

Tidal Behaviour and its Relation to Suspended Sediment Concentration in Selected Zones along the Hugli River, South 24 Parganas, West Bengal

Anindita Mukherjee¹, Subhamita Chaudhuri² and Sunando Bandyopadhyay³

Abstract : *Suspended sediment concentration (SSC) of the Hugli is the key factor behind smooth operation of riverside brick kilns which thrive both solely and partly on supply of riverine sediments. The process of sedimentation depends on tidal behaviour of the river. On the left bank of the Hugli, two 72-km apart stations – Kulpi in the south and Akra in the north – were selected on the basis of concentration of brick kilns. The study aims at understanding the disposition of tidal asymmetry and SSC induced by it, reflecting on the relation between availability of sediment and brick making. Monitoring of tide, analysis of SSC in water samples and dumpy level survey inside the selected brick kilns at the two stations were conducted in pre-monsoon and monsoon seasons from 2017 to 2019. The pattern of rise and fall of the tides remained unchanged for the studied period at the two stations. Asymmetry in terms of duration and velocity of tides was responsible for spatial difference in sedimentation. In this flood dominated channel flood tide travels at a faster velocity and flood phase is shorter than ebb. The sediments travel upstream with tide, recording high SSC at high tide at Kulpi but the load is unable to reach 72 km upstream at Akra. The riverine flow is much effective around the northern station causing high SSC at low tide. Mean SSC was higher in monsoon at Akra and higher in pre monsoon at Kulpi. Kulpi had higher mean SSC in both seasons and higher rate of sedimentation. Steeper incoming water gradient during incoming tide at Kulpi in both seasons brought in huge sediment load causing higher mean SSC at Kulpi. Sedimentation process was controlled by tide around the southern station but tidal effect was dampened by riverine flow around the northern station.*

Key Words: *tidal asymmetry, suspended sediment concentration, brick kilns*

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Spatio-temporal Analysis of Agricultural Land Use and Crop Dynamics in Jodhpur District, Rajasthan

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Abstract : *This study examines changes in agricultural land use in Jodhpur district, utilizing multi-temporal Resourcesat-1 LISS III satellite data. The research applies Doi's method to analyse crop combination, Gibb's and Martin's diversification index to assess crop diversification, and S.S. Bhatia's method to evaluate agricultural efficiency. Despite the region's varied agro-climatic conditions, food crops, particularly pearl millet, continue to dominate Jodhpur's cropping pattern. However, a slight shift has been observed, favouring the cultivation of pulses and oilseeds. Additionally, the study reveals that crop diversification and agricultural land utilization have increased over time, indicating farmers' attempts to adapt to changing environmental and economic pressures. But the findings also highlight a concerning trend: a decline in agricultural efficiency over time.*

Key Words: *Crop combination, diversification, agriculture efficiency, land use, micro level*

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Micro-Regional Disparities in Level of Development: A Case Study of Kalahandi District, Odisha

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Abstract : *A shift in the economy's structure or economic activities starts the development process. Different places experience the socioeconomic shift in different ways. This results in regional differences, which are brought about by a variety of elements, including capital, government policies, infrastructure, services, skills, and resources. Numerous structural, social, and economic issues arise in the affected areas as a result of regional imbalances, necessitating the implementation of corrective policy measures. The objective of this research is to analyse the disparities in development levels, focusing on the regional aspect in terms of space. Thirty-three variables were chosen to examine the regional disparities of thirteen blocks in the Kalahandi district. Regional disparities were then found using the Development Index (Z-Score Method). Based on the data, the Junagarh block emerged as the most developed block overall, with Karlamunda and Th. Rampur blocks are developing at a lower level.*

Key Words: *Regional Disparities, Socio-Economic Development, Z-Score, Composite Standard Score, Imbalances*

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Postcolonial Chinese Landscapes of Kolkata, India: The Evolution of a Visible Spatial Construct

Aditi Chatterji

Abstract : *This paper studies the evolution of the Chinese community of the city of Kolkata, West Bengal, India. It takes into account the spatial rise of the old Chinatown area in central Kolkata in the Bowbazaar, Tiretti Bazaar, and Poddar Court area and its decline following the India-China War of 1962, when many ethnic Chinese people migrated out of Kolkata to Canada, Australia, and elsewhere. Another zone of ethnic Chinese concentration developed more recently in the eastern Kolkata area of Tangra, when the Chinese tanneries were shifted out to the wetlands. Tangra has evolved into a second Chinatown and has become a gentrified neighbourhood with upmarket Chinese restaurants. The paper traces the visible Chinese spatial construct in the context of changing symbolic landscapes.*

Key Words: *Landscapes, Cultural geography, Ethnic enclave, migration Chinese community of Kolkata*

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Sustainable City Planning: An Analysis of Urban Green Spaces in Some Selected Wards of Kolkata Municipal Corporation

Aditi Chatterjee

Abstract : *Urban green spaces are public and private open spaces in urban areas, primarily covered by vegetation, which are directly (e.g., active or passive recreation) or indirectly (e.g., positive influence on the urban environment) available for the users. It plays a crucial role in maintaining the sustainability of a city with the promotion of essential ecological functions to supplement the natural and social environment of the urban area. Preservation of a substantial proportion of the city's space under green cover has now become a qualification for city's space under green cover has now become a qualification for city planning and design. This paper explains the benefits and needs of "Urban Green Space". Urban green space can be a comprehensive tool for term long-term protection of environmental sustainability through improving quality of life and air quality. Here Ward numbers 50 to 69 of Kolkata Municipal Corporation have been selected purposively as this area is densely populated, and there has been an increase of built-up area. The paper aims to highlight the impact of urbanization on green space. Moreover, as the urbanization process is accelerating the study of green spaces and their location within the cityscape becomes crucial for sustainable development and planning of cities.*

Key Words: *Biodiversity, Ecological Condition, Normalized Difference Vegetation Index, Parks and Open Space, Sustainable City, Urban Green Space.*

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Factors Influencing Women Entrepreneurial Success in Floriculture: A Study of Nadia District in West Bengal, India

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Abstract : *Floriculture in India is endowed with vast potential for entrepreneurial development particularly for women. In this context, perceptions of women entrepreneurs in floriculture about the factors of their entrepreneurial success in Nadia district, West Bengal have been analysed in this study. Principal Component Analysis (PCA) has been applied for validation of survey schedules and identification of meaningful variables. Finally, based on Likert scores, the levels of agreements have been estimated with the measure of consensus strength. The highest consensus strength has been observed in overcoming unemployment followed by rich traditional knowledge in floriculture and high level of adaptability and innovativeness. The lowest consensus strength has been found in achieving social recognition followed by improved rural transport network and success stories of other entrepreneurs. This study will be helpful in achieving women empowerment and promoting gender equity in the society through the development of women entrepreneurship in floriculture.*

Key Words: *Consensus, Gender equity, Perception, Principal Component Analysis, Women empowerment*

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Saura Tribal Ikon Art, A Converting Ritual from Painting to Literature Across Odisha, Saura Villages: Case Studies of Rayagada District, Odisha

Anwasha Chakraborty

Abstract : *The beautiful state of Odisha is blessed with a variety of tribal cultures and is also considered one of the major centres of iconography. In Odisha, the art of ikon is only found among Sauras. Saura tribal art, the mural art form, is already well known for its originality and traditions across the world. Magic and ritual occupy an important place in the socio-religious life of all primitive communities, and sauras are not an exception. The saura iconography as ritual, based upon an extensive linkage between benevolent and malevolent spirits, good and evil. With this backdrop, the present study tries to analyse, the art of ikon making, stylistic variations, and most precisely, behind every ikon making process, there are particular stories of shamans. The Shaman is a person regarded as having access to, and influence in, the world of good and evil spirits, and also the house owner of those icons. He often calls a saura painter to paint their house walls with ikons. Ikon, often regarded as a temple within the house known as idital and needs to repaint annually in certain cases. The findings show that Ikon designs, basically based on some case studies, symbols are used to promote or preserve the fertility of the crops, to avert diseases, to assist childbirth, to represent shrines and hills, and in many more. The results show that ikons are drawing on the walls and therefore it is called ititalan, suggest writing than painting. Often it might be argued that the ikons belong to literature rather than art. In other sense, they are graphic messages to the spirits; their stories, they recite a prayer of praise and flattery because behind every ikons, there are various stories to identify and tell.*

Key Words: *Saura tribal art, Shaman, idital, Ikon, Mural Art, stylistic variation*

Socio-economic Status and Challenges: Assessment of Flower Growers in Purba Medinipur, West Bengal

Soumitra Jana¹ and Swati Mandal²

Abstract : Floriculture is an evolving market in the arena of commercial agriculture. Purba Medinipur district is one of the leading producers of cut and loose flowers in West Bengal. Sahid Matangini, Panskura, and Kolaghat Community Development Blocks are the main areas of flower cultivation. From an economic perspective, the flower growing industry is significant since it creates many jobs due to its labour-intensive nature. Not only men but many women are engaged in this cultivation like, flower replenished, garland making, packaging, and marketing of the product. Many small and marginal farmers can make it profitable even in a small plot of land. The paper focuses on the socio-economic status of the flower growers and evaluates the challenges faced by them through the field-based observation method. The main challenges and obstacles of flower cultivation of Purba Medinipur, West Bengal are the uncertainty of the market, lack of infrastructure, absence of cold storage for flowers, soil health-related challenges, the prevalence of pests & diseases, the increasing growth rate of price of fertilizer, climate-related, etc. Despite that, Purba Medinipur holds an important role in West Bengal next to Nadia district in terms of area and production (Department of Food Processing Industries and Horticulture 2021-22).

Key Words: Floricultural products, Challenges Assessment, labor-intensive, Marketing, Replenished.

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Rural livelihood in Badipadara Village, Kandhamal District, Odisha

Priyadarshini Sen

Abstract : *Studying rural livelihood has always been a source of great research topic in India. A country with an agrarian economy needs to be studied at various levels of rural settlements. A primary level study was conducted in a village, named Badipadara, situated in Kandhamal district of Odisha, one of the eastern states of India. Kandhamal district, which includes Badipadara village, is a tourist destination, known mostly for its glass bangles and Geographical Indication-tagged turmeric production and dokra (brass) toys. Badipadara village, with 112 households, almost each being interviewed, land use being studied along with their stories of existence, would attract the interest of rural geographers. Such a micro-level study on a very remote village of the state of Odisha may provide deep insights into the typical rural living, highlighting its regular features and problems as well.*

Key Words: *Crop pattern, tourism, rural-scape, drop-outs, dry millets*

Understanding Out-Migration from Odisha (1991 to 2011): A Census-Based Analysis

Swaroop Mahapatra¹ and Vijaya P. Khairkar²

Abstract : *Odisha has seen a consistent rise in out-migrations since 1991. The 2023 Odisha Conclave underscored that 33.5 per cent of rural households report out-migration. This paper investigates the reasons and patterns of out-migration from 1991 to 2011, focusing specifically on intercensal migration by employing geospatial techniques and demographic data from the Census of India. Searching for work or employment opportunities is the primary reason for total and male out-migration, while marriage is the primary reason for females. Gujarat, Madhya Pradesh, Maharashtra, Delhi, Chhattisgarh, and Andhra Pradesh emerged as the preferred destinations, with Gujarat leading in all three decades for work or employment-related migration.*

Key Words: *Work, Employment, Out-migration, Census, Geospatial.*

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Geographical Perspective of Migration in Devprayag Block, Tehri Garhwal District, Uttarakhand

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Abstract : *This study looks into the migration in the Devprayag block. Migration, which includes all forms of community relationships regardless of distance or time, is the movement of persons from one location to another due to changes in social connections. It denotes a permanent or semi-permanent relocation without regard to the distance travelled or whether the transfer was forced upon oneself. The "place of origin" and the "destination" are distinguished by this idea. However, ongoing labour migrations needing more permanent status are not included. Economic, social, political, and environmental factors interact in a complicated way to influence migration. These causes include the desire for better employment prospects, access to healthcare and education, political unrest, natural disasters, and personal motives like family reunions. To effectively handle the benefits and challenges migration brings, it is imperative to comprehend these variables.*

Key Words: *Destination, Devprayag, Employment, Migration, Place of origin*

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Geographical Note

**A Geographical Study of Slum Dwellers in Kashi Rajnagar
and Chaukhandi Wards of the Municipal Corporation in
Prayagraj Metropolitan City**

Ajin Ray

Abstract : *Urban living is the keystone of modern human ecology. Urban attractions mean better opportunities, be it employment, education, or health facilities. But, due to rapid and unplanned urbanization, we find grey areas in cities called 'slums'. In these areas, we find concentrated poverty, inadequate housing, and very limited access to basic services. The slum-dwellers live here with a ray of hope for betterment.*

Key Words: *Haphazard Growth, Disorganized, Encroachment, Relocation, Sustainable and Cultural Sensitivities.*