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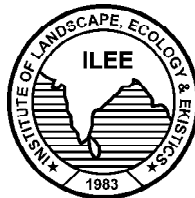
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*Vol. I*

Demography & Health



INSTITUTE OF  
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# Indian Journal of Landscape Systems and Ecological Studies

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# New Paradigm of Family Formation: From Coupling to Multinuclear Family

Utpal Roy<sup>1\*</sup>, Indranil Maity<sup>2</sup> and Surajit Karak<sup>3</sup>

**Abstract :** *Since industrialization, family evolution has been a continuous process that is reflected in demographic transitions i.e., FDT (first demographic transition) and SDT (second demographic transition) with significant variations in different countries. This article attempts to trace the factors like-fertility, economy, socio-cultural value and technology have dominant influence in family demographic transitions that is prominent in delay marriage and parenthood, high divorce, lower remarriage, growing cohabitation with non-marital birth etc. Such changes stimulate the shifting from conventional family to nuclear family to multinuclear form. The principal findings reflect the features of multinuclear family structure-single living, single mother or father household, cohabitation family, LGBT family, are experiencing and growing around the world specially in OECD countries, Latin America and Far Asia. Despite family dynamics, multiform of nuclear family will be increasing near future by the globalization, urbanisation and postmodern force.*

**Key words:** *FDT, SDT, Multinuclear, Cohabitation, LGBT, Urbanisation, Postmodern*

## Introduction

The theory of second demographic transition (SDT) has a multiple family features with large family dissolution, union deformation, postponed of marriage and parenthood with childlessness, single living, pre and post-marital cohabitation, extramarital birth and remarriage with high divorce rate (Lesthaeghe & Van de Kaa, 1986; Van de Kaa, 1987, 1994, 1996; Lesthaeghe, 1995, 2010, 2020; Latten & Mulder, 2014). The interrelationship between SDT events and traditional family deformation and single household formation is coming into account in developed country since 1980s, recently in developing country (Ogden & Hall, 2004; Wallerstein & Smith, 1992; Bongaarts, 2001; Sonawat, 2001; Barkat, 1985). Since 1960s, four radical changes i.e., technological, sexual revolution, women, youth movement (Arnett, 2014), drives to individualism, self-actualisation, gender revolution and materialist to post materialist consumption among educated group, stimulate the conventional family values change. Therefore, traditional extended joint, joint and stem family norm are in transition and move to multinuclear form in 20<sup>th</sup> century i.e., Cohabiting family,

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# Mapping the Knowledge, Attitude, and Practices of Menstrual Hygiene Management among Adolescent Girls in Rural West Bengal

Saraswati Kerketta\*

**Abstract :** *According to WHO and UNICEF Joint Monitoring Programme (JMP) for drinking water, sanitation, Menstrual Hygiene Management (MHM) refers to 'Women and adolescent girls using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials as well as understanding of the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear'. Menstrual hygiene constitutes an integral part of the health of adolescent girls and therefore has direct implications on their reproductive health. MHM is not only determined by availability of safer absorbent materials, adequate Water, Sanitation and Hygiene (WASH) and adequate disposal facilities but also guided by existing social norms and taboos. Present article attempts to investigate into the knowledge, attitude and menstrual hygiene practices among rural adolescent girls of Bankura district. A total of 900 girls and their mothers (900) were interviewed during the survey carried out in three selected C.D blocks namely Bankura-II, Sarenga and Mejia of Bankura district. The study is based on qualitative and quantitative analysis.*

*Knowledge, Attitude, Practice score (KAP score) has been constructed to analyze the knowledge, perception and menstrual hygiene behavior among sample population. Focus group discussions ((FGDs) were conducted to expose some of the complex, subtle aspects of the topic of interest, which would not have surfaced during a personal interview. Result from the analysis shows that there is dearth of adequate and accurate knowledge about menstruation and its accurate management among the adolescent girls. Attitude towards menstruation is mostly negative across communities and are mostly controlled by norms and taboos. Significant proportion of girls use safer method of menstrual protection however; disposal of absorbents remains a serious challenge. KAP score indicates age, religion and place of residence to be important determinants of MHM practices among girls.*

**Key words:** *Knowledge, Attitude and Practice (KAP), Menstrual Hygiene Management (MHM), KAP Score*

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# **An Assessment of Fertility Preferences and Behaviour in a Region of Low Fertility: A Case Study of Kolkata**

**Monorisha Mukhopadhyay<sup>1</sup>, Anuradha Mondal<sup>2\*</sup>**

**Abstract :** *This paper seeks to understand the nuances of fertility preferences and behaviour in a sub-population in Kolkata which is experiencing low fertility on the basis of a field investigation during which over 300 currently married and unmarried women were interviewed in the city. The fertility preference depends on number of factors like number of living children, sex composition of the living children, notion of ideal family size and desire for more children. Large proportion preferred one boy- one girl combination although nearly half of the respondents have one birth. This indicates that there is undercurrent of desire for small families and preference for one child is emerging rapidly. There is indication that fertility decline has taken place in the study area along with an undercurrent sex preference. The paper indicates towards the implication of low fertility which will be proportionate increase of the age old population, sizeable decrease of population if in-migration stops and deficiency of young and innovative minds.*

**Keywords :** *Desired family size, Low fertility, Arnold effect, Gender preference*

## **Fertility Transition in India: A Regional Context**

The successive reduction in fertility from high birth order to low birth order is thus the result of values and disvalues accrued to each birth. The early fertility transition is guided by value of having a child whereas, the post transition fertility being guided by economic considerations (Bulatao, 1981). In course of fertility transition low fertility gradually became intriguing in the developing world. Although fertility transition in the developing countries do not comply with the micro economic theories of socio economic variables like caste, education religion and working status of women (Dev *et al.* 2002). India has come a long way in the history of fertility transition. But the most striking feature of India's transition is that of large divergence due to combination of determinants that produces different fertility regimes in the country (Dyson and Moore, 1983; Rele, 1987; Murthi, Guio and Dreze,

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# **Cost of Child Birth and its Role on Fertility Decision among the Urban Poor of Kolkata**

**Paramita Banerjee\***

**Abstract :** *Factors controlling fertility decisions has always remained an area of interest for the demographers. In this study, role of one of the economic factors, i.e., cost of child birth on fertility decision has been studied for urban poor women living in the city of Kolkata. How much cost they had to bear for seeking maternal health care during the antenatal, delivery and post natal phases of a child birth and impact of these costs on couples decision on number of children ever born and timing of the birth have been observed. The bivariate association between cost of child birth with the first and second birth intervals showed that the decision on timing of first birth was being governed by social factors. However the situation totally changed in case of the second child birth, the role of cost became the most important factor in deciding to have a second child and timing of the second birth. Multivariate analyses also showed that the costs of maternal health care had a significant relationship on decision of having second or higher order births rather than the social factors. Findings from In-depth interviews confirmed the significant role of cost of child birth on fertility decisions.*

**Key words:** *Child birth, Maternal health care cost, Fertility, Family Planning*

## **Introduction**

India is entering the late transitional phase of Demographic Transition with a declining population growth rate. Reduction in growth rate of population is result of already low death rate and lowering birth rate since 2001 (Kulkarni, 2014). With a total fertility rate of 2.4 it has reduced its population growth rate from 24.9% in 1971 to 17.6% in 2011. However due to the demographic momentum, i.e., the tendency for a population to continue growing after a fertility decline because of their young age structure, the country is supposed to become the most populous country in the World on the year 2022 (Pandey et. al., 2015). For speeding up the fertility decline in India, it is need of the hour, to focus demographic studies on the pockets of population with higher growth rate and analyse the responsible factors in detail. At micro level, a couple's fertility decision making process needs to be studied in-depth: how many children they are going to have and what are the determinants of their desired family size (Thompson, 2001).

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# Coverage and Buying Constraints of Health Insurance: Findings from Kolkata

Anuradha Mondal<sup>1</sup> and Monorisha Mukhopadhyay<sup>2\*</sup>

**Abstract :** *In India, the available options of health insurance are employment and income centric, but the coverage in the formal sector is still weak and assuming if income is not a constraint for many, all potential buyers are also not insured. This paper focuses on two aspects; firstly, health insurance coverage of households and their choice patterns of coverage in Kolkata by analyzing NFHS- IV (2015-16) data, and secondly, to understand the household's buying decisions for insurance subscription through a perception based survey in Kolkata.*

*The study findings reveal, Kolkata has significant number of households with insurance coverage (25.4%) with a higher number of households enrolled in Rastriya Swastha Bima Yojana (53.6%), followed by privately purchased schemes (18%) and employer-based coverage in 2015-16. The coverage rate has gone up by 7% since 2005-06 but shows a sweeping change by type of coverage. In addition, socio-economic factors rule out to some extent the coverage rates. Finally, buying constraints point out that a large number of potential buyers exist and are inadequately trapped because they lack information, many are risk-takers and do not value the importance of health insurance.*

**Keywords :** *Health insurance coverage, types of health coverage, employer-based insurance, potential buyers*

## Introduction

Government expenditure on health is usually low in India forcing many households to pay out-of pocket which is almost two-thirds of total health spending and this spending is majorly on private health care which includes two-third of the spending on outpatient care and one-fourth on inpatient care (Chaudhuri et al, 2015).

The demand for financial security opens up discussions and there has been continuous review of health financing system by experts and henceforth, numerous suggestions have been proposed. The guidelines suggested were on the principles of equity and universality and proposes universal health coverage to promote health at cost-effective price (Baru, 2006; Mahal and Fan, 2011; Reddy *et al.*, 2011).

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# Understanding Contemporary Fertility Transition in Rural West Bengal: A Critical Review

Kakoli Das\*

**Abstract :** *Rural West Bengal has witnessed fertility transition (from high fertility to low fertility) during the last two decades. According to SRS 2018, it has now the second lowest (1.6 children/woman) TFR among all other states in India. The provisional data of Socio-Economic Caste Census (SECC 2011) revealed that in terms of rural development, West Bengal is lagging behind most of the states in important indicators. Therefore, fertility decline in rural West Bengal had taken place in seemingly unfavourable conditions and almost nullified several pre-existing theories of the same. The present study tries to hypothesize that fertility transition in rural West Bengal cannot be simply understood through the conventional wisdom of positively linking proximate determinants of fertility. Instead, it could be 'distress-driven', or regulated by aspiration towards a child or ideas/values related to low fertility, or it can be a culmination of various factors that initiate a reduction in demand for children at first and then the supply-side factors come into its track and fertility reduces.*

**Keywords :** *Spatial Clustering of Fertility, Fertility Transition, Innovation Diffusion Hypothesis, Rural-Urban Fertility Differentials*

## Introduction

The world has experienced fertility transition (high fertility to low fertility) in varying degree (Bongaarts, 2009). The process of fertility transition was initiated in Europe, especially in France, in the second half of the nineteenth century and later spread throughout the world (Lee, 2003). It has been widely accepted that, factors like, age at marriage, contraceptive practice, post-partum amenorrhea (Bongaarts, 1978), female education and occupation (Black and Juhn, 2000; Dolado et al., 2002) and socio-economic status (Skirbekk, 2008) have great influence in fertility transition. Explaining why ideal family size would fall over time, researchers argued that it is a matter of quality of children or otherwise, a trade-off between quantity and quality (Becker and Lewis, 1974) and increasing aspiration for upward social mobility (Davis, 1963; Greenhalgh, 1988)

India has been witnessing fertility transition since 1960s. Currently, the Total Fertility Rate (TFR) (number of children per woman of reproductive age group) of

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# Socio-Economic Aspects of Labour Migration: A Case Study of Nepali Migrants in Kalpa, Himachal Pradesh

Pranab Kr. Das\*

**Abstract :** *Migration is an important social process of population movement, temporarily or permanently from one geographical area to another. Push factors repulse people from their native places. On the other hand, labour migration could enhance economic sustainability in their native places with a constant flow of remittances. Nepal is one of the backward countries in South Asia, suffering from the adverse effect of population explosion and slow economic growth. Volatile political conditions mainly the prolonged civil war of Maoist has created the situation more vulnerable. Nepali labours are forced to migrate in India and other countries. Remittance is one of the main contributors to Nepal's economy. The Mid-Western, Western and Far Western regions of Nepal are facing this scenario badly. A large amount of rural population from these regions is visiting different areas of Himachal Pradesh and Uttarakhand during the harvesting period of apple as the seasonal labourers. Kalpa, famous for Kinnauri Apple, is the perfect example of this scenario. There is a long tradition of migration from Nepal. These labourers are locally known as 'Bahadhur' as they hard workers and courageous. They are extremely helpful for plucking, packaging and transporting of apples from high terrain areas. The remittances help them to maintain families during the lean periods. This is an inclusive case study which explores the different socio-economic aspects of the migration of Nepali labourers in Kalpa and surroundings emphasising on nature, cause and consequences.*

**Key words:** *Apple Harvesting Period, Migration, Nepali labourers, Remittances.*

## Introduction

Labour migration is an important aspect of population studies. In the contemporary world, labour migration is a common scenario. It has a great impact on the socio-economic, cultural and psychological life of people, at the place of immigration and emigration (Kaur, 2003). It is mostly influenced by social structures and pattern of development. Labour migration has been a feature of Nepalese livelihood strategies for at least 200 years; the first large-scale migration being that of men from the hills to join *Gurkha* Regiments (Carroll, 2012). It plays a key role in Nepal's economic development. Nepal is one of the poor countries of the world suffering from social inequalities and poor infrastructural growth. It ranks 143 among

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# Perspective of Migration in the Backdrop of Urban Development: A Case Study of Cooper's Camp Notified Area Authority in West Bengal

Samik Gupta<sup>1</sup>, Panchali Majumder<sup>2</sup>  
and Jyotibrata Chakraborty<sup>3</sup>

**Abstract :** *Defined as the urban space, the twenty first century brought with its new aspirations as well as challenges of urban development, throughout, from local to urban. Urban space is central to the study area, Cooper's Camp notified area, Nadia, West Bengal, where migration, a spatio-temporal process, and the rehabilitation of the refugees after partition had an immense effect. The present study focuses on the current refugee's status of the Cooper's camp notified area, the condition of educational facility in the colony area, to compare the inter-urbanization level between different wards of Cooper's municipal area. The methodology adopted is systematic random sampling method and the collected data has been tabulated and analysed through different cartographic and statistical techniques. This paper is an endeavour to ensure the process of urban development where migration plays a major role. It attempts to find out the effect that urbanization and development has had on the inhabitant of the Cooper's Camp who during the period of partition had to face immense hardship and struggle for their daily survival.*

**Key words:** *Poverty, work participation, income, urbanization, development*

## Introduction

Indian subcontinent witnessed partitioning that has been influenced by the massive migration of people. The nation- state India upheld displaced people during independence violence and resulting in partition of East and West Pakistan. India became free on the 15th day of August, 1947 (Biswas, 2017). The legacy of the colonial rule for more than three hundred years had take its toll on the people, having a pluralistic composition in terms of religion, language and ethnicity. The inhabitants of undivided Bengal did not follow a monolithic composition in terms of race, religion and ethnicity and as such remained fragmented forming separate

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# A Study on the Growth of Population in Bankura District, West Bengal

Atanu Sarkar<sup>1</sup> and Saswati Mookherjee<sup>2#</sup>

**Abstract :** *Population growth is one of the important determinants of the overall development of any region. Population is in itself considered as a resource. Low growth of population as well as excessive population growth, both is constraint to development. For all-round development there should be a balance between population growth and available resources. Impact of population growth on human development is plentiful, and it cannot be effectively opined that a greater number of people leads to higher economic development, as this needs pioneering idea, technology and policy execution. Countries with small population growth and higher resource potential also undergo development hurdles, due to difference in the allocation of man and resource. Demographically the district of Bankura, over the years, has presented a picture of stability with low population growth rate, which is only 12.65% as compared to the average growth rate (13.93%) of West Bengal, and India (17.64%). This study aims to analyse the changing pattern of population growth and changes in growth rate of population over a period of 1901-2011 in the district of Bankura. Lastly, the study suggests some remedial measures to reduce the variation in population growth and the developmental measures for the backward areas.*

**Key words:** *Population and resource, Changing pattern of population growth, Development of backward region*

## Introduction

Population provides a focus for comprehensive geographical study of a region. The term population refers to the whole number of people or inhabitants within an administrative or geographic area. We see interest in population study had been shown by many geographers from the middle of the seventeenth century. Most of the early developments took place in England, France, Germany and a few other European countries. In India, the establishment of Indian Association for the Study of Population (IASP), 1972 may be considered a landmark in the history of population studies in India. Population growth is the increase in the number of people that reside within a country, state, district, block or city over time and can

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# Demographic Structure, Work Participation and Association with Social Sustainability in Nadia District, West Bengal, India

Iman Sk\*

**Abstract :** *Demography of an area means the study of changes in number of birth, marriages, death, migration, growth of population etc. in a particular area during a period of time. The present paper is an attempt to analyze the demographic structure, work participation and association with social sustainability in Nadia District, West Bengal, India; and to analyze the pattern of existing population growth rate, birth rate, death rate and infant mortality rate and literacy rate. Based on the C.D. Block wise secondary data obtained from the District Census Handbook, Nadia; and Primary Health Report, West Bengal, choropleth maps have been prepared for the area by taking the values of population growth rate, birth rate, infant mortality rate, work participation rate and literacy rate; and also to measure the correlation among birth rate, work participation rate and infant mortality rate with literacy rate. The result shows that the highest population growth rate (13.51%) in 2001-2011 census period occurred in Krishnagar sub- division. Based on 2011 census data correlation measurement negative correlation have occurred in birth rate with literacy (-0.338) and infant mortality rate with literacy (-0.718) and positive correlation have occurred in work participation rate with literacy (0.449). However, balanced conditions among population growth rate, birth rate, death rate mainly infant mortality rate, and literacy rate, and job facilities are suggested for considering demographic change of the region.*

**Keywords :** *Infant Mortality Rate, Mean Centre of Population, Literacy and Work Participation Rate.*

## Introduction

A number of diverse stages are experienced in demographic growth through which population passes, the stages being jointly known as the population cycle or the theory of demographic transition. It is the relationship between fertility and mortality. Demographic transition is a general model describing the evolution of levels of fertility and mortality over time. It has been devised with particular reference to the experience of developed countries. The theory of demographic transition was put forth by scholars like W.S. Thompson (1929), Notestein (1945) and Blacker (1947)

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# A Comprehensive Analysis of Human Fertility Transition of South 24 Parganas District in West Bengal, India

Jiban Krishna Mandal<sup>1</sup> and Saswati Mookherjee<sup>2#</sup>

**Abstract :** *Since the 2000s, the nature of fertility has gone through a dramatic change more or less at all levels in the developing world, and South 24 Parganas district of West Bengal has experienced such change to a significant extent. The present paper contributes about the emerging trends and patterns of fertility (crude birth rate) of the district at subdivision and Block levels. The overall observation establishes about the fact of major decline of fertility, compared to the state and the country's status. The specific analysis (2008-2017) elucidates negative relationship of fertility with female literacy, female work force participation and urbanization and positive relationship with the proportion of Muslim population. In spite of having absolute increase of population, spectacular decline in decadal growth rate of people, consistent decline of child population (0-6 years of age) and growing proportion of population especially in working age group may be the consequences of fertility decline which has a considerable implication towards demographic dynamics of the district.*

**Keywords :** *Fertility decline, Crude birth rate, Muslim population, Female literacy*

## Introduction

The developing world has started to experience the trajectory of demographic transition during the decades where India has stepped at the middle position of such journey by the declining fertility and mortality. As a vital event, fertility acts as one of the key controllers of demographic transition and also one of the three principal components of population dynamics, the others being mortality and migration (United Nations, 1973). It refers to the actual reproductive performance of people (Gurusamy, 1997 p.49) and their existence, growth and distribution (Sharma, 2012). The trends and differentials of fertility are influenced by several social, cultural, economic, political, psychological and demographic factors, though socio-economic factors have the principal role for its trends and differentials (Bongaarts and Potter, 1983). Some scholars argues that the main factor for the differential growth of

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# Population Growth and its Consequences: A Case Study of North 24 Parganas District, West Bengal

Rajat Halder\*

**Abstract :** *Rapid population growth undermines the functioning of traditional, social, economic and ecological structures. The problems which have arisen out for excessive growth of population are deteriorating the man-land ratio and increase the population pressure on functioning land. The district of North 24 Parganas of West-Bengal is a densely populated area and, therefore, its economic development is closely connected with its population growth. The population in 1981 Census had increased by 31.49 percent over that of 1971. In 1991 the population in the study area increased by 31.69 percent and the growth of population of the study area was 22.69 percent in 2001 and 12.04 percent in 2011. In 1981 there were 12.19 persons in per hectare cultivable land and increase into 22.2 persons in 2001. Marginal worker (work less than 183 days in a year) to total workers has also been increase abruptly. For example it increases from 2.01 percent in 1991 to 14.45 percent in 2011. A more widespread effect of population growth is that people have been crowded into low income work. 53.64 percent of total workers of sample surveyed (2012) earn rupees 5000 and less than 5000 of amount and their highest proportion occurs in the rural area. The pressure of population growth is making the difficult for governments to keep pace with growing social needs such as water supplies and sewerage, housing and education. In rural area there is only 1 health center per 60000 populations, only 1.25 km of surface road per sq. km. and 45.07 percent of households are under sanitation. Mass-exodus of man power from the countryside to towns is taking place due acute agricultural over population and the rate of extreme urbanization is taking place in Barasat, Rajarhat and Kolkata Metropolitan.*

**Key words:** *Population Growth, Man-land Ratio, Marginal worker, Low Income, Social needs*

## Introduction

Everywhere in India is a clear picture of increasing population. According to the Indian census, carried out in 2011, the population of India was exactly 1,210,193,422, and the various studies have projected that India will be globally most populous country, surpassing China, by 2025. According to Phukan (2014), the main common cause leading to over population in India is that birth rate is still higher than the death rate. We have been successful in declining the death rates but the

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# Census of India and Disappearance of a Minority Community

Sudarshana Sen\*

**Abstract :** *The history of recording the demographic profile of the population was a colonial administrative initiative. A community of Eurasians later known as Anglo-Indians begun from sexual union between a native woman and a man of European origin. The birth of the community and its evolution into a large one was in the colonial past. Later it developed and was acknowledged as a minority in independent India. From the year of independence till 1961 it was enumerated in the Census of India by its name but later on was recognized only as a Christian minority where many other groups of the same religious identity were categorized. This article delves into how a recognized minority group slowly started to disappear from the radar of official recognition as a community and a minority and how it affected their identity in India.*

**Key words:** *Anglo-Indian Community, Politics of Identity, Lok Sabha representations, Constitutional amendment*

## Introduction

The Census of India begun under the patronage of the colonial administrators in 1872. However the first synchronous census was conducted in 1881. Since then census had been conducted of the population domiciled within the territory of India every ten years. The last one was conducted in 2011, the purpose being enumeration of the population for better administration. Though this has been a modern and western paradigm of enumeration, there was a population count as early as in 800 to 600 B.C. It contained a detailed description of the population to formulate policies. Listing and recording data of the population has been conducted in pre-colonial India in the third century B.C. and during Akbar's rule in Mughal times. The Census Act of 1949 and subsequent Census operation in 1951 was the first record of the population in Independent India. The two censuses in the first two decades after independence were different from the subsequent ones. The report of 1951 census was a complete departure from the pattern of previous census reports during colonial rule. This report attempted to interpret the past changes in the size and structure of India's population and to point out their implications for the level

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# **Climatic Extremes and Human Displacement: Case Studies from Sagar C.D. Block in South 24 Parganas District of West Bengal**

**Samiparna Das<sup>1</sup> and Anwasha Haldar<sup>2#</sup>**

**Abstract :** *Historically, humans have always settled in the environmentally most favourable locations. But with the rapidly rising populations, greater environmental hazards due to climate change, and scarcity of usable lands, people have been forced to move to marginal regions, whereby putting themselves at risk. This paper discusses the plight of the people of Ghoramara, a remote and fast depleting island in the Hugli estuary under Sagar C.D. Block of South 24 Paranas district of West Bengal. Those who were displaced by climatic disasters or had to migrate in search of better living conditions moved into the rehabilitation camps in Jibantala on the inner parts of Sagar Island perceived the process of rehabilitation differently than those who live in constant risk zones, but are not ready to change their 'homeland' area. Primary survey data and information is used in this study. The research aims to bring in a general awareness among the planners on the psychological needs of the displaced population as mere safer homes cannot bring in content and security in the minds of the people.*

**Key words:** *Climate change induced displacement, Climate refugees, Resettlement camps, Psycho-social impacts*

## **Introduction**

Climate change may not directly displace people but may either cause extreme events resulting in uncondusive habitations, or frequent climatic disasters that make it difficult for people to survive in their original habitats. Climate change causes an increase in the number and severity of sudden-onset of natural disasters. It has specific long-term environmental effects such as land loss, extreme floods, decreased soil productivity, desertification and other changes in weather patterns, which means that people's livelihoods are no longer sustainable and they are forced to live in vulnerable situations or migrate to other places. It often leads to increased conflict over resources inducing displacements. Climate change affects crop productivity

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# Practicalities of Labour Migration in Iron Foundries of Howrah Cluster till the Post-Covid 19 Pandemic Period

Koushik Chatterjee<sup>1</sup> and Kathakali Bandopadhyay<sup>2</sup>

**Abstract :** *The oldest and largest iron foundry cluster of India is at Howrah in West Bengal. It has always experienced migratory labourers from various states since inception till date. The demography, styles, causes and rate of migration varied during the times. It is here, the study has been taken up to identify the cause-and-effect relationship of the migrant workers in Howrah Foundry Cluster (HFC) is a necessity. The research is to measure and identify the causes, and dynamic nature of both immigration and emigration of labourers in the Howrah iron foundry cluster with special reference to the Covid19 pandemic and post- pandemic periods. Both the statistical and cartographic analysis is executed of the data derived from primary survey as well as secondary information. Lee's Migration model has been applied and findings of the push and pull factors of migration were studied with respect to the foundries. Ravenstein's model stands more justified in few indicators in examining the behavioural characteristics of the Howrah Foundry Cluster migratory labourers. The entire situation of the just pre-pandemic, during pandemic and immediate post-pandemic period of the HFC and its enterprises are described exclusively by diagrammatic representation. The prospect of iron foundries of Howrah can be affected by migration of more skilled and semi-skilled labourers from the foundries of other states, which was found from the impact of immigration caused by the pandemic.*

**Key words:** : *Iron and steel industry, Migrant labourers, Labour migration models*

## Introduction

The iron foundries of Howrah, a district of West Bengal, India, is considered as a natural cluster as it is the outcome of backward linkages of large industries, spin-off and inter-firm linkages during the British colonial period.

The indigenous entrepreneurs of Howrah led the emergence of small-scale Iron foundries in Howrah. The local unskilled mob were gradually trained for the casting,

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# Community-Based Management of Low Birth Weight (LBW) Babies: Does India Need a Standard Operating Procedure (SOP)?

Subir K. Kole\*

**Abstract :** *One out of every four babies in India is born with low birth weight (LBW). Being born as LBW is a significant risk factor for mortality. When an LBW-baby is delivered at an institution, it is managed as per prescribed clinical procedures. Despite 80% of total births occurring at institutions at all India-level, there remain states (Jharkhand, Bihar, Rajasthan), and districts within states (Barmer, Jaisalmer), where the coverage of institutional delivery is poor. Moreover, all babies delivered at institutions, eventually return to the community. What happens when the LBW-baby is discharged from institutions to be taken care of at home? How it is managed in home or community settings? Does India have a set of Standard Operating Procedures (SOPs) to manage such babies? Through a critical review of evidence, I examine the need for an SOP on community-based management of LBW-babies in India. I also examine how Government of India's existing Home Based Newborn Care (HBNC) Operational Guidelines can be improved to effectively manage LBW-babies in home or community settings and address high neonatal/infant deaths. This paper suggests technology-based solutions, and a radical incentive structure for the front-line community health workers to address LBW-related mortality risks in children.*

**Key words:** : *Low birth weight, child health, home based newborn care, ASHA*

## Introduction : Why an SOP for LBW?

Low birth weight (LBW) – defined as weight at birth of less than 2.5 kg (2,500 grams) – remains a significant and unresolved public health problem in India. The World Health Organisation (WHO) estimates that globally more than 20 million LBW babies are born each year, of which 19 million (96%) occurs in developing countries (WHO, 2014). In India, about 3.6 million LBW-babies are born every year, which consists of 18% of all live births (NFHS 4, 2015). Studies suggest that being LBW is a significant risk factor for stunting, wasting and early childhood mortality (Rahman, et al. 2016). In India, almost one-third (33%) of infant mortality is associated with LBW (Wardlaw, 2004). Of all the neonatal deaths (children dying within 28 days of delivery) in India, 75% occur among LBW-babies (Chaudhary et

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