

URBAN GOVERNANCE FOR WHOM?

A study on public amenities and land use in Guwahati city







A study on public amenities and land use in Guwahati city

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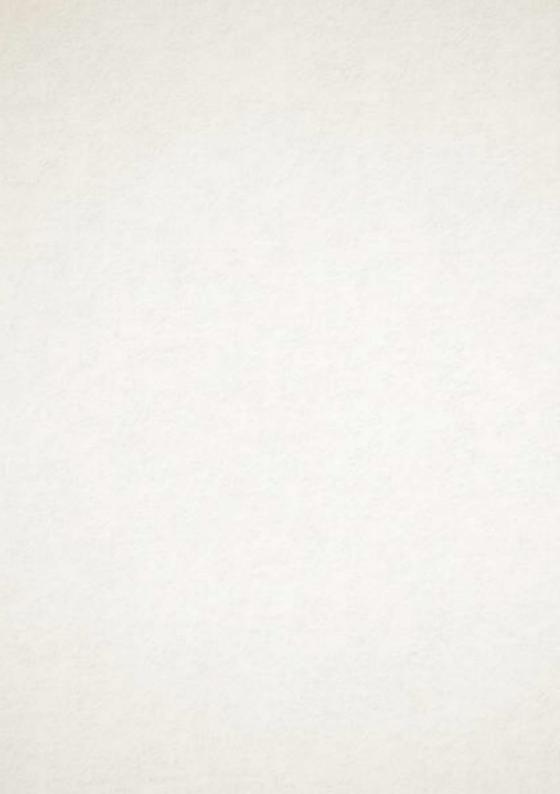
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Foreword

The twenty first century is often seen as a century of cities, urbanity and ecology, and will be defined by the struggles of millions to claim urban spaces and redefine urbanity. Across the globe the influx into urban areas across has seen billion plus people living in squatter settlements, without basic facilities and services, in a life of insecurity, fear and indignity. Urbanization of this kind has posed severe sustainability challenges on all fronts, and has given rise to deep speculations, contests and uncertainties about the fate of cities and urbanity. The urban spectre of majorities of population squeezed in corners in what are called slums and tenements with numeric minorities in large expanses of green and well-planned spaces, raise nightmares of inequalities.

Under the European Commission supported project 'Securing rights and sustainable livelihoods through collective action and education for people dependent on the informal economy in India' the need was felt to study and highlight the kind of space the city of Guwahati in the Northeastern State of Assam, was providing for informal sector workers and the kinds of amenities that are available for the public. We felt the need to locate rights of people within the world of urban planning.

On becoming the capital of the State of Assam, Guwahati was witnessed major change over the last 50 years or more so in the recent two decades. The influx of population created challenges for the civic authorities as the infrastructure in terms of house, roads, water and sanitation, health and education, was hopelessly insufficient to address this.

However the new population started a vibrant economic engine creating livelihood possibilities for many. An analysis of the land pattern and model that the Guwahati Metropolitan Development Authority (GMDA) adopts observed through this study, will provide significant evidence for policy advocacy.

We are grateful to Nayanjyoti Bhuyan, for undertaking this study and working with colleagues in our North East India Regional Office located in Guwahati to put together this publication. This document has been in circulation with many persons connected or concerned with Guwahati's governance, and through this publication we hope to bring it to a wider circulation. I am grateful to colleagues in Citizen Rights Collective, the urban knowledge activist hub, hosted by ActionAid for anchoring this study.

We look forward to comments and suggestions so we can carry this conversation further

In solidarity,
Sandeep Chachra,
Executive Director
ActionAid Association

Chapter I

Introduction: From Pragjyotishpur to Guwahati Smart City

Guwahati, the capital city of Assam, is situated along the river Brahmaputra and is bound on the southern side by the foothills of the Meghalaya state. The city of Guwahati, once the gateway to Assam and subsequently to Northeast India, is gradually emerging as India's gateway to Southeast Asia.

Historically, Guwahati has been a garrison city. The city, then known as Pragjyotishpur, became the seat of the Borphukan, the military administrative officer of the Ahom state (1228 1826) in charge of lower Assam after the Ahom state witnessed westward expansion from its heartland in eastern Assam in the 16th century. However, in 1826, Guwahati, then Gauhati (meaning areca nut marketplace) emerged as a modern town with the advent of British colonial rule to the state. The city was given the status of Municipal Board in 1853 and finally elevated and categorized to Class I category in 1876. Yet, it took almost seven decades before the town came to be connected by railway line with rest of India in 1890. Although Guwahati remained a significant town as hub of important government offices, educational and social institutions, political activities, etc. during the colonial period, it was Shillong, the hill station and present capital of Meghalaya state, which was the capital of colonial Assam.

Guwahati experienced phenomenal growth after independence of the country following the establishment of major institutions of higher

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education like Gauhati University, Engineering College and Medical College. However, the process of major structural changes began with Assam's capital shifting from Shillong to Guwahati in 1972. The year of 1972 marks a watershed in the life of the Guwahati city and the beginning of a process of rushed and short sighted process of urbanization. That year as a part of the process of reorganization of the Assam state, the capital was shifted from Shillong to Dispur (Guwahati) under the North Eastern Areas Act, 1971. With it, the city became the political administrative headquarters of the state of Assam. After the shift of the administration to Guwahati, there developed necessary infrastructure along with an administrative class and its associated needs.

Post 1991, the era of economic liberalization in India, Guwahati experienced a major boost as a consequence of being the gateway to the Northeastern region of India. Since then, the city has grown enormously in terms of population and development of commercial activities. The city underwent rapid surge in its process of urbanization but as the horizontal expansion of the city is restricted because it is bounded on three sides by hills and on one side by the Brahmaputra River, the city landscape has transformed from within leading to transformation of the physical landscape. In 1971, considering the growth of the city, Guwahati was brought under the Guwahati Municipal Corporation (GMC) from Guwahati Municipal Board. Today, Guwahati has emerged as the most prominent city of entire Northeast India and the total area covered under Guwahati Metropolitan Area (GMA) is approximately 262 sq. km. The region under GMA constitutes areas of Guwahati Municipal Corporation, North Guwahati Town Committee, Amingaon Census Town and 21 revenue villages (Abhoypur, Rudreswar, Namati Jalah, Gouripur, Silamohekhaiti, Tilingaon, Shila, Ghorajan, Mikirpara, Kahikuchi, Mirjapur, Jugipara, Borjhar, Garal Gaon, Ajara Gaon, Dharapur, Jansimalu and Jansimalu (NC), Kalitakuchi & Kalitakuchi (NC), Kharghuli, Bonda, Bondagaon and Bonda Grant (I&II), Birkuchi). According to the 2011 census, Guwahati municipal area and Guwahati Metropolitan Area had a population of 963,429 and 968,549, respectively. 14.1 per cent of the state's population was living in urban areas in 2011, which is an increase from 12.9 per cent in 2001 and 11.1 per cent in 1991. According to the projections of the GMDA Master Plan for Guwahati Metropolitan Area 2025, the total population of GMA will be 21 lakh approximately in 2025. There is also a floating population of about 10 per cent, which comes to Guwahati for daytime activities. Thus, the daytime population in Guwahati in 2025 is estimated at 22.94 lakh. The overall gross city level density is proposed to increase from 34 to 68 persons per hectare by 2025. There is a continual expansion of the city owing to the need for coping up with the increasing population and its associated requirements. In the process, the city has transformed from a small town to a big town to a state capital and eventually to its present form with a cosmopolitan culture.

In 1965, the State government prepared a Master Plan for Greater Guwahati under Section 10 of the Assam Town and Country Planning Act, 1959 so as to accommodate the emerging process of urbanization and related urban issues. The Plan had perspective 1986. The Modified Final Master Plan and Zoning Regulations for Guwahati was prepared by the Town and Country Planning Organisation in exercise of the powers under section 14 and sub section (2) of section 10 of the Assam Town and Country Planning Act and published the same in February 1987. However, this Plan has evolved over the years in order to accommodate the growth and development of the city. The Master Plan was finally entrusted to the Guwahati Metropolitan Development Authority (GMDA), which was constituted in 1992 under Guwahati Metropolitan Development Authority Act 1985, for implementation of the Plan with Perspective 2001. The plan has now been revised to have a Comprehensive Master Plan (CMP) for Guwahati Metropolitan Area (GMA) keeping in perspective the direction of growth of the city up till 2025.

The vision of this Master Plan for the development of Guwahati through 2025 is: Guwahati city to be one of the most admired state capitals of India as gateway to the north east, with a unique image of its own. The goals listed out are as follows: Goal 1: To conserve Guwahati's sensitive natural environment; Goal 2: To develop an integrated intra urban transport system; Goal 3: To develop well distributed physical and social infrastructure; Goal 4: To provide space for efficient functioning

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of economic activities; Goal 5: To create an image befitting that of the State capital; Goal 6: To create affordable housing for all and develop a city without slums; Goal 7: To bring in a system in the land development process.

Apart from the Master Plan 2025, Guwahati will also be undergoing transformation for development as it was enlisted among the first 20 smart cities. This announcement on January 28, 2016 by Shri Venkiah Naidu, the erstwhile Union Minister of Urban Development, bears testimony to the fact that the city is an important centre of development and urbanization with respect to Northeast India. Under the Smart City Project, there are area-based projects which focus on the water bodies, which include Borsola Beel Development, Bharalu River Rejuvenation, Mora Bharalu River Rejuvenation, Brahmaputra River Front Development and Deepor Beel Conservation. Apart from these, there are transformative pan city projects which are geared towards making Guwahati ICT integrated and other miscellaneous projects with the object of beautification of the city.

Along with these plans, the Chief Minister of Assam in his speech on August 15, 2016, announced the formation of State Capital Region encompassing Guwahati and its peripheral areas in line with the National Capital Region. In the Draft Assam State Capital Region Development Authority (ASCRDA) Bill, the proposed Assam State Capital Region area will encompass the following areas: Kamrup Metropolitan District (all Circles), Kamrup District (Hajo, Palashbari, Rangia, Goroimari, Chaygaon, Boko, North Guwahati, Kamalpur and Koya Circle), Nalbari District (Barkhetri, Nalbari, PachimNalbari, Ghograpar, Barbhag,Banekuchi Circle), Darrang District (Sipajhar Circle), Morigaon District (Mayong and Marigaon Circle).

The Master Plan 2025 proposes to increase the present area of GMA by 66 sq. km. through creation and inclusion of New Towns. As part of the State Capital Region, Guwahati will expand to its peripheral areas and beyond. The Smart City Project targets to transform the city from within. With so many plans geared towards the development and expansion of

Guwahati, it becomes important to take stock of the status of governance in the city and critically analyze whether these development projects will address the issues faced by the people of the city.

1.1 Urban Governance of Guwahati City

The administration and governance of Guwahati city is managed by various government departments and authorities involved. However, the primary ones are Guwahati Municipal Corporation (GMC), Guwahati Metropolitan Development Authority (GMDA) and Guwahati Development Department (GDD).

Guwahati Municipal Corporation is the urban local body responsible for governing, developing and managing Guwahati. The Guwahati Municipal Corporation was constituted with 34 wards in 1974 under The Guwahati Municipal Corporation Act, 1969. Since then, there has been a manifold rise in its population. The wards were further delineated, and their number of wards was fixed at 60. Presently there are 31 municipal wards with sub areas (Area Sabhas) and each ward is represented by elected ward councillors who elect the Mayor of the city. As listed in the official website of GMC, the municipal services provided are: Property assessment/reassessment/mutation; Development and maintenance of roads/drains; Issue and renewal of trade license; Development and maintenance of municipal markets; Construction and maintenance of Public Toilets/e Toilets; Building permission; Development and allotment of parking slots; Development and maintenance of parks and ponds; Hoarding and advertisement; Issue of Birth/Death certificates; Installation and maintenance of Street Lights; Cesspool emptier; Construction and maintenance of crematorium; Implementation of different central/state Government programmes schemes and projects; Water supply with metered/non metered connection, etc; For property tax and trade license purposes, the corporation area is divided into six revenue zones; For Conservancy and Public works, the corporation area is divided into six engineering divisions.

Guwahati Metropolitan Development Authority is in charge of the planning and implementation of the development projects concerning

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the city. GMDA came into effect in 1992 as per Guwahati Metropolitan Development Authority Act 1985 (amended) and replaced the erstwhile Guwahati Development Authority constituted in 1962 under the Town and Country Planning Act, 1959 (amended). As per section 126 of this GMDA Act, with the constitution of this Authority, the relevant section of the GMC Act, 1969 (Assam Act 1 of 1973), Assam Town and Country Planning Act, 1959 (Assam Act I of 1960), Assam Municipal Act, 1956 (Assam Act IV of 1957) and Assam Panchayat Act 1972, along with its amendments and rules and regulations in consistent with provisions of this Act cease to operate within the territorial limit of Guwahati Metropolitan Area. GMDA's jurisdiction extends over GMA which covers an area of 262 sq. km. Their primary role encompasses of Planning: Preparation of Master Plan and Zoning Regulation; Development: Preparation and execution of development schemes. To carry out or cause to be carried out such works as are contemplated in the Master Plan; Regulation and Control: To regulate and control the development though statutory plans and other measures; Co ordination: To co ordinate development activities of other public agencies operating within Guwahati Metropolitan Area.

The Guwahati Development Department was created in January 1994 as the administrative department for GMC and GMDA in order to facilitate coordinated development of Guwahati urban area. Guwahati Development Department, a department of the Government of Assam, oversees the all round development of Guwahati City through the development works carried out by Guwahati Municipal Corporation, Guwahati Metropolitan Development Authority, Guwahati Metropolitan Drinking Water and Sewerage Board, and Guwahati Smart City Project. The primary function of the Department is the administrative control of the GMC and GMDA, and to monitor the activities of these two organizations and also to sanction and release fund for the various developmental schemes to be undertaken by these two organizations. It has a technical wing for matters concerning urban and regional planning, strategies, research appraisal and monitoring of Central government schemes and development policies in Guwahati.

However, through this study it was found that despite the creation of GDD, there is lack of coordination between the various departments. Rather than facilitating the smooth functioning of the development projects, the existence of multiple agencies in reality create overlap of roles and convenience to shift the blame in case of failures. And in the case of grievance, the people are not sure as to which issue falls under the ambit of which project and who the concerned authority is. This lack of clarity results from lack of people's participation in the process of governance. To state an example of this, under the Smart City Project it is public participation during the phase of drafting the proposal is mandatory. Though public meetings were organized to this effect, however these preliminary meetings were conducted to inform and make people aware of the upcoming project. According to our respondents there were no follow up meetings for appraisal of issues neither was there any scope to be involved in the process of planning.

With regard to GMC's role, which is the body of elected representatives, it was found, through interviews of existing and previous ward councillors, when it comes to distribution of resources and allocation of funds for wards, the rapport that the ward councillor shares with the ruling party plays the most significant role. As such certain wards of the city tend to get neglected.

In the case of the overall development plans of Guwahati, derived from the Master Plan or presently also the Smart City Project, GMDA's jurisdiction overrides ULB, thereby diminishing the role of GMC. The concern with the jurisdiction of GMDA overriding the other bodies with regard to planning and development is that GMDA is primarily an engineering department and the officials of GMDA are appointed employees within the administrative structure of the state. Though their expertise is absolutely essential, but the process of planning needs to be balanced out by incorporating GMC ward councillors and members who are elected representatives and can voice the ground level concerns. GMDA does seem to work in conjunction with GMC which provides the required necessary understanding of the need of a particular locality. However, the role of GMC is more often limited to a suggestive collaborator.

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The final plans are drawn up by GMDA, either by their engineers or are tendered out to private companies. The bureaucratic approach of GMDA in terms of planning, and disengagement from the local population while implementing these development models, is one of the primary reasons for the failure of multiple development schemes.

The role of these institutions is crucial to urban planning and governance, but without diminishing the significance of public participation. In the case of Guwahati, it is seen the urban planning and governance is reflective of managerial governance¹ which has reduced the role of elected representatives and the public, and the focus is on professional management of service delivery. Though this model of urban governance is supposedly geared towards efficient management of provisions for the city based on public choice, but as seen in Guwahati, with the diminishing role of elected representatives and the public itself, there is a sharp shift towards private entities entering the domain of provision of public amenities. As a result of this, there is an increasing dependency on bureaucratic structures which reduces the accountability of ULBs, the people are disconnected from the process of planning and there is an increasing trend towards privatization of public amenities and public space.

Pierre, Jon. 1999. 'Models of Urban Governance' in Urban Affairs Review, Vol. 34, No. 3, January 1999. Sage Publications. pp. 372 396.

Chapter II

Significance of the Study

Development should not be defined exclusively in economic terms; for sustainable development the well being and welfare of people from all echelons is crucial. In the face of rapid urbanization and expansion of the city, there is an urgent need for a comprehensive analysis of the urban planning and governance of Guwahati to ensure an inclusive and sustainable vision towards a better urban scape. In this context, reference can be made to Amartya Sen's Capability Approach which focuses on the quality of life that individuals are actually able to achieve. According to this Approach, it is not just the accumulation of material goods that determine the quality of life, rather it is the state of 'being and doing' which empowers one's capabilities and enhances the quality of life. In the case of urban governance of Guwahati, such an approach is required to ensure that the upcoming models of development are inclusive and sensitive to the issues which concern the people so that the overall quality of life is improved. In the light of various violations and inability to adhere to the various parameters of SDGs, as found through this study, it is essential to highlight these issues so that concrete measures can be taken towards improvement of urban governance in Guwahati.

2.1 Aim of the Study

The aim of the study is to critically analyse urban governance of Guwahati so as to be able contribute to the public discourse on policy making.

https://socialissuesindia.wordpress.com/2013/09/06/what is amartya sens capability appr

The main objectives of the study are:

- To map out the change in land use pattern through analysis of land appropriation and allocation, with special focus on public space;
- >> To highlight the discrepancy of provisions of public amenities, with special focus on water and sanitation;
- >> To locate the issue of space and security faced by vendors in the city.

2.2 Area of Study

The study was conducted in selected pockets of 11 wards of Guwahati city randomly selected from the total of 31 wards. Along with that the study also incorporates few additional wards which are of significance because of their location.

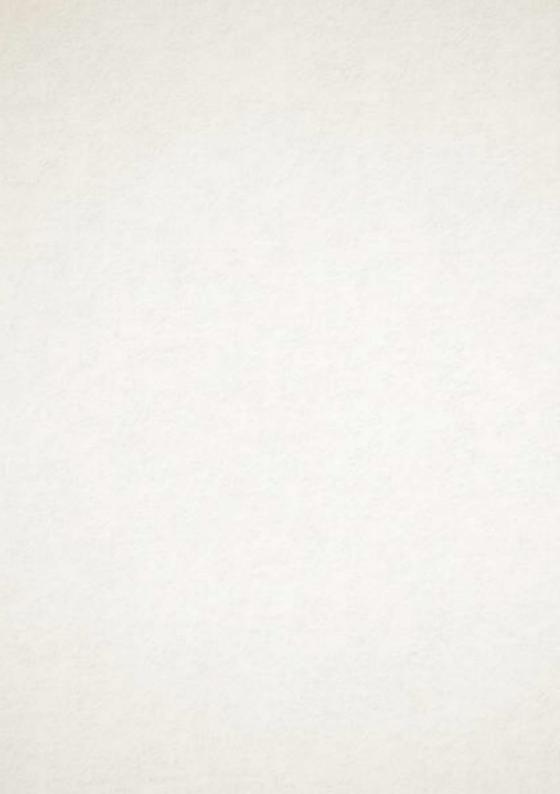
Selected Wards for the Study:

- >> Ward 1 Jalukbari, Sadilapur, Lankeswar, Deepor beel, GU, AEC
- >> Ward 4 Kamakhya, Maligaon, Adabari, Bhutnath
- Ward 7 Adimgiri, Sankardev nagar, Dhirenpara, Dwarka nagar (Maligaon), Gorchuk, Boragaon, Gakhirchowk
- Ward 10 Digholipukhuri paar, Milan road, B Barooah road, Panbazaar, Paltan bazaar station
- » Ward 13 Gandhi basti, Pub sarania, Bhaskar nagar, Rajgarh road
- >> Ward 16 Fatasil ambari, Ganeshpara, Lal ganesh
- Ward 19 Christian basti, Sree nagar, Udayachal, Ganeshguri (G.S. road)
- Ward 22 Sunsali, Kailashpur, Kanchan nagar, Bishnu rabha nagar, Salbari
- Ward 25 Hengrabari, Borbari chowk, Anandpur, Magzine, Sorumotoria
- >> Ward 28 Six mile, Beltola, Survey, Khanapara (G.S. road)

- » Ward 31 Panjabari, Baghorbari
- » Special case:
- Ward 21 Chandmari
- >> Ward 11 Uzan bazaar
- Ward 6 ISBT
- » Peripheries Sonapur, Amingaon

2.3 Methodology

The study incorporated both qualitative and quantitative methods for collection of primary data. Focus Group Discussions were conducted in the selected wards to appraise the issues concerned in the study. Survey was conducted to corroborate the data. Personal in depth interviews were carried out with government officials and academicians concerned with the issues under study. Three Round table discussions were also organized on the three objectives of the study which was open to various participants involved with these issues in varying capacity. As part of the study, GPS mapping was also carried out to capture an overview of Guwahati as well as select areas. For secondary data collection, the study referred to archival data, government documents, reports, policies and Acts, along with relevant books, journal articles and research reports.



Chapter III

Water and Sanitation

Access to clean water and hygienic sanitation facilities are essential requirements for survival, the absence of which has serious implications on the health and well being of people. However, according to UNDP, at present more than 40% of the world's population is affected by water scarcity. Although 2.6 billion people have gained access to improved drinking water sources since 1990, but 663 million people are still without. 2.4 billion people worldwide do not have access to basic sanitation services like toilets or latrines. 80% of wastewater from human activities is discharged into waterways without any pollution removal.³ In view of this global concern, Sustainable Development Goal 6 aims to ensure availability and sustainable management of water and sanitation for all by 2030. It is crucial to understand that this goal can be met only with adequate infrastructure and availability of public services which falls under the purview of governance.

In the present context of rapid urbanization and shift of the population towards urban centres, the role of Urban Local Bodies (ULBs) in governance becomes increasingly significant as a democratic institution which is representative of people's needs. The Government of India sought to strengthen municipal governance through the 74th Amendment which seeks to provide more power and authority to ULBs. Introduction of the Twelfth Schedule which covers an array of functions

^{3.} http://www.undp.org/content/undp/en/home/sustainable development goals/goal 6 clean water and sanitation.html

and responsibilities of ULBs is an attempt to improve governance and public service delivery for improved living conditions.

Twelfth Schedule of the Constitution of India

- 1. Urban planning, including town planning
- 2. Regulation of land use and construction of buildings
- 3. Planning for economic and social development
- 4. Roads and bridges
- 5. Water supply for domestic, industrial and commercial purposes
- 6. Public health, sanitation conservancy and solid waste management
- 7. Fire services
- 8. Urban forestry, protection of environment and promotion of ecological aspects
- 9. 9. Safeguarding the interests of weaker sections of society, including the disabled and mentally retarded
- 11. Slum improvement and upgrading
- 12. Urban poverty alleviation
- 13. Provision of urban amenities and facilities such as parks, gardens, playgrounds

3.1 Water Supply

Taking into account the role of ULBs in public service delivery, the Guwahati Municipal Corporation provides a range of municipal services which includes provision of piped water supply. The first water treatment plant was constructed in Guwahati in 1887 at Panbazar after the declaration of Municipal Body in 1873. Later, the Municipal Body was renamed as Guwahati Municipal Corporation (GMC). Under GMC the first modern water treatment plant was established in 1963 at the initial Panbazar site which is still functioning. Later incorporations are Satpukhuri WTP in 1984 and Kamakhya WTP in 1992.

Apart from GMC, water supply to the city is also provided by Public Health Engineering Department (PHED) and Assam Urban Water Supply & Sewerage Board (AUWSSB).

In 1954 under the Directorate of Public Health, Assam, a Public Health Engineering Cell was created to handle the centrally sponsored "National Water Supply and Sanitation Programme". The same cell has been upgraded to Public Health Engineering Department (PHED) in 1961. PHED in 1957 had proposed construction of four tubewells to augment the water supply in Guwahati town. Out of these four tubewells three were successful.

Later Assam Urban Water Supply and Sewerage Board (AUWS&SB) was also established in 1996 to cater for the increasing the demand for water.

3.1.1 Existing Water Supply Schemes of Guwahati under GMC⁴

The demand of water for Guwahati city was 132 MLD as documented in July, 2014.⁵ However, the total installed capacity of WTPs under GMC is 74 MLD water generation, against which the present output stands

Plant Location	Installed Capacity in MLD	Present Output in MLD	
Panbazar	45.00	22.00	
Satpukhuri	22.50	15.00	
Kamakhya	4.50	3.00	
Deep Tube Wells (8 functioning)	2.00	1.50	
Total	74.00	44.50	

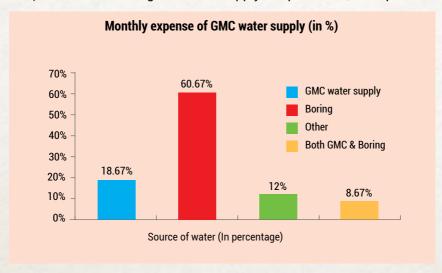
^{4.} https://gmc.assam.gov.in/portlets/water supply

Review of Studies on Urban Floods in Guwahati from Flood Knowledge to Urban Action; Prepared by All India Disaster Mitigation Institute (AIDMI); Supported by Assam State Disaster Management Authority (ASDMA)

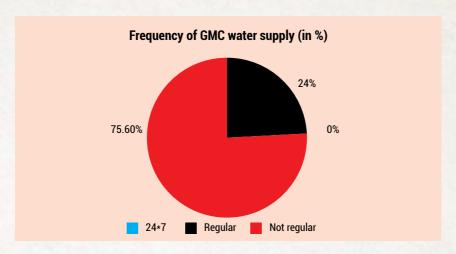
at 44.50 MLD, i.e., only 60% of its total capacity. However, as stated in an interview by Najibuddin Ahmed, executive member, PHE Retired Engineers Forum (PREF), this gap in capacity and output of the WTPs cannot be met as these WTPs have already been exhausted beyond their lifespan.

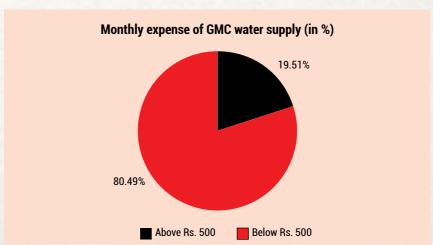
Presently, according to govt. data only 30% of Guwahati city area is covered by the piped water network for water supply from these WTPs; however, this 30% coverage is not absolute. This study has found that out of 150 respondents, 91 HHs (60.67%) have boring, 18 HHs (12%) procure water from other sources, only 28 HHs (18.67%) rely on supply water and 13 HHs (8.67%) receive supply water but also have borewell as an alternative. Community borewell is also an important source of water for these people. Out of 91 HHs who have boring, 56 respondents have said that they collect water from community borewell system, especially in the hilly areas where people are mostly dependent on community borewell system.

Out of the 41 households (HH) that receive piped water supply only 10 HHs (6.67% out of 150 HHs) receive water regularly. 75.6% (31 out of 41 HHs) do not receive regular water supply. Dilip Barman, a respondent



from Fatasil Ambari, expressed his woe, "Although the pipes were installed last year but there is no water supply yet." So effectively the coverage of 30% is not accurate as the frequency of supply water is insufficient. Biren Talukdar, a respondent of Salbari, stated, "Water is supplied once in every third day but sometimes water is not available even for one month".

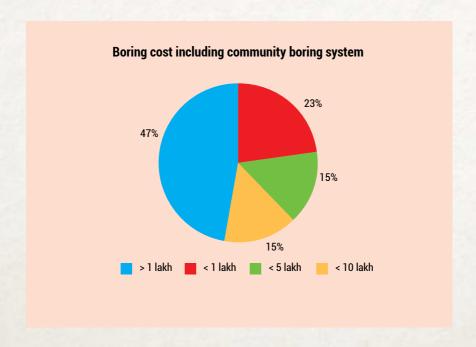




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Despite paying for piped water supply monthly Rs 300 these HHs do not receive sufficient water supply or are not satisfied with the quality of water supplied. As such they have to resort to other options, thereby increasing their expenditure on water. The respondents of the FGDs have pointed out the neglect of respective authorities in ensuring the smooth water supply for the households. It has been becoming a serious civic issue in Guwahati city. It has encouraged the private players to capitalize the 'water market' of the city. The respondents of study wards of this research are the witnesses of declining governance regarding the water supply in recent years.

As such people have to rely on community borewell system to reduce their water expenditure. The 56 respondents who depend on water supply from community borewell have had to incur a one time cost (below Rs.5000 – 29; below Rs.10,000 – 19; above Rs. 10,000 – 8) till the underground water is available.



This insufficient water supply also results from lack of monitoring and maintenance of the existing infrastructure due to which there are leakages in the piped network. This leads to pollution of water which affects the quality of the supplied water and also leads to misutilization of the resource.

With the growing concern towards insufficient supply of water and taking into cognizance SDG 2030, the Government of Assam reiterated its commitment in Vision Assam 2030 towards providing universal and equitable access to safe drinking water to all household and habitations.

To meet this goal, Guwahati Metropolitan Development Authority (GMDA) has undertaken major infrastructural projects. The following are Water Supply Projects of Guwahati under execution:⁶

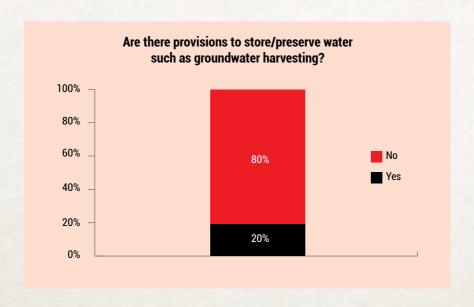
Water Source Location	Location of WTP	Name of Executing Agency	Funding Agency	Designed Capacity in MLD	Zone	Initial Target year (source: interview of officials)
Pandu	Sadilapur	GMDA	JNNURM	107	South West Guwahati	2011
Kharghuli	Kharghuli	GMDA	Japan International Cooperation Agency (JICA)	191	South Central Guwahati	2013-14
Mazgaon	Mazgaon	GMDA	JICA	37	North Guwahati	2013-14
IOCL Gate, Sectorl, Guwahati Refinery	Chunshali	AUIIP	ADB	98	South East Guwahati	2018-19

^{6.} https://gdd.assam.gov.in/portlets/water supply projects

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However, the delay and inefficiency of the four water supply projects highlights the absence of accountability towards their commitment. Also it is important to bring to notice that the function of the ULB is now being handed over to GMDA which is essentially a bureaucratic organization. None of the above projects are operational at full capacity. The latest option provided under Smart City Project is installing water ATMs. This is commoditization of water which cannot be the alternative to free and safe supply water. The water ATMs are targeting the areas where there is insufficient supply of water.

As a result of insufficient water supply, there is a crisis of usable water in the city. But, as stated above, the water projects are already lagging behind. These projects tendered out to private parties are funded by loans, the cost and interest of which will be levied as tax on the people. In the meantime, there is no provision even to conserve rainwater or provision for groundwater harvesting in the individual level capacity under the study.



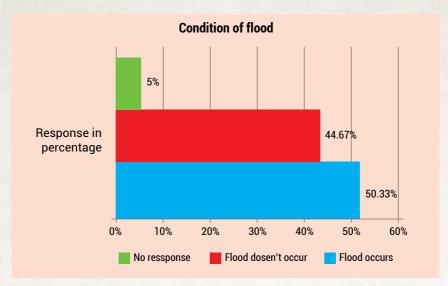
3.2 Sewerage and Drainage

At present, the city of Guwahati does not have an integrated sewerage system except for select residential areas such as the Railway Colonies, the Oil Refinery colonies and residential areas under defence establishments which have their own sewerage and treatment facilities. There is a sewerage system under planning as part of Japan International Cooperation Agency (JICA) assisted Guwahati Sewerage Project which will be undertaken after the Water Supply Project. As such there is no definite guarantee of when the sewerage system will be operational. Presently, the only collection and treatment process followed is use of septic tanks. Therefore, much of the waste water generated in the city is being disposed of into rivers without treatment.

The current situation suggests that in the absence of proper sewage disposal system the drains are turning into sewers and blocking the path of natural flow of storm water. In monsoon period the situation worsens, and it leads to flooding and water clogging. The city of Guwahati also lacks overall proper drainage system. Except for the 17km drains built by the Town and Country Planning Organization in 1970s, no other planned drainage system exists within the Guwahati Metropolitan area. The drains present along roads are not capable enough to handle excessive flow of water during monsoon leading to floods.

This was evident in the wards where FGDs were conducted. Out of 150 respondents, 102 respondents (68%) complained about the bad drainage system and stated that the drains are defunct. Raju Deka, a respondent from Bhaskar Nagar, complained about the condition of the drains saying that, "Condition of drainage is getting worse. It overflows every single time it rains. But the govt. pays no heed". Prabin Barman, a respondent from Durga Sarobar, stated that, "Drains have not been cleaned for a long time and as such get blocked here and there".

Due to the faulty drainage system, there is regular occurrence of flash floods in the city. More than 50% of the wards face the problem of flood whenever there is rainfall.



Despite flood being one of the most crippling issues faced by the residents of the city, the respondents stated that there are hardly any preventive measures taken by the government and even the post flood relief measures are very sparse.

3.3 Solid Waste Management

An important component of sanitation is garbage disposal and solid waste management. According to the Solid Waste Management Rules, 2016, all the ULBs are responsible for the Solid Waste Management activities within their respective jurisdiction which includes collection, segregation, storage, transportation, processing, and disposal of municipal solid waste, along with monitoring and ensuring eco friendly waste processing and disposal facilities. In the Guwahati Municipal Area under GDD, Guwahati Municipal Corporation (GMC) looks after the Solid Waste Management activities within its jurisdiction. The collection of house to house solid waste from the households and commercial establishments comes under Primary Collection. GMC is divided into 31 wards and there is one NGO each assigned for the job of Primary Collection and Street Sweeping within the respective ward. The NGOs deposit the waste so collected to the nearby secondary collection bins.

Based on the interview conducted with Manajit Buzorboruah (Executive Engineer, Solid Waste Management Department, GMC), it was found that the entire city is divided into 58 zones or parts for primary garbage collection and each of these areas is manned by an NGO. There are 3 secondary collection bins in Guwahati, one in Manik Nagar, another near GMC and a third one in Chabikul which is presently under construction. There are 58 garbage pickup vans, 30 dumpers and 12 JCBs for collection of garbage.

However, from our fieldwork, it was found that out of 150 respondents, 79 HHs (52.67%) garbage was collected by GMC but 71 HHs (47.34%) disposed their waste themselves. Karuna Kalita, a respondent from Sundorbori, brought to attention that the inefficiency of the garbage disposal system, "People throw garbage where they find an open space. No municipality vehicles visit to collect them". As such it can be stated that the coverage is not absolute.

In the absence of proper garbage collection and segregation, the solid waste does not get treated which leads to pollution and health hazards. With increasing population and improper waste management system this problem is only going to multiply.

3.4 Generation of Solid Waste in Guwahati⁷

According to Debojit Kalita, a respondent from United Bothers Club which looks after garbage collection, Guwahati generates 500 tonnes of waste on a daily basis. Out of this, only 50 tonnes is converted into organic waste at the Boragaon dumpsite. Though there are two organic waste converters automatic planned in Borsola Beel and Boragaon but there is no proper method of segregation. Also, there is no plan in place by GMC regarding non organic waste. He also brought forth the issue of insufficient pickup vans and also commented that only 2-3 secondary transfer stations are not sufficient.

^{7.} https://gdd.assam.gov.in/portlets/water supply projects

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The major drawbacks of the present solid waste management are:

- i. Inadequate system for primary collection;
- ii. Unhygienic open waste storage bins;
- iii. Open trucks with manual loading used in transportation;
- iv. No arrangement for segregation and storage at source;
- v. No processing at dumping site (no proper disposal method has been seen in the West Boragaon dumpsite. The municipal trucks simply carry the wastes to the dumpsite and dispose it without any processing.

Year Actual/ Projected	Population (lakhs)	Estimated Generation (kg/day/person)	Estimated Generation (MT/day)
1991	6.46	0.3	193.8
2001	8.9	0.35	311.5
2010	12.5	0.6	750.0
2025	22.15	0.8	1772.0

Chapter IV

Markets and Vendors

The aim of this study is to analyse the role of governance with regard to equitable access to public space and public amenities. In this regard the third objective of this study was to locate the issue of space and security faced by street vendors in the city. The rationale behind choosing this particular category of low-income group was that their mode of livelihood is dependent on access to public space. Also vendors have the most requirement for public amenities such as public toilets and drinking water facility as they are out on the street to earn their livelihood without any infrastructural facilities.

According to the National Policy for Urban Street Vendors, a street vendor is broadly defined as a person who offers goods or services for sale to the public without having a permanent built up structure but with a temporary static structure or mobile stall (or headload).

The policy recognizes the important service provided by the street vendors for the benefit of the urban population. With use of minimal space in a cities, which are already congested due to overflow of population, the street vendors facilitates the urban population with easy access to goods required for everyday consumption. The markets are not sufficient to satiate everyone's needs and this gap is met by the street vendors. In their absence, as seen in Guwahati during any major festival when the street vendors return to their villages, the city's population has difficulty in finding rudimentary things like vegetables and fruits. Despite providing such an indispensable service, the street vendors are treated as unlawful entities encroaching on public space. Though the Policy

states as one of its objectives 'To provide facilities for appropriate use of identified space including the creation of hawking zones in the urban development/ zoning plans', but there is no such demarcation of vending zone in the plans of Guwahati. The vending zones should be created in consultation with the Town Vending Committee, but as stated in the round table conference⁸ by Chandan Goswami, member of ASVA, the GMC had set up the committee in 2015 but its role is not very functional or representative as the number of registered street vendors was only 7,186 whereas there are more than 25,000 vendors in Guwahati city. This committee in consultation with GMC had proposed for 11 vending zones but there is no government notification yet.

Without any regulation on vending zones, the street vendors are susceptible to eviction as a consequence of Section 283 of the Indian Penal Code⁹ and Section 34 of the Police Act.¹⁰ Ramani Das, a street vendor who owns a stall near Panbazaar said that the vendors in Panbazaar have suffered many times due to eviction as GMC has tried to evict them without any notice. Out of 40 vendors that were surveyed under this study, 60% have been evicted.

^{8.} On 20th September 2018, a round table conference was organized on the topic 'Socio Economic Security of low-income group/street vendors of Guwahati City'.

^{9.} Section 283 of the IPC (Danger or obstruction in public way or the line of navigation) Whoever, by doing any act or by omitting to take order with any property in his possession or under his charge, causes danger, obstruction or injury to any person in any public way or public line of navigation, shall be punished with fine which may extend to two hundred rupees.

^{10.} Section 34 of the Police Act: No person shall cause obstruction in any street or public place by –

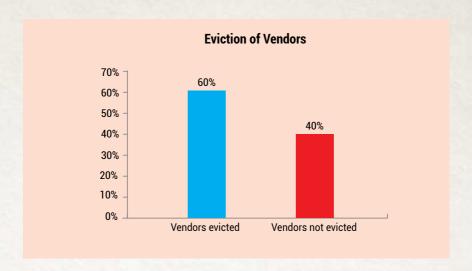
Allowing animals or vehicle

Leaving any vehicle standing or fastening any cattle in the street or in the public place

Using any part of a street or public place as a halting place for vehicles or cattle

Leaving any box, bale package or other things whatsoever or upon a street for an unreasonable length of time or contrary to any regulation

By exposing anything for sale or setting out anything for sale in or upon any stall, booth, board, cask, and basket or in any other way whatsoever.



This leads to insecurities among the vending committee which can be addressed only if there is a proper regulatory mechanism in place. One step towards that is to issue permits or licenses to vendors which grant them legal status. This would enable the government not only to regulate the vendors but also generate revenue through tax. In Guwahati around 2000 3000 vendors have paid Rs.200/ for the registration but the GMC has provided identity card to only 105 vendors. Despite this, in order to continue their livelihood, the vendors have been making monthly payments to the local authorities as rent/tax.

Out of the 40 vendors that was taken as a sample for this study, 76.32% said that they pay tax/rent monthly. Out of the vendors who pay tax, 19 vendors pay Rs.100 or below daily. Among them 10 vendors pay Rs.100, 7 vendors pay Rs.80 and 2 vendors pay Rs.50. Another 12 vendors pay tax above Rs.100 up to Rs.500. Among the 12 Vendors, 4 vendors pay Rs.200, 3 vendors pay Rs.150, 2 vendors pay Rs.200, 1 vendor pays Rs. 300 and 2 vendors pay Rs.500 daily.

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Apart from facing insecurity of space for their livelihood, the vendors also do not have access to basic public amenities which have been outlined in the Policy:

Qualitative guidelines refer to facilities to be provided at vendors' markets by the civic authorities. They would invariably include:

- >> Provide provisions for solid waste disposal
- >> Public toilets to maintain cleanliness
- >> Aesthetic design of mobile stalls/ push carts
- » Provision for electricity
- » Provision for drinking water
- >> Provision for protective covers to protect their wares as well as themselves from heat, rain, dust etc.
- >> Storage facilities including cold storage

Sattar Chaudhury, an activist of SSTEP, expressed that street vendors are increasing day by day because of the rapid urbanization. Most of the people are coming from rural areas in search of better livelihood opportunities. Rather than providing basic amenities such a proper lavatory system, the government is focused on the beautification of the city.

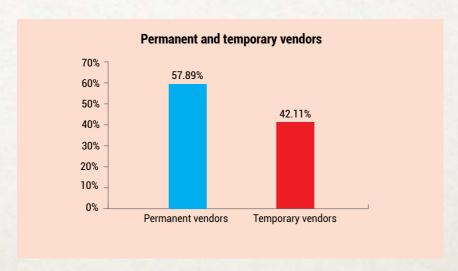
Out of the abovementioned facilities, three of the basic amenities that this study focused on were public toilets, drinking water facility and storage facility.

In the market areas surveyed (Chandmari Railway Market, Ulubari Market, Nizarapar Market, Beltola Market, Sixmile Fruits Market, Silpukhuri Market, Botahkhuli Market, Uzanbazar Market), it was found that there was no provision of public lavatory system. Helmina Sangma, a woman vendor from Botahkhuli Market, expressed her concern saying, "We come from Goalpara District (100 km from Guwahati) in the morning and

stay here for the whole day. It is indeed necessary to have a bathroom or washroom. It is difficult and inconvenient for women vendors."

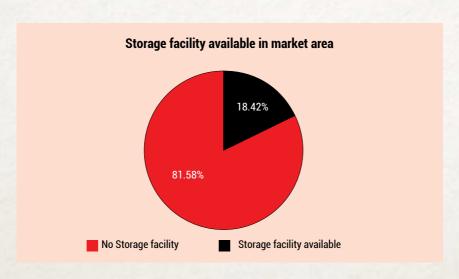
Similar is the status of drinking water facility in the market areas surveyed. Minati Patar, a woman vendor in Beltola Market, said, "We come here early morning at 7 am from Morigaon and pay tax for sitting here. But we do not get a single drop of public drinking water facility here". It is to be mentioned that at Beltola, one of the oldest public markets of the city, has no public lavatory facility. In Beltola more than 200 women (according to the interviews done in the market) vegetable's vendors come in two market days of the week (Thursday and Sunday) and they are deprived of basic facilities like drinking water and lavatory which is a violation of human rights too. The women vendors attend the market days with the children also.

Another important component for vendors is the storage facility to ensure safety of their goods. It was found that around 42% of the vendors surveyed did not have permanent space allocated. And around 26% of the vendors were not local but travelled from outside Guwahati on a daily basis. As such a storage space becomes crucial for them to facilitate their livelihood.



However, storage was available only in select areas which constitute a very minimal percentage. Out of eight markets, storage facilities are available only in Sixmile Fruits Market and Nizarapar Market (only for permanent vendors). Haren Kalita, a vendor from Uzanbazar GMC market, expressed his concern, "It will be convenient if there is a storehouse. Although, GMC is in charge of the bazaar, but there is lack of minimum facilities. It is risky to keep the goods on the roadside at night". Nur Ahmed, a vendor from Silpukhuri Market, added, "It is very expensive for us to preserve the goods. It will be convenient if govt. arranged something for it".

These lapses in provision for vendors are reflective even in the markets which are managed by GMC. As part of this study 3 GMC markets, Chandmari Railway Market, Uzanbazar Market and Ulubari Market, were surveyed. The infrastructural condition of these three markets is very poor and there is no evident sign of maintenance by GMC. Basic provisions such as public drinking water facility, public lavatory and storage system are not available. Moreover, in some cases, the places which have been allotted for the markets by GMC are not visible to the common people. Dulav Nath, a vendor in Ulubari GMC market, expressed his woe by saying, "We seat here idly for the whole day. Common people



are not even aware that there is a market here". This reflects the lack of consultation with vendors by GMC while planning and marking out the zones for these markets. As such this affects the flow of customers to these markets and causes economic hardship to the vendors, so much so that not only is their livelihood adversely impacted but also to the extent that they are unable to even pay the tax. "We hardly get any customers and we do not make enough money. So we are not even able to pay the tax," said Naren Deka of Chandmari GMC market.

One of the primary flaws is the inaccurate government database on street vendors which does not reflect the actual number of the street vendors which constitutes a large population.

Without a proper survey, adequate facilities cannot be provided in conformity with the National Policy for Street Vendors.

4.1 Other Low-income Groups in Public Space: A Case of Construction Workers

The case of construction workers also highlights the plight of inadequate government provisions, despite the Building and Other Constructions Workers (Regulation of Employment and Conditions of Service) Act, 1996 amended in 2017 as Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central (Amendment) Rules, 2017. The BOCW Act is a social welfare legislation and the preamble of this Act explicitly states its purpose as: "An act to regulate the employment and conditions of service of building and other construction workers and to provide for their safety, health and welfare measures and for other matters connected therewith or incidental thereto". State Welfare Board Functions include:

- i. immediate assistance in case of accident;
- ii. pension (after beneficiary attains age of 60);
- iii. loans for construction of house;
- iv. premium for group insurance scheme;

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- v. medical expenses for major ailments;
- vi. maternity benefit to female beneficiaries;
- vii. other welfare measures as may be prescribed by the Board.

In order to avail these benefits, the construction workers have to be registered. However, according to Centre of Indian Trade Union (CITU), only 10% construction labourers of Guwahati have been registered.

While conducting this study, it was found that there are no workers who get these benefits. With regard to their registration, there was no assistance from any government officials, including the office of the Labour Commission. Though a number of workers under this study have been registered (Rajib Das, Rajani Kalita, Kanak Deka, Achyut Das, Jiten Lahkar, Rakesh Majumdar, Mintu Deka, Babul Ali, Ila Begum), but they were able to register only because of the guidance and assistance of NGOs. These workers earn a daily income of around Rs.300 400 and as such need support from the government for their safety and well being. Although they have gone through the process of registration and have been made aware of the benefits such pension, etc. but they haven't yet received any benefits under BOCW Act.

Chapter V

Land Use and Public Space

With the advent of the process of urbanization, the land use of Guwahati underwