

## Urban Transformation in a Period of Transition from Colonialism to Post-Colonial Rule: A Case Study of Calcutta (1942-66)

Avirup Sinha

*This paper tries to explore transformation of Calcutta's urban space in a period of transition, i.e. from end phase of colonial rule to early years of decolonization. The main object of this paper is to understand the role of broader politico-economic events like world war, famine, communal riots and migration in determining urban planning and development. At the same time, we would review how concerns of health and hygiene affected planning and developmental works in an urban area. Simultaneously, we would try to identify elements of colonial influence in the area of urban planning and development even in post-independent phase.*

**Keywords:** *Urban Planning, Urban Health, Hygiene, Calcutta Improvement Trust, Urban Space*

### **Introduction:**

The study on the transformation of Calcutta's urban area primarily demands an understanding of the concept of 'urban area'. There is no fixed definition of the term. Its definition varies from country to country depending primarily on the demographic count, nature of occupation, economic activities and social formation. In some countries, a settlement of 500 or more people is termed as an urban place whereas in many other countries the population figure may be 20,000 or more. Broadly speaking in Indian context urban area can be define as a space - (i) which is under a municipality of whatever size it may be, (ii) where population size is 5000 or more, (iii) where density of the area is 400/sq.km and (iv) where the employment of at least 75% of the adult males is in the non-agrarian sector.<sup>1</sup> The continuous process of spread of human settlement led to formation of urban areas and demographic, economic, social, geographical and political factors played a role in it. In this context it would be relevant to understand the concept of 'urban planning' because in case of many big cities both in the West and in the East like Paris, London, Cairo, Istanbul, New York, Chicago, New Delhi, Calcutta etc. urban planning played a vital role in transforming the mosaic of the city. In the words of Partho Dutta -

“...the history of modern town planning, which is also called urban planning, has usually addressed the physical layout of the city and how the civic services, i.e. potable water supply, drainage, sewerage, road building, railways, electrification, etc., were implemented. All these were connected with innovations in science and technology which were an intimate part of the industrial revolution.”<sup>2</sup>

Any historical sketch of urban planning therefore include many interrelated disciplines like history of architecture, history of technology, environmental history, economic history and history of medicine.

Growth and development of modern Calcutta is a product of long evolution and in this paper, we would deal with the broader topic of transformation of Calcutta's urban area between 1942 and 1966. The aim of this study will be to understand the process of urban growth of Calcutta in the decade of the forties to the sixties of the twentieth century and to link urban development to broader political-economic events. Urban planning, as mentioned earlier, incorporates issues of public health and hygiene, sanitation, water supply, solid waste disposal system and housing, all of which form subjects of study of this paper. Above-mentioned period is important because it was a time of transition. In the context of collapse of the colonial rule and process of decolonization in South Asia it would be relevant to understand, what changes took place in Calcutta's urban map, pattern of town planning and in health and hygiene issues. Moreover, in the stormy decades of 1940s the city faced a series of threats and new challenges that prominently affected its urban growth in the long run. In 1939, the Second World War broke out and Calcutta witnessed threat of the war after December 20, 1942. Japanese after capturing Burma concentrated on Calcutta, which was a hub of Anglo-American forces at that time. Sporadic Japanese air attack continued until 1944. The Bengal famine, which broke out in 1943-44, affected Calcutta as famine stricken destitute came to the city in large numbers, which placed a strain on housing condition, sanitation, sewage, water supply and general municipal infrastructure of the city. Calcutta along with the rest of India also experienced the problem of communal violence. The 'Great Calcutta Killing' touched upon the already shaken nerves of the city leading to great psychological and physical alienation of the city's two most important communities. Occasional riots continued in Calcutta along with other parts of India. These communal riots led to the collapse of civic amities in the city. In the wake of independence and partition, the refugee influx in the city became an issue of concern. Thus the forties of the last century constituted a major transition in Calcutta's social and spatial dimension, the fifties and the sixties especially the year 1966 which is chosen as the boundary of this article are equally important in terms of Calcutta's urban growth and development and health and hygiene issues. The various experiments with regard to the urban planning, which ultimately in 1966, led to the formation of Calcutta Metropolitan District (hereafter C.M.D) will form the end point of this paper. The year 1966 marked the beginning of another chapter in the history of transformation of urban health, hygiene, sanitation and planning related issues of Calcutta.

Before proceeding in our discussion, we must remain aware of various research works on this topic. A galaxy of authors worked on it and important among them are A.K.Ray, N.R.Ray, Murari Ghosh, Alok K. Dutta and Biswanath Roy, Soumendra Nath Mukherjee, Pradip Sinha, P.T.Nair, Sukanta Chaudhury, Manimanjari Mitra, Swati Chattopadhyay, Partho Datta and others. A.K.Ray dealt with the broader topic of transformation of legendary *Kalikshetra* into modern Calcutta and his work throws light on Calcutta's urban growth from the time of its origin until the end of nineteenth century.<sup>3</sup> N.R.Ray, on the other hand, dealt with more or less similar theme, but his work contains glimpses of Calcutta's remarkable places like St. John Church, the Park Street Cemeteries and

other notable monuments.<sup>4</sup> The works of A.K.Ray and N.R.Ray are important because they enriched our knowledge on the urban formation of Calcutta at its early stage and showed how demographic influx caused spatial expansion of the city. Serious academic research on the urban history of Calcutta had however started in 1970s. In 1974, Murari Ghosh, Alok K. Dutta and Biswanath Roy published their works on Calcutta. It not only gives us a general idea about the changing pattern of urban formation of Calcutta from late seventeenth century till around 1971, but also discuss how the condition of water-supply, sanitation, housing etc., changed with the growth and development of the city in mentioned time period.<sup>5</sup> While Murari Ghosh, Alok K. Dutta and Biswanath Roy showed how economic and demographic factors influenced urban development, Soumendra Nath Mukherjee made an attempt of writing the social history of Calcutta. He showed how in 'native' Calcutta during the nineteenth century factions of high caste Hindu elite operated to control its social and political life.<sup>6</sup> Pradip Sinha, on the other hand, deals with issues like Calcutta's physical environment, ethnic composition, occupational pattern of its population, its overall urban setting and the division between white and black towns, and broader social condition.<sup>7</sup> P. Thankappan Nair makes a noteworthy contribution in the field of urban history of Calcutta. He practically explored every aspects of the city of Calcutta from seventeenth to nineteenth century- touching on the origin of the name of the city, beginning of press in the city, a history of its streets, the story of its High Court and police system.<sup>8</sup> In 1990, Sukanta Chaudhury edited a book published in two volumes. It was a collection of articles on various aspects of Calcutta – the growth of the city, geology, water supply, drainage system, demographic structure etc. – both during the colonial era and in post-independence period.<sup>9</sup> In the same year, Manimanjari Mitra published her work on twentieth century Calcutta that throws light on issues like urban growth and development, demographic structure, economic aspects etc.<sup>10</sup>

In the field of the urban history of Calcutta, Partho Datta makes a path-breaking contribution.<sup>11</sup> He wrote a vivid account on Calcutta's urban planning in the period between 1800 and 1940. In this context, it would be relevant to mention that, works on the town planning of Calcutta prior to the publication of this book, concentrated on the instruments of planning, like water supply, drainage, etc. Depending on municipal sources, such accounts have often become mere municipal histories. The arguments have swung between those who saw genuine progress in the introduction of modern civic services and those who pointed to the limits of such policy. However, Partho Datta's work showed that town planning could be studied in terms of imperial ideology and its bid to win a consensus for its rule. It mainly dealt with three recurring themes. First, the author shows an intimate connection of colonial planning to concerns rising from health and hygiene. Secondly, this work focuses on the shift from laissez-faire to interventionist government strategy. Finally, it shows the role of planning in stabilizing the economy of the city. In this context, we must mention that, in the area of urban planning another important contribution is Prashant Kidambi's work. This work helps us to understand the pattern of urban planning in Bombay metropolis and the role of health and hygiene issues in the process of planning a city.<sup>12</sup>

A brief survey of above-mentioned literature shows that there is a scarcity of literary works on the issue of urban transformation of Calcutta in early years of independence. Further, except

Partho Datta no scholar is really concerned about linking urban planning and health and hygiene related issues in the context of Calcutta's urban transformation in colonial period. This makes our discussion relevant. For a better understanding of the topic, we would divide our discussion under three broad heads. First, we would try to understand how the boundary of this city shifted constantly. Secondly, we would discuss nature of urban planning in colonial Calcutta in nineteenth and twentieth century. In this context, we would try to understand the link between urban planning and health and hygiene related issues. Finally, we would discuss the issue of the transformation of Calcutta's urban space between 1942 and 1966.

### Section - I

Any study on Calcutta as a city must necessarily map the urban area and explain the commonly used concepts like Calcutta proper, Greater Calcutta (hereafter G.C) and Calcutta Metropolitan Development. Calcutta proper means an area, which is under Calcutta Municipal Corporation (hereafter C.M.C). The area under C.M.C never remained fixed and it changed with the expansion of the city. Going back in history, the city of Calcutta had no legally defined boundaries before 1794. Popularly the Fort William region, old or new, was referred as Calcutta and the rest being European 'suburbs' or 'native town'. In 1774, Warren Hastings proposed the boundaries of Calcutta for policing purposes as – "SOUTH-Carry Jurie (Khari Juri, a village under Mathurapur Thana); NORTH- Palta, a village in Calcutta Pergunna; EAST- Baddadherry (Bidyadhari) River; WEST- River Ganges."<sup>13</sup> The Governor-General Lord Cornwallis fixed the boundary of Calcutta for municipal and judicial purposes in 1794, and it practically remained the same until 1867. A proclamation of 11 September 1794 gave a detailed account, which was adequately summarize in an Act of 1840 -

