

CHAPTER 20

GEOGRAPHY

Doctoral Theses

01. BASUMATARY (Mijing Gwra)
Spatial Assessment of Status of Air Quality in Delhi and Chennai.
Supervisor: Dr. Subhash Anand
Th 26674

Abstract

Air pollution is contamination of the indoor or outdoor environment by any physical, chemical, or biological agent that modifies the natural characteristics of the atmosphere. The aim of the study is to spatially analyze the causes of air pollution in Delhi and Chennai and its impact on health. The objectives of the study are, to assess the level of air pollution in Delhi and Chennai; to analyze the major causes of air pollution in both cities; to study the health effect of air pollution in both cities and the different policies to suggest suitable strategies to control air pollution. Primary data collected by conducting field survey in both the city. Secondary data are collected from the CPCB, DPCB, TNSPCB, Hospitals, IMD, NEERI, WHO and SAFAR. The finding of the study is that, air pollution in Delhi is higher than the Chennai. In both the city PM_{2.5} and PM₁₀ are the prominent pollutants for increasing the AQI. Delhi air pollution was constantly increasing since 2013 to 2016 but after 2016 onwards due to effective schemes and policies it decreased. During 1st phase of COVID 19 lockdown period, air pollution in both the city decreased drastically. In Delhi air pollution drastically changes in accordance to season. In both the cities source of air pollutants are traffics, industries, construction sites and some natural phenomenas. Meteorology and Geographical factors play important role in manipulating air pollution. The amount of air pollutants in the atmosphere is directly linked to the health of the citizens. Various stakeholders are taking initiatives to combat air pollution. The best possible way to check air pollution is to plant lots of trees and protect the natural ecosystem.

Contents

1. Introduction 2. Geographical profile of study area 3. Assessment of air quality in Delhi and Chennai 4. Air pollution source apportionment study in Delhi and Chennai 5. Epidemiological study on effects of air pollutants on human health 6. Air pollution policies in Delhi and Chennai 7. Summary, Conclusion and suggestions. Bibliography. Appendix.

02. BHATTACHARJEE (Shinjini)
Gendered Soundscapes of Resistance: Exploration of Baul Music and Rabindrasangeet in the Making of the Everyday in Bolpur, West Bengal.
Supervisor: Prof. Anindita Datta
Th 27036

Abstract

The present study is cantered on the following broad objectives: 1. To analyse how the space of Bolpur acts as an enabling agent for the soundscapes of Rabindrasangeet and Baul music to be produced and to understand how such spaces are gendered 2. To understand how Rabindrasangeet and Baul music manifest themselves as agents to social change and get impacted by the social realities around them 3. To trace the commonalities and contracts, in terms of spatial vision and world view, between the soundscapes formed by the everyday practices pertaining to Rabindrasangeet and Baul music, respectively 4. To, identify the forms of resistance that mark the everyday soundscapes produced by Ranindrasangget and Baul music, within the space of Bolpur. At the very core of this study, lies the analysis of space. An attempt has been made to understand the space producing qualities of music and thereby address the lacunae that exist with respect to the inclusion of space in ethnomusicological research, particularly in the Indian context

Contents

1. Gendered soundscapes of resistance: an introduction 2. Mapping socio-characteristics of Bolpur 3. The space of bolpur as a cradle for the overlapping and contrasting traditions of Rabindrasangeet and Baul music 4. Development of Rabindrasangeet and Baul music as agents and products of social change 5. Mapping gendered resistance in the everyday practices of Rabindrasangeet and Baul music: commonalities and contrasts 6. Theorizing gendered soundscapes of resistance. Reference.

03. FITZGERALD (Maria Anne)
In-between Spaces, Identities, Belongingness and Everyday Praxis: Geographies of Young People from Cross-Cultural Families in Kolkata.
 Supervisor: Prof. Anindita Datta
Th 27246

Abstract

Post-colonial theorist Homi Bhabha proposes that in-between spaces are the interstices between contrasting cultures which gives rise to something different, something new and unrecognizable. They are new areas wherein meaning and representation can be negotiated. This study advances the concept of in-between spaces by citing the example of young people from cross-cultural families (CCFs) in Kolkata. Literature on CCFs in India focuses mostly on the marital circumstances of parents in these familial contexts; and relatively less is known of the spatial experiences of young people born into these families. This study foregrounds the identity experiences of young people from cross-cultural families across different spatial scales – an overlooked theme in Indian contexts. These geographies of young people from CCFs in Kolkata allude to the ways in which their identity and spaces co-constitutively construct and shape their everyday praxis and sense of belongingness. Using qualitative methods the study attempts to explore the ways through which young people from CCFs self-identify and are identified in relation to their cultural and/or regional location. They ways in which these young people forge a sense of belongingness and simultaneously also experience alienation on account of their ambiguous cultural and regional location is another focus of this study.

Contents

1. In-Between Spaces, Identities, Belonging and Everyday Praxis: Geographies of Young People from Cross-Cultural Families in Kolkata 2. The Study Area: Exploring Kolkata's Palimpsestic Landscape 3. Self-Identification Practises of Young People from Cross-Cultural Families in Kolkata 4. The Labelled Identities of Young People from Cross-Cultural Families in Kolkata 5. The Ways of Being and Belonging across Spaces among Young People from Cross-Cultural Families in Kolkata 6. The Emotional Topographies of Young People from Cross-Cultural Families in Kolkata 7. Key Findings and Interpretations on In-between Spaces, Belongingness, Identities and Everyday Praxis of Young People from Cross-Cultural Families in Kolkata. References. Annexure.

04. GUPTA (Gauri)

Changing Pattern of International Trade: A Comparative Study of Trade Blocks.

Supervisor: Prof. Daljit Singh

Th 26663

Abstract

Changing pattern of International trade: A comparative study of trade Blocs The past few decades have seen important shifts that have reshaped the global trade landscape. As a share of global output, trade is now at almost three times the level in the early 1950s, in large part driven by the integration of rapidly growing emerging market economies (EMEs). The study is based on the observation of the magnitude of intra and inter trade flows among various trading partners. It also compares and show patterns of trade blocks, Bilateral and Multilateral agreement's such as ASEAN, EU, COMESA and SAARC. By the end of the 1980's virtually all of the centrally planned regimes that previously eschewed the use of market-based trade had either collapsed or made dramatic reforms that brought foreign trade and investment into a prominent place in their development programs. Shifts in the global trade landscape over the past few decades have resulted in increased interconnectedness and strengthened trade spill over channels. The study is an attempt to empirically verify the changes in trade due to formation of trade blocks as well as the changes in the commodity flow among the various Blocks. The expansion in global trade has been underpinned by a diffusion of key systemic players, both in size and in links. Not only has the number of key players increased, but there has been a shift in relative importance in global trade, from large advanced economies such as Japan and the United Kingdom to EMEs such China and India.

Contents

1. Changing patterns of international trade: a comparative study of trade blocks 2. Economic geography of trade blocks under analysis 3. SAARC: (South Asian Association for Regional Corporation) 4. Case study of trade block ASEAN (Association of Southeast Asian nations) 5. The European Union (EU) 6. The common market for eastern and southern Africa (COMESA) 7. Conclusion and findings. References.

05. HEENA
Evaluation of Groundwater Status and Human Health Risk Assessment in Hazaribagh Plateau.
 Supervisor: Prof. S.C. Rai
Th 26668

Abstract

The present study has been divided into seven chapters which deal with varied but interrelated aspects. Chapter one introduces the topic and the rationale behind choosing this topic and area for research. Based on the detailed review of literature related to previous studies, the chapter states the objectives undertaken in the present study. It deals with the database and methodology, a brief introduction to the study area, and an overview of chapters in the dissertation. Chapter two brings out the background of the study area describing its location and extent, geological setting, drainage; climate conditions, soil, historical background and socio economic profile of the area. Chapter three analyses the groundwater level dynamics in Hazaribagh plateau, and the factors controlling them. In chapter four hydro geochemical study of groundwater in the area was accomplished to evaluate general hydrochemistry and various hydrogeochemical processes attributing the chemical Characteristics to groundwater, with the help of appropriate techniques. The aim of chapter five is to analyse the spatial variation in physic-chemical characteristics of groundwater, to assess the suitability of groundwater for drinking purpose and to evaluate the human health risk assessment concerning fluoride and nitrate. Further the chapter also quality zones with the help of WQI. Chapter six analyse the quality of groundwater for irrigation purpose with the help of various indices. Suggestions for sustainable management of groundwater in the area have been dealt with in chapter seven.

Contents

1. Introduction 2. Background of the study area 3. Groundwater level dynamics 4. Hydro geochemical modelling of groundwater 5. Groundwater suitability purpose human health risk assessment 6. Ground water suitability for agriculture 7. Groundwater management. Summary. References.

06. JAMAL (Shahid)
Cultural Economy of Varanasi: Studying the Products with Geographical Indications.
 Supervisor: Prof. Anjan Singh
Th 26665

Abstract

The idea of the cultural economy denotes cultural magnitude of economic activities such as sale, purchase, design, layout, marketing and promotion of any goods and services or societal aspects of the manufacturing units. It refers to the indication of a certain section of economic activity which is related to the cultural activity and products like architecture, print media, libraries, and galleries, performing art, visual art, film, drama, play and music. Culture comprises ample diversity of human behaviour, advanced human capability to behave artistically and creatively. A nation's culture resides in the hearts and souls of its people. Banaras/Varanasi is renowned as one of the oldest living cities in the world and is included in the UNESCO's world heritage tentative list. It includes Banaras Brocades and Sarees, Banaras Gulabi Meenakari Craft, Banaras Metal Repousse Craft, Varanasi Glass

Beads, Varanasi Wooden Lacquerware and Toys, Jute Wall Hanging Craft and Varanasi Soft Stone. The basic objective of the study is to understand the cultural economy of Varanasi and studying the products with Geographical Indications of artisans engaged therein. A household survey was conducted using purposive random sampling in different clusters of Geographical Indications (GI) products in Varanasi district of Uttar Pradesh between 2019 and 2022. The ethnographic method using qualitative and quantitative techniques has been applied to get the desired results. After the discussion, it was concluded that Varanasi had great handicraft artisans, which have declined somewhere due to some unpopularity and loopholes in the system. The current government together with the artisan community is reviving these antique Geographical Indications (GI) products and making no stone unturned to establish mega clusters for the entire community. Keywords Geographical Indications, Unpopularity, Artisans, Economy, Creativity.

Contents

1. Introduction 2. To re-discover with geographical indications and study its distinct features 3. To assess the factors responsible for the unpopularity and gradual decline of these goods with geographical indications 4. To design a strategy and mechanism for the revival of the goods with geographical indications 5. Summary and conclusion. References. Appendix.

07. JOON (Sahil)

Non-Metropolitan Sexualities: Same-Sex Sexual Practices Among Men in Haryana.

Supervisor: Dr. Kiran Bhairannavar

Th 27245

Abstract

The sexuality and space literature in India is centered on metropolitan cities like Mumbai, Delhi, Mumbai and Kolkata following the academic tradition of metrocentricity in Western sexuality and space literature. The smaller cities and rural areas are unexplored in terms of their sexual culture. This thesis is an attempt at doing the same. It maps cultural landscape of same-sex sexualities among men in Haryana using qualitative data generated from ethnographic methods. This cultural landscape comprises gay dating applications, gay cruising spots and other everyday places like homes or farmlands. Despite all the struggles they face, in heterosexed society of Haryana, same-sex desires find their way. Men practicing same-sex sexualities devise various strategies to realize their desires and make a place for themselves. A major finding that has emerged from this study is that same-sex practices are way more common than one can imagine in a deeply heteronormative society like Haryana. However, it vastly differs from the global notion of homosexuality as that notion is not rooted in Haryanvi culture. In such a society, the boundaries of heterosexuality and homosexuality cannot be well defined unless there is an influence of Western identity based understanding of same-sex sexualities. Therefore, I am arguing that we should focus on practices rather than identities while understanding sexual behaviours.

Contents

1. Introduction 2. Literature Review and Conceptual Framework 3. Methodology 4. Mapping Homosexuality in Haryana 5. Making Place for Same-Sex Desires: Struggles and Strategies of Men Practicing Homosexuality 6. Destabilizing the Boundaries of Homosexuality: Moving Beyond Identities 7. Findings and Conclusion. References.

08. MD. HUSAIN
Geospatial Study of Snow Cover Dynamics in Lahaul and Spiti District, Himachal Pradesh.
 Supervisor: Dr. Pankaj Kumar
Th 27247

Abstract

Snow cover is the amount of snow that is on the ground at any given time. Snow cover can be affected by many factors including temperature, precipitation, wind, and sunlight. Snow cover can also be affected by human activities such as construction and farming. Snowmelt from this region provides water for agricultural production and household activities. Lahaul and Spiti is high-altitude district in the Indian state of Himachal Pradesh. The region is virtually inaccessible for most of the year, especially during the winter months when the roads are blocked by snow. The objectives of the study are to analyse the trend and pattern of precipitation and temperature, to assess the impact of land use land cover change on land surface temperature, to analyse the seasonal variation of snow cover area and to determine the socio-economic implication of snow cover dynamics on the lives of the local people. As per the result, the trend analysis of temperature and precipitation also showed an increasing trend which is a clear indication of increasing temperature and precipitation in Lahaul and Spiti. LULC shows 31% (435217 ha.) area of Lahaul and Spiti experienced change and converted into other LULC types from 1991 to 2021. The result of the correlation of the coefficient of LST with NDVI shows a moderate positive and LST with NDSI shows a moderate negative correlation. A significant decrease in the snow cover area has been observed in the Lahaul and Spiti district during the research span. Around 78,628 ha (7%) area of snow cover has decreased at an average rate of 2,621 ha./year from 1991 to 2021. This is a remarkable loss in the snow cover area of the Lahaul and Spiti district in the last three decades.

Contents

1. Introduction 2. Background of the Study Area 3. Trend Analysis of Precipitation and Temperature 4. Land Use/Cover Change and Its Effect on Land Surface Temperature 5. Seasonal Variation of Snow Cover 6. Implication of Snow Cover Dynamics 7. Summary and Conclusion. Bibliography. Appendices.

09. MISHRA (Arun Pratap)
Optimizing Regional Development through Smart Cities: A Case Study of Kaval Cities in Uttar Pradesh.
 Supervisor: Prof. Subhash Anand
Th 27243

Abstract

In recent times, there is an immense interest in the development of Smart Cities. But the million-dollar questions are whether new proposed smart cities will create any sizeable difference? Will smart cities become panacea for whole range of problems related to urbanization? Will future smart cities be sustainable without considering the surrounding peri-urban area? Will smart cities help in trickle down of development in surrounding regions also? Should there not be common policy and programs between smart cities development and their influence area development? If we look at the complete picture of smart cities related developments, answers seem very difficult. Thus it becomes extremely crucial to

carry out detailed study related to optimization of regional development through smart cities. The creation of smart cities should not only uplift the socio-economic status of urban areas but there should be linkages with their peri-urban area also. These smart cities can play major role in overall regional development of the state by reducing the intra-regional disparity and inequality. But as it is perceived, in the Indian context, villages and small towns which are the hearts of the nation are located in the peri-urban area of proposed smart cities. Hence, for the development to percolate to the grass root level, focus must be devoted to the progress of peri-urban area also. The study takes into account the case study of KAVAL (Kanpur, Allahabad, Varanasi, Agra, and Lucknow) cities. KAVAL cities are five prominent cities of Uttar Pradesh which are being developed as smart cities. The study emphasizes the development of peri-urban area of these cities while developing them into smart cities. LULC Analysis, Principal Component Analysis, Multi-Criteria Decision Analysis, and Composite Z-Score have been used to fulfil the objectives. The study will provide great inputs for the creation of smart villages and smart regions.

Contents

1. Introduction 2. Peri-urban area delineation of kaval cities 3. Level of development in the peri-urban areas of kaval cities 4. Smart city transformation readiness of kaval cities 5. Inclusive regional development through kaval smart cities 6. Summary and conclusions 6. Bibliography. Appendix: questionnaire for primary survey.

10. PRAVEEN KUMAR

Environmental Impact Assessment of Wastewater: A Comparative Study in Delhi and Ghaziabad.

Supervisor: Prof. Subhash Anand

Th 26667

Abstract

Topic: Environmental Impact Assessment of Wastewater: A Comparative Study in Delhi and Ghaziabad Supervisor: Prof. Subhash Anand, Department of Geography, Delhi School of Economics, Delhi University. Delhi's existing sewage treatment capacity is 2940 MLD of the total generation which is 3873 MLD per day (MLD). Only 75% of the total sewage water is being treated and 25% of the wastewater is released into the drains untreated because installed capacity is less utilization. In Ghaziabad, against the total sewerage generation of 551.88 MLD, installed treatment capacity is 454 MLD. However, only 41% of the total generated sewerage is treated and over 59% effluent discharged untreated. Secondary data collected from different govt. agencies and primary data source, 400 respondents have been picked for interviews from Delhi and Ghaziabad as 300 and 100 respectively. Based on objectives, following are finding of study: • Performance of existing Sewage Treatment Plants is not satisfactory as they are not meeting prescribed standards. • Statistical technic i.e. ANOVA Test, implies large families are disposing Less Per Capita wastewater and small families discharge more. Likewise, consumption of water is inverse, as family size increases, LPCD also decreases. • Wastewater is a major contributor to water pollution. Therefore, wastewater must be treated before discharge. This can be achieved through the application of appropriate treatment processes, which will help to minimize the risks to natural environment and public health. • People have reported very high poor quality of drinking water. Supplied water is absolutely non-drinkable. • Untreated wastewater has been discharged in rivers, wastewater treatment methods must be

sustainable in order to reduce the contaminants to acceptable levels so as to be safe for discharge into the environment. Suggestion: Some Sewage Treatment Plants are not performing satisfactorily as they are not meeting the prescribed standards with respect to criteria of pollutants. Thus, their capacity utilization is needed to upgrade.

Contents

1. Introduction 2. Geographical profile of Delhi and Ghaziabad 3. Wastewater treatment and management in Delhi and Ghaziabad 4. Impact of wastewater on environment and health in Delhi and Ghaziabad 5. Community participation and stakeholder's perception about sustainable wastewater management 6. Decision making process and implement of policies and programs on wastewater 7. Summary, conclusion and suggestions. Bibliography. Appendices.

11. RAI (Aditya Narayan)
Conceptualising Place Marketing and City Branding Strategies: The Re- Imaging and Re-Creation of Ayodhya.
 Supervisor: Prof. Anjan Sen
Th 26664

Abstract

The present study tries to extend the scope of marketing geography by considering "places as products". It is important to note that the first to point out the need for marketing geography as a sub field of economic geography was William Applebaum who was a visiting lecture on food distribution and comparative marketing at Harvard School of Business administration and has pioneered the field of marketing geography. Applebaum argued that geographers needed to pay more attention to the study of the marketing because much of the working population is engaged in marketing functions. Moreover, much of the urban landscape is devoted to wholesale and retail trade structure and the complex distribution channels leading to the producing and consuming areas. Hence the primary purpose of marketing geography is to examine marketplaces as spatial units and numerous activities related to the distributions of consumer required goods. It is an interdisciplinary study and touches various subjects from ancient and medieval history of the place, economics and marketing and branding within the periphery of Geography. According to the primary survey analysis Ayodhya is a city for religious tourism and hosts many interstate pilgrims. These numbers are expected to increase as per the primary data. The detailed finding is presented after interpreting and analysing the available literature and data collected from field work and secondary sources.

Contents

1. Introduction 2. Place- brand image harm crises 3. Consumer driven marketing strategy or strategic marketing of Ayodhya 4. Re-imaging and Re-creation of Ayodhya 5. Conclusion, limitations and suggestions. Appendices.

12. RANJAN (Rajeev Kumar)
Impact of Climate Change on Environmental Sustainability and Livelihood Security in the Leh Region of Jammu & Kashmir.
 Supervisor: Prof. B.W. Pandey
Th 26670

Abstract

The present research, assess and examine the nature and extent of climate change and analyze the Spatio-Temporal Pattern of Land Use Land Cover situation with respect to climate change in Leh District. This study deals with the impact of climate change on livelihood security and examines the scope and opportunities of livelihood. The study also evaluates and suggests management strategies for climate change, environmental sustainability, and livelihood security in the study area. The primary data have been collected through a structured questionnaire that assess the adaptation capability of the population to climate change and records information on environmental sustainability, population, literacy, socio-economic problems, and livelihood security. The primary data has been gathered from 60 out of the 112 villages in the Leh District, with 200 households selected using stratified random sampling (SRS) based on the population size. The aim of the study is to understand the complex and dynamic climatic systems of the region through careful analysis of the data, it is observed that there is non-linear variation in temperature as well as in precipitation over the year and it has observed that curvilinear model is suitable for analyzing such non-linear fluctuations. The polynomial model of different order is fitted and its predicted value is obtained based on different order of polynomial. This research applied the Landsat satellite datasets to detect changes in land use and land cover in the study area. The study uses quantitative methods of change detection and false color composition for image analysis. The Landsat series of satellite images for the years 1991, 2001, 2011, and 2021 are used in this study. Digital image processing techniques such as supervised classification method were used to identify various land cover classes in the study area.

Contents

1. Introduction 2. Geographical profile 3. Nature and extent of climate change and climate variability in Leh region of Ladakh 4. Impact of climate on land cover and livelihood security in Leh region of Ladakh 5. Management strategies of climate change for environmental sustainability and livelihood security in Leh region 6. Summary and conclusion. Select bibliography. Appendices.

13. RANJEET KUMAR
Dynamics of Ecosystem Services and Livelihood Security in the Beas Basin of Himachal Pradesh.
 Supervisor: Dr. Anju Singh
Th 26666

Abstract

Dynamics of Ecosystem Services and Livelihood Security in Beas Basin of Himachal Pradesh Ecosystems are well recognized as critical in supporting human well-being. The services of ecological systems and the natural capital stocks that produce them are critical to the functioning of the earth's life support system. They contribute significantly to human welfare and form the base upon which livelihood of people depend. Today these ecosystem services produced by nature are in unbalanced state. Mountain system especially Himalaya is quite vulnerable to any kind of disturbance posed by human or natural phenomena. The study region i.e. Beas basin lies in central Himalaya is facing different types of changes. The rate and intensity of climate change is quite high in the region as compared to other parts of India. Further land cover has also gone transformation due to high pace of construction and high influx of tourists in the region. These two drivers of

change are significantly changing ecosystem services of the region. On the basis of Constanza et. al (2014) Model, the total ecosystem services value of the region was calculated as 8948.88 million US dollar in 2000. However in 2021 value of ecosystem services got reduced to 8119.61 million US dollar. Thus there has been depreciation in value over period of time. Further during this period the economic value of all three classes of ecosystem services i.e. provisioning, regulating and supporting services has decreased except cultural services which shows increase in economic value. The study also analyses the vegetation health status of Beas Basin. This has been done by calculating NDVI value of the region for year 2000, 2007, 2014 and 2021. The NDVI value as a whole increased from 0.429301 to 0.48108 during 2000 to 2021. This shows the greenery condition of Beas Basin has improved despite significant land use transformation and Climate change. The study further analyses the condition of water related services in Beas Basin. It has been found that river discharge of Beas river has decreased from 1980 to 2020. At the end, impact assessment of changing ecosystem services on livelihood security has been done. It has been found that due to land use land cover change the per capita land holding size has decreased. This will certainly negatively impact livelihood of local rural community. The impact of climate change on horticulture especially on apple cultivation shows decline in productivity of the region. However tourist flow in region over period of time has increased many fold. This has created multiple option for income generation in hospitality sector and as such locals got benefited. But this benefit from recreational services are for shorter period till aesthetic beauty of the region remain stable. Once the drivers of ecosystem services change will break ecological stabilization point the ecological services whole region will gradually diminish.

Contents

1. Introduction 2. Geographical profile of study area 3. Drivers of ecosystem services 4. Impact of drivers of change on water services 5. Monitoring vegetation health for ecosystem services assessment 6. Ecosystem services and livelihood security in changing environment 7. Summary and conclusion. Select bibliography. Appendix: Questionnaire.

14. SHAILENDRA PRATAP

A Spatial – Temporal Study of Agriculture Products and its Marketing in Vidarbha Region.

Supervisor: Dr. Pankaj Kumar

Th 27244

Abstract

Agriculture and its associated industries provide a living for over 58% of the population of India. It has had a tremendous impact on India's entire economic and social progress. Agriculture, together with its linked fields, is without a doubt the most important source of income in India, particularly in the vast rural areas and the livelihood for the farmers. It also makes a substantial contribution to the Gross Domestic Product directly and indirectly. As Vidarbha region always faces drought every year and these conditions impact the production of agricultural products and their marketing over the Indian subcontinent. In this present research work, an effort has been taken to identify the land use land cover change and different agricultural products in the study area and analyze the local perception of sustainable agricultural practices and market networking in the Vidarbha Region. With the help of the different statistical techniques i.e. mean, standard deviation, and land use land cover change matrix techniques, it has been evidenced that agriculture production has gradually increased over the period of

time, but the local farmers are not able to get the same amount for the products. This situation leads to the suicides of the farmers. These conditions worsen the situation of the agriculture industry in Vidarbha especially the eastern part of it. With the implication of policies and programs, this can be changed in favor of the farmers. Local initiatives and different agriculture marketing measures and reforms change the scenario of the region. The reforms lead to a change in the agricultural marketing model of the traditional channel to the non-traditional channel, as revealed in the study. Keywords: Agriculture Products, Vidarbha Region, Livelihood, Regulated Market, Local Farmers.

Contents

1. Introduction 2. Geographical profile of vidarbha region 3. Status of land utilisation of vidarbha region 4. Agriculture products and sustainable agricultural marketing in vidarbha region 5. Policies and planning for the sustainable agriculture development and marketing in vidarbha region 6. Findings and conclusions. Bibliography. Appendix. Publications.

15. SINGH (Rashmi)
Grey Green Infrastructure and Sustainable Urban Development: A Case Study of Smart City Jaipur.
 Supervisor: Prof. Poonam Sharma
Th 26669

Abstract

Nearly 55% of the World population lives in urban areas, and it is expected that the number will increase up to 66% by 2030 (United Nations, 2016). Sustainable and smart cities were one priority area at the 2012 UN Conference on Sustainable Development ("Rio+20"). The Sustainable Development Goals (SDGs) , Goal 11 sustainable cities are focused on overall urban development and reducing inequalities in cities. Jaipur is a city under the Smart City Mission of India. The sprawling urbanization is leading to major land use and land cover changes with the maximum increase in the built-up (grey) areas. The Smart City mission initiative puts an emphasis on the improvement of life in cities in various areas. Green Infrastructure aims to ensure that the protection, restoration, creation and enhancement of green infrastructure become an integral part of spatial planning and territorial development. The objective of this study is to analyze grey and green infrastructure as part of process of urban growth of Jaipur. The study was on land use land cover change in the city, analyzing the city's grey and green spatio-temporal changes and future expansion. Various methods and techniques were used to analyze the data and present the results. Satellite data from 1980 to 2021 have been analysed to draw the results. Findings reflect the spatial changes in the city and their impact on other factors in the city. The study also focuses on the smart city mission objectives and their implementation in the city.

Contents

1. Introduction 2. Geographical profile of the study area 3. Dynamics of Spatio-Temporal pattern of land use and land cover of Jaipur city 4. Spatial-Temporal dimensions of transformation of built up area 5. Spatial-Temporal changes in urban green space in the city 6. Impact of increasing built up areas on urban system 7. Simulating the dynamics of urbanisation and predicting the urban sprawl in the Jaipur city 8. People perception analysis of urban development initiatives and smart city 9. Summary and conclusion. Bibliography. Appendices.

16. SINGH(Shipra)
Impact of Climate Change on Water Resource Sustainability in Lower Son River Basin.
 Supervisor: Dr. Pankaj Kumar
Th 26671

Abstract

Lower Son river basin is an important agricultural and ecological region, and the economy of the region is largely dependent on farming. For understanding the study area, LULC of 1991, 2001, 2011 and 2020 have been classified with the help of supervised classification. Zonal classification of the basin has been done based on slope. NDVI, LST and correlation between NDVI-LST has been calculated for the whole basin as well as zone wise. The present study aims to examine hydrologic scenario of this basin based on LULC of 1991 and 2021. Soil and Water Assessment Tool (SWAT) model has been used to accomplish the desired goal. The model has been calibrated for 1991 to 2014 and it has been validated for 2015 to 2021 using discharge data obtained for Koelwar GDSQ station from Lower Ganga Basin Organisation, Patna. Calibration of the model showed good and above satisfactory results with r factor - 0.91, r² - 0.90 and NS - 0.87. Average stream flow, surface runoff as well as water yield in the basin has increased. LULC change analysis presented that vegetation has decreased significantly in the region and agricultural land along with settlement has shown a steep increase in order to accommodate the increasing population. Analytic Hierarchy process has been included to identify the critical sub-basin based on important parameters. The area has been demarcated into 9 sub basins. In the end, integrated watershed management plan for the area has been presented based on results of above three objectives and primary data collected from field. This study becomes relevant as it has identified critical sub basins based on sediment and surface runoff values which needs immediate attention for holistic conservation of the basin. Keywords: Lower Son river basin, LULC, SWAT, AHP, critical basin.

Contents

1. Introduction 2. Geographical profile: lower son river basin 3. Land use land cover dynamics 4. Climate change and water resources 5. Prioritization of critical sub basin 6. Strategies for integrated basin management 7. Summary and conclusion. Selected bibliography. Appendix: Questionnaire and data.

17. SURAJ PRASAD
Re-Interpreting Visual Forms of Folk Art: Studying the Madhubani Paintings of Mithila.
 Supervisor: Prof. Anjan Sen
Th 26672

Abstract

Folk art is a form of art which represents the cultural identity of a society, and is made by individuals without any formal training in art. In the Mithila region of Bihar, Madhubani painting (Mithila painting) is a folk-art depicting Hindu style of painting that has now attained worldwide recognition. The paintings mostly depict the men and their association with nature; and the scenes and deity from the ancient epics. In its original form, it was used by women to decorate the walls and floors of their houses during the time of festivals, and to this date, it is mainly women from the Brahmin, Kayastha, and Dalit communities who practice this type

of painting. Traditionally, painting was one of the skills that were passed down from generation to generation in the families of the Mithila region, primarily by women. However, globalization has not only affected the economic sphere of the society but also has affected the social values, and as such, nowadays there is no caste bar among the artists of Madhubani Art. Data related to different forms of folk art and their micro regional variations, socio-economic attributes etc. has been collected through primary survey that include face to face interviews, focus group discussions, and in-depth observation. Based on these data, the study assessed the symbolic values of Madhubani painting as well as the role of socio-cultural fabric of the geographic space within which it is located in the evolution and development of different styles of Madhubani painting in the region.

Contents

1. Introduction 2. Review of literature 3. Geography of folk art in India: a regional analysis 4. The socio-cultural semantics in the evolution of Mithila art 5. Conceptualising economic spaces in Mithila: re-inventing Madhubani painting 6. Evaluating the role of government & non-governmental organisations in the promotion of Mithila art 7. Summary and conclusion. Appendices. Publication.

18. YADAV (Anuja)
Re-Positioning A Post- Industrial City: City Branding and Place Marketing of Faridabad.
 Supervisor: Prof. Anjan Sen
Th 26673

Abstract

The present thesis out to analyse the plight and potential of this city emphasizing its perspective beneficial attribute which can be market and brand it to re-positioning this post-industrial city. It tries to point out the sectors and arenas of negligence or slow pace of growth. This city was visualized as Nehru's "city of hope" has become a "city of belied hope". Life cycle of this city from gloom to glory is fascinating to be focused upon. It tries to re-position its fifth image of past, to be more attractive and magnificent place of future. The city which tries to re-position itself means to incline towards new-fangled and superior identity of place. This city tries to project its change in identify from a dormitory city to a sustainable, liveable city, post-industrial city of Haryana. The vision stipulates direction of growth and identification of resources potential and innovations to be adopted for the thrust areas of development. The present research look at and studying the dynamics landscapes, diversifying economy & identities; exploring and measuring potential attributes, cultural mapping of geo historical heritage; and proposing branding strategies for Faridabad in city. It is not something ludicrous to study, as it is very genuine, indeed an interesting topic for research which makes you understand the post-industrial information in cities.

Contents

1. Introduction 2. Accounting the existing images and scenarios of Faridabad 3. Exploring the potential identities and functions of Faridabad 4. Sacred, Secular and contemporary sites in Faridabad with touristic significance 5. Place marketing and city branding strategies for Faridabad 6. Conclusion. Bibliography. Appendix.