“...north, Maratha Ditch; east, Circular Road (which was constructed along the eastern portion of the Ditch); west, the Hooghly; and south, Lower Circular Road to Kidderpore Bridge and Tolly's Nullah to the river, including the Fort and Cooly Bazaar (Hastings).”<sup>14</sup>

The Municipal limits of Calcutta expanded thereafter. An Act of 1857 defined the Suburb area of Calcutta.<sup>15</sup> In 1876, a separate Suburban Municipality was established. Finally, in 1889 the old suburban Municipality was split into North Suburban (Chitpur and Kashipur), East Suburban (Maniktala), Suburban (Garden Reach) and South Suburban (Tollygunge) municipalities.<sup>16</sup> Entally, Beniapur, Ballygunj, Bhawanipur, Northern Tollygunge, Alipur, Ekbalpur and Watganj became 'added area wards' under Calcutta Corporation and on the east Corporation's limits crossed the Maratha Ditch and included Ultadanga, Maniktala and Beliaghata.<sup>17</sup> The area and number of wards of the Corporation remained unchanged between 1891 and 1921. The municipalities of Cossipur-Chitpur, Maniktala and Garden Reach were joined with the Corporation in 1923.<sup>18</sup> Thus by 1939 the boundary of C.M.C roughly extended from Hooghly on the west to Chitpur, Maniktala and Beliaghata on the east and Kalighat on the south. On 1 April 1953 by *Calcutta Municipal Amendment Act*, the area under Tollygunge Municipality was amalgamated with C.M.C and thus total area administered by C.M.C became 36.92 square miles.<sup>19</sup> The term G.C, on the other hand, first used during the Second World War. The area included a large tract of land, nearly forty miles,

on both banks of the Hooghly River from Budge-Budge to Halisahar. The total area of G.C. as estimated by Sunil Munsri was around two hundred and seventy square meters.<sup>20</sup>

The concept of C.M.D came in 1960. C.M.D covered an area of five hundred and forty square miles and it include Calcutta Corporation Area, and some portions of the district of Twenty-Four Parganas, Howrah, Hooghly and a small portion of district of Nadia in the north. There were thirty-four municipalities, thirty-seven non-municipal urban units and three hundred and forty four rural *mouzas* on the East Bank and two hundred *mouzas* on the West Bank of Hooghly within C.M.D and these distributed among thirty police stations lying on both the banks of river Hooghly.<sup>21</sup>

## Section - II

Now it would be relevant to discuss nature of transformation of Calcutta's urban space in nineteenth and mid-twentieth century and the link between urban planning and concerns of health and hygiene. From the time of its origin Calcutta was the home of various diseases that were associated with bad environmental conditions. These include cholera, diarrhea and dysentery, enteric fever- typhoid and paratyphoid fevers - infective hepatitis, tetanus, malaria, smallpox, plague, influenza, tuberculosis etc. The rapid spread of these diseases in the city became a cause of concern for the British. The British Army in Bengal as well as in other parts of the country was in constant terror due to the tropical diseases. Every year a large number of European soldiers either died or were send off to their homelands due to epidemic or chronic diseases. After suppressing, the rebellion of 1857 welfare of the army became top priority of the colonial government and measures were taken to protect soldiers from various tropical diseases.

Between late eighteenth and late nineteenth century, most dominating medical theory in Europe was the miasma theory. The notion of miasma means inhalation of putrid atmospheric vapour. Health according to this theory was directly link with environmental and topographical factors. Within this category included decaying vegetation and animal matter, putrid odour from earth, water, excrement and corpses, as well as leaving bodies. All these factors, according to the proponents of the miasma theory, caused infection of air, which degenerated into poisonous and sticky miasmas. The miasma theory gradually discarded with the invention of microbes and their vectors. Partho Datta showed how the miasma theory influenced the city planners. He writes - "This new zeal mapped the city along old factory lines, and areas of possible miasma were demarcated for suitable action to contain epidemic."<sup>22</sup> In Calcutta also similar process operated. Air began to be study as an area of decomposition. A contemporary journal in 1820 linked the threat of cholera to unwholesome air.<sup>23</sup> Influenced by the miasma theory the colonial state emphasized on the policy of deodorization and ventilation and it was reflect in the urban planning of Calcutta.

In order to understand how concerns for health and hygiene related issues influenced colonial city planners a brief survey of Calcutta's urban planning in nineteenth and first half of twentieth century should be made. The sanitary condition of Calcutta attracted attention of Lord Wellesley who in 1803, appointed a town improvement Committee for improving the city and health of Calcutta. Nevertheless, this effort was not very successful and only a few streets were metalled. In 1814, the Committee's activities handed over to the Lottery Commissioners who were empowered to raise fund by selling lottery tickets. Between 1805 and 1817 large tanks were dug, the Town Hall was

built, Beliaghata Canal was constructed and several roads were build.<sup>24</sup> Lottery Committee succeeded the Lottery Commissioners in 1817 and it continued until 1836. Under the Committee roads and paths across the Maidan were made, Strand Road was completed in 1828, north to south roads known as Cornwallis Street, College Street, Wellington Street, Wellesley Street, and Wood Street were constructed and large squares with a tank such as Cornwallis Square, Wellington Square and College Square were constructed.<sup>25</sup>

From the first half of nineteenth century the theory of climatic condition took an important place in European medical discourse. It was believe that climate profoundly determined human character and health. Metcalf for example believed that hot climate not only brought discomfort and disease but enduring degeneration of mind and body. He believed that what set India apart were its pestilential climate and not the sewage in the streets.<sup>26</sup> It also believed that climate and topographic condition not only explained individual human nature and habits, but also the form of governments. India, which did not fit the classical European norms, had produced despotic oriental governments.

Ranald Martin, who made an extensive survey of Calcutta, believed that climate shaped human character and health. In his writings, we could get a flavor of utilitarian ideas, when he wrote that, “climate made the Hindu heedless and slothful”<sup>27</sup> However, importance of Martin’s work lie in the fact that he made a detailed survey of the Indian part of Calcutta. He said main problem of Calcutta was faulty drainage.

In 1836, Lord Auckland appointed the Fever Hospital Committee. Discussion and testimonies around Martin’s report on the Native Hospital, which he submitted to the Governors on 9 April 1835 along with a copy of his *Medical Topography*, which he had finished by 1834, popularly known as the Fever Hospital Committee. The Fever Hospital Committee comprehensively reviewed the state of public sanitation in India and the urgent need of sanitary reforms was recognized. The survey also revealed the fact that the existing Indian healing practices were too diffuse to deal with epidemics and that institution on a new footing was essential. However, the Committee failed to produce immediate results, but extensive survey made by it on existing condition of the Native Hospitals and sanitation system of Calcutta served as a guide for future planners of the city.

Simultaneous attempts were also made to create a framework that would supervise and govern health and sanitation related issues in Calcutta. From the middle of nineteenth century, attempts to establish a Municipal Corporation for Calcutta were made. The first Municipal Corporation was established in 1727.<sup>28</sup> The Charter Act of 1793 provided for setting a municipal body in Calcutta, which would consist of Justices of Peace of Bengal, Bihar and Orissa, and the Calcutta Municipal Act of 1863 provided for the establishment of the Corporation of Calcutta.<sup>29</sup> In 1864, a Health Officer was appointed in Calcutta for the first time.<sup>30</sup> The Municipal Act of 1876 reconstituted the Calcutta Corporation and it completed the original drainage scheme, largely increased the supply of filtered and unfiltered water and effected many other improvements. In 1886, a permanent Health Officer was appointed in the person of Dr. W.J.Simpson and in 1899, all aspects of public health activities were carried on under the direct supervision and control of the Health Officer appointed by the Calcutta Corporation.<sup>31</sup> In 1901- 02 four district Health Officers were appointed, who in

addition to their medical qualification required possessing knowledge of sanitation. In 1912, a Board of Trustees was constituted in accordance with the provisions of the Calcutta Improvement Act and was given the power to open up and improve insanitary and congested areas of the city. Finally, in 1923 the Calcutta Municipal Act imposed definite sanitary obligations on the Corporation and gave it wide powers in the health matters.

Apart from reconstructing the C.M.C, the colonial government took initiative to build an institution that would look into the matter of urban planning and for this reason, the Calcutta Improvement Trust [hereafter C.I.T] was created in 1911. Still now, it mainly concentrated on road improvement schemes. The model of town planning which influenced C.I.T at the time of its establishment was Haussmann's Model. Baron Haussmann, the Prefect of Paris during the time of Napoleon, made it. Apart from Haussmann's Model, there were several other plans that influenced activities of C.I.T. These were Richard's plan; Madan and Shroobree's Plan; Geddes' Plan etc.<sup>32</sup> C.I.T brought some momentous changes in the city's urban profile. Attempts were made to improve the Bara Bazar region. In 1936-37 a new sixty-foot road, running north from Harrison Road via Kalakar Street begun.<sup>33</sup> The building of Central Avenue in 1920s was a triumph for C.I.T. Until 1940 in Central and Northern Calcutta C.I.T improves Central Avenue, widened Strand road and created a wide-open ground called Desbandhu Park.

Remarkable changes also took place in Southern Calcutta. Partho Datta showed how both because of initiatives of the C.I.T and private enterprises South Calcutta region developed.<sup>34</sup> In the 1920's private enterprises were very much active in developing the upper- class residential areas. Reshee Case Law, who had been active in the affairs of C.I.T, developed parts of Ballygunj and areas west of Gariahat through his Hindustan Cooperative Society. Apart from the initiative of the rich Bengalis living in the city, the enterprise of the Armenians, Europeans and other settlers in the city in developing Calcutta is noteworthy. Among the migrant population in the city, the Armenians played a prominent part in the development of the city. An Armenian Seth, Apar, built Queen's Park in Ballygunj. Johannes Carapiet Galstaun, another Armenian, developed the areas like Rawdon and Pretoria Streets and Lansdowne Road. The activity of the Mackintosh Burn and Company was intimately connected with changing profile of the city of Calcutta. Mr. James Mackintosh established it in 1834. This company was the official surveyors, valuers, architects and builders. The credit for developing the area south of Alipur and buildings of Minto Park goes to this Company. Thanks to C.I.T's improvement schemes, access to Tollygunge became easier, access to two golf courses of the Calcutta Society and Tollygunge racecourse was opened and Mudiali dumping ground disappeared and replaced by the Southern Avenue. Among other improvement schemes of C.I.T in South Calcutta, extension of Chowringhee and Russa Road, extension of Park Street to newly created Park Circus towards the east and development around the Dhakuria Lake were most remarkable.

In the area of urban planning, the achievements of C.I.T were praiseworthy but it failed to solve the problem of slum dwelling. The colonial state failed to provide adequate housing facility to the huge laboring population. This forced a section of laboring class as well as immigrants to live in the slums. The major fault of the slum clearance policy was that the colonial state failed to make

alternative arrangements for slum dwellers and thus by the end of the colonial rule slum clearance policy of the government ended in a failure. In this context, it must also be mentioned that from late nineteenth century, Calcutta became a commercial centre and thus land in the centre of the town became dearer.

In this scenario, events like Japanese air attacks on Calcutta, Bengal famine of 1943-44, communal riots and partition of India and refugee problem made the situation tough. We would take this discussion in our next section.

### Section - III

In 1939, the Second World War broke out. Calcutta experienced real threat of the war after the fall of Burma in 1942. During this period of the war, the city faced several Japanese air raids. These air attacks started on December 20, 1942 and continued roughly until 1944. During this time, the Bengal famine occurred in 1943 - 44. Huge number of people from *muffasils* flocked to Calcutta in search of livelihood. When the memories of Second World War and the Bengal Famine were still fresh, Calcutta was ravaged by communal violence in 1946-47. The communal violence and partition of India gave birth to the refugee problem. Huge number of refugees flocked to Calcutta after the Noakhali Riots of 1946 and this process continued until mid-60s. Now it would be interesting to study Calcutta's urban growth, development and planning between 1942 and 1966 in the context of impact of above-mentioned events on urban planning of Calcutta.

In 1940s events like Second World War, communal violence and refugee influx greatly hampered activities of C.I.T. After independence, C.I.T. could develop Maniktala, Kankurgachi and Narikeldanga areas. However, C.I.T. could not undertake other activities due to lack of funds.<sup>35</sup> It could not undertake projects like widening of Maniktala Main Road, the widening of Ultadanga Main Road with bridge across the canal, construction of two bridges in continuation of Rashbehari Avenue across Tolly's Nullah (Chetla) and the Eastern Railway Track (Kasba), the widening of Raja Subodh Mullick Road in continuation of the completed Gariahat over bridge, the widening of Deshpran Sasmal Road in continuation of the Tollygunge Railway underpass which had already been widened by C.I.T and the widening of Prince Anwar Shah Road.<sup>36</sup>

However, in 1948 C.I.T took the task of improving Maniktala and the neighbouring tract. The reports of the C.I.T mentioned that –

“A large north-south corridor of improvement area has been completed extending from Ultadanga area on the north upto Beliaghata area on the south. This corridor opened up a main thoroughfare mostly 120 feet and partly 100 feet wide road with the trunk main sewer running underneath which were to carry the combined storm of Ultadanga Maniktala area (N) and sanitary effluents of the entire eastern part of the city leading to the Dhapa Lock Pumping Station.”<sup>37</sup>

C.I.T after Independence continued to improve this region and beautify it. The construction of the Subash Sarobar was an important achievement. Other developmental schemes of C.I.T included – “...the replacement of the Railway Level Crossing on Gariahat Road by a four lane wide over-bridge over the Railway Lines, the remodeling of the old single span Railway Underpass with low headroom on Deshpran Sasmal Road to double span



opening with adequate headroom for double decker bus to ply through [and] the corridor improvement scheme executed in Entally / Paddapukur / Old Ballygunge area linking Rashbehari Avenue with Dharamtolla Street via Park Circus.”<sup>38</sup>

This changed the entire landscape of southern part of Calcutta encompassing the Entally, Ballygunge and Tollygunge region giving the area a modern cultural identity distinct from the more tradition bound cultural identity of the northern part of the town. The city was now expanding towards the South and the East.

C.I.T's activities were not confined only to redevelopment and building. The beautification of the city and creation of spaces for public recreation also attracted its attention. To promote sports and recreational activities C.I.T undertook several projects. Rabindra Sarobar Stadium was constructed according to this plan. It could accommodate 20,000 persons. Subash Sarobar stadium was also construct for above-mentioned purpose. C.I.T builds a large number of parks in various parts of the city. By mid twentieth century, thus C.I.T had been able to change the face of the city to a modern urban metropolis.

Now it would be relevant to look on the condition of slums in the city and Governmental policies related to it. The colonial government failed to solve the slum problem. An Enquiry Committee in 1948-49 stated in its report that there were 4,371 *busties* in Calcutta. As per this report there were on an average, 6.38 huts having 52.12 rooms where 35.3 tenant families and 4.8 lessee families lived. The study revealed that about 92.3% of tenant families, in slums, lived in single room, whereas 6.2 % of tenant families only enjoyed two rooms.<sup>39</sup> The rooms were not only use for dwelling but also for cooking, storing articles and various other purposes. For example, in Sahebbagan *busti*, only 3.7% of tenant families had separate kitchens and 53.7% had to cook in their rooms.<sup>40</sup> The *busti* dwellers were thus force to live in an extreme unhygienic and unhealthy condition.

In 1945, Calcutta Slum Improvement Act passed under the Governorship of Mr. Casey.<sup>41</sup> It emphasized on improvement of slums rather than its clearance but nothing concrete happened as both Government and property owners were not ready to spend money for slum improvement. In the initial years after Independence, nothing concrete happened in this area.

Coming of refugees also affected the urbanization pattern in the city. Unplanned squatter colonies developed and refugee colonies not only witnessed development of a new pattern of dwelling but also it affected urbanization process of this metropolis. Partition of India gave birth to the refugee problem. In case of West Bengal, the influx took place in various phases over a large span of time. Prafulla K. Chakrabarti discussed vividly on how migration to West Bengal from its eastern border took place in various phases.<sup>42</sup> The Hindus from East Bengal started migrating to West Bengal with the outbreak of the Noakhali riots of 1946 and the partition of India accelerated the magnitude of exodus from East Bengal. By June 1948, nearly 1.1 million refugees reached West Bengal.<sup>43</sup> In 1951, there were at least 3.5 million refugees in West Bengal.<sup>44</sup> The introduction of passports for travelling from Pakistan to India on 15 October 1952 started a new phase of exodus. The next phase began in 1960-61. The exodus was the result of widespread minority killings in Rajshahi and Pabna districts in 1962 and Dacca and other areas in 1964-65.<sup>45</sup>

A great number of these refugee population flocked to Calcutta and its suburbs mainly because of its political and economic importance. In a newspaper report, it was stated that -

“About 1,350,000 refugees migrated from East Pakistan to West Bengal up to the third week of September last [1948], according to an investigation conducted by the Indian Statistical Institute. The influx, according to this survey, has been the greatest in the city of Calcutta, where the immigrants number [number] 903,329. The 24 Parganas with some of the areas of Greater Calcutta have a refugee population of 186,855 while the district of Howrah has given shelter to 54,612 immigrants.”<sup>46</sup>

The refugees initially came to the Sealdah station. Thereafter they either made sporadic attempts to settle down or were taken to the Government camps. The condition of refugee camps was horrible. Indifferent attitude of the Central and State Governments forced refugees to initiate movement for self-settlement.

The first experiment of establishing a squatters' colony in West Bengal made in a strip of fallow land at Sodhpur. In that place under the leadership of Nikhil Vanga Bastuhara Karma Parishad (hereafter N.V.B.K.P) Deshbandhunagar colony was established. On the Lakshmi Puja day in 1949 the second and the biggest squatters' colony was established at Naihati and it was named as Bijoy Nagar. After this Sahidnagar colony was established at Kanchrapara. In the tract of land between Dum-Dum and Kanchrapara, several refugee colonies sprang up. After the success of the movement for forcible occupation of land in the North, efforts were made to establish colonies in and adjoining areas of South Calcutta. Prafulla Chakrabarti showed that the first N.V.B.K.P attempt of founding a squatters' colony in the South did not succeed. The refugees from Durgapur Camp choose a strip of land belonging to the Government of India behind the Mint at Alipur. However, because of intervention by the police the attempt failed.<sup>47</sup> However, this strengthened the self-settlement movement in South Calcutta and on 28 January 1950, the Poddarnagar colony came up under the leadership of N.V.B.K.P leaders like Binoy Roy and Sambhu Chowdhury.<sup>48</sup> Meanwhile under the leadership of Indu Baran Ganguly Azadgarh colony was established on 17 January 1950. Azadgarh colony became a bastion of self-settlement movement and in that colony; plans were formulated to establish the Netajinagar Colony, which was also established under the leadership of Indu Baran Ganguly. On 23 January 1950, Chittaranjan Colony was established in South Calcutta.<sup>49</sup> In this way, several squatters' colonies came up in Calcutta and its suburbs.

Thus the refugees occupied the suburb areas, low lying marshy area around the city of Calcutta and vacant areas within the C.M.C area. In the initial years of the influx of the East Pakistan refugees, displaced persons infiltrated fringe areas of Calcutta like Dum-Dum, Tollygunge, and Jadavpur etc. With the passing of time, these areas became crowded, and refugees of later period moved more towards the interior. The refugee population living in the suburban areas of Calcutta began to depend on the city proper both economically and socially. This led to an expansion of Calcutta's urban boundary and with passage of time; suburban areas became a part of the Calcutta city. In 1953, the Tollygunge Municipality was amalgamated with Calcutta Municipality. In 1960 concept of Calcutta Metropolitan Area emerged and it include Calcutta proper and suburban areas. In 1970, C.M.D.A came into existence. The refugee influx and their resettlement eventually caused an expansion of the urban space of Calcutta thereby adding a new dimension to broader issues of public health policy and sanitary engineering.

**Conclusion:**

Above discussion helps us to understand process of urban expansion of Calcutta in terms of demography, economy and urban space. The commercial and political importance of the city of Calcutta attracted many immigrants who came from Burdwan, Rajshahi, Dacca and Chittagong Divisions within Bengal and from Assam, Bombay, Madras and Central India outside Bengal. The process of immigration into the city seen from as late as eighteenth century but number of immigrants increased radically in the first half of twentieth century. Migration into the city of Calcutta affected its demographic character and occupational structure. Apart from causing a demographic explosion, it led to the growth of a heterogeneous population structure in Calcutta. The city became home of the Bengalis, Biharis, Marwaris as well as English, Armenians, Chinese and various other linguistic and ethnic groups. A side effect of demographic explosion was the growth of unplanned constructions in the city. Various diseases affected these constructions, which often took the shape of slums, in most cases. They were clumsy, and its residents often lived in insanitary arrangements and in an overall unhealthy environment.

Concerns for health and hygiene forced the colonial authority to undertake schemes related to issues like urban planning, health etc., from early nineteenth century, which definitely brought an architectural transformation of Calcutta and gave the city its modern shape. However, the colonial government failed to solve problems related to the process of urban development and health and hygiene issues. By the end of the colonial rule issues like scarcity of drinking water, insanitary arrangements, inadequate housing conditions, overcrowded and unhygienic slums continued to threaten broader urban health condition of the city.

At a time, when above-mentioned problems remained unsolved some fresh problems in the decade of 1940s prominently affected the urban profile of the city. Events like Japanese air raids during the Second World War or the Great Calcutta killing on August 1946 prominently affected civic properties and created an atmosphere of panic that restrained the civic administration from undertaking any concrete project to improve the condition of urban health of the city. The Bengal famine of 1943-44 and communal riots in various parts of Bengal attracted many displaced persons into the city and created a problematic situation for the city administrators and planners.

In the area of urban planning, hardly any improvement was noticed in the years after Independence. What seem surprising is that, immediately after Independence, Government did not take any concrete plan related to urban planning and sanitation. C.I.T continued to exist as the chief architect of town planning in Calcutta. However, in the initial years after independence the paucity of funds almost paralyzed C.I.T and it as we noted, could not take important schemes of urban development. Slums continued to exist as breeding grounds of diseases and in this department, little improvement could be noticed. No concrete plan was proposed in this direction.

In the final analysis, we can say that as the colonial government failed to build up an effective water supply and sanitation system in the city and to solve the problem of slum dwelling and this legacy continued even in the initial years after independence. Broader public health condition of the city got affected because of it.

**Endnotes:**

1. K.R. Chakraborty: 'The Urbanisation Trend in the Calcutta Metropolitan District: A Projective Analysis' in Biplab Dasgupta (ed.) et al.: *Calcutta's Urban Future: Agonies from the Past and Prospects for the Future*. Calcutta, Government of West Bengal, 1991. p. 122.
2. Partho Datta: *Planning the City: Urbanisation and Reform in Calcutta c 1800-1940*. New Delhi, Tulika Books, 2012. p. xiii.
3. A.K. Ray: *A Short History of Calcutta, Census of India, 1901, VII, Part 1*. Calcutta, Rddhi, 1982.
4. N.R. Ray (Ed): *Calcutta Old and New: A Historical and Descriptive Handbook to the City*. Calcutta, Bani Mudran, 1960.
5. Murari Ghosh et al.: *Calcutta: A Study in Urban Growth Dynamics*. Calcutta, Firma KLM, 1972.
6. S.N. Mukherjee: *Calcutta: Myth and History*. Calcutta, Subarnarekha, 1977.
7. Pradip Sinha: *Calcutta in Urban History*, Calcutta, Firma KLM., 1978.
8. P. Thankappan Nair: *Calcutta: Origin of the Name*. Calcutta, Subarnarekha, 1985. *Calcutta in the Eighteenth Century: Impression of Travelers*. Calcutta, Firma KLM, 1984. *Calcutta in the 17th Century*. Calcutta, Firma KLM Private Limited, 1986. *Early History of Calcutta High Court*. Calcutta, Bannerjee Book Company, 1987. *A History of the Calcutta Press: The Beginning*. Calcutta, Firma KLM, 1987. *A Tercentenary History of Calcutta: A History of Calcutta's Streets*. Calcutta, Firma KLM, 1987.
9. Sukanta Chaudhuri (ed.): *Calcutta: The Living City: Vol. I, The Past; Vol. II, The Present and Future*. Calcutta, Oxford University Press, 1990.
10. Manimanjari Mitra: *Calcutta in 20th Century: An Urban Disaster*. Calcutta, Asiatic Book Agency, 1990.
11. Datta: *Planning. op.cit.*
12. Prashant Kidambi: *The Making of an Indian Metropolis: Colonial Governance and Public Culture in Bombay 1890-1920*. Great Britain, Ashgate, 2007.
13. Thankappan Nair: 'The Growth and Development of Old Calcutta' in Choudhury (ed.): *Calcutta. op.cit.*, p.13.
14. Ibid.
15. The Suburban area of Calcutta included Garden Reach (Muchikhola), Singeratee, Indree, Sonai, Barberia, Rajarampur, Bhukailas, Dakhsin Sherpur, Khidirpur, Baikunthapur, Adi Ganga Char, Ramchandrapur, Ekbalpur, Mominpur, Balarampur, Alipur, Zirat, Radhanagar, Gopalnagar, Durgapur, Chetla, Jarul, Daulatpur, Sonadanga, Majherhat, Moyerpur and Shahpur. Cited in Ibid.
16. Ibid.
17. Ibid.
18. P.T. Nair: *Calcutta Municipal Corporation at a Glance*. Calcutta, The Calcutta Municipal Corporation, 1989. pp. 6-7.
19. Sunil K. Munsri: *Calcutta Metropolitan Explosion: Its Nature and Roots*, New Delhi, People's Publishing House, 1975, p. 74.
20. Ibid.
21. Pranati Chaudhuri: *Refugee in West Bengal: A Study of the Growth and Distribution of Refugee Settlements within the CMD*. Centre for Studies in Social Sciences, Calcutta, Occasional Paper No. 55, (mimeograph) 1985. p. 7.
22. Datta: *Planning. op.cit.*, p. 21.
23. Ibid., p. 20.
24. Ibid., p. 10.

25. Ibid.
26. Thomas Metcalf: *Ideologies of the Raj*. Delhi, Cambridge/ Foundation Books, 1998. pp. 172-173.
27. James Ranald Martin: *Notes on the Medical Topography of Calcutta*. Calcutta, Bengal Military Orphan Press, 1837. p. 48.
28. *Handbook on Calcutta*. Calcutta, The Corporation of Calcutta, 1966. p. 1.
29. Kabita Ray: *History of Public Health: Colonial Bengal 1921-1947*. Calcutta, K.P. Bagchi and Company, 1998. pp. 17- 18.
30. Ibid., p.18.
31. Ibid.
32. For details see, Datta: *Planning. op.cit.*, pp. 212-263.
33. Ibid., p. 263.
34. Ibid., pp. 270-275.
35. “The Calcutta Improvement Trust, 1946 -1974”, *The Calcutta Improvement Act, 1911 and Allied Matters*, Vol. 1. Calcutta, Calcutta Improvement Trust, 1974. p. 1.
36. Ibid.
37. Ibid. , pp. 1-2
38. Ibid., p. 5.
39. Report on Sample Survey into Living Conditions in Bustees of Calcutta and Howrah, 1948-49, State Statistical Bureau, West Bengal, p. 14.
40. Uma Guha: *A Short Sample Survey of the Socio-economic Conditions of Sahebbagan Bustee, Rajabazar*: Government of India, 1958. Cited in, Mitra: *Calcutta. op.cit.*, p. 197.
41. Partho Datta (ed.): *Improving Calcutta: Notes and Essays on Urban Government*. Calcutta, Bibhasa, 2000.p.139.
42. Prafulla K. Chakrabarti: *The Marginal Men: The Refugee and the Left Political Syndrome in West Bengal*. West Bengal, Lumiere Books, 1990. pp. 1-5.
43. Ibid., pp. 1.
44. Ibid.
45. *Working Group Report on the Residual Problems of Rehabilitation in West Bengal - Appendix, IIIp. V.*
46. “Refugee Influx in Calcutta”. *The Times of India*, 13 December, 1948, p. 9.
47. Chakrabarti: *The Marginal Men. op.cit.*, p. 65.
48. Ibid.
49. Bhaskar Chakrabarty: ‘The Refugees, ‘Self Settlement’ and the Politics of Neighbourhood: Calcutta, 1947-1950’ in *The Calcutta Historical Journal: New Series XXX: 1-2*, January-December, 2014. p. 126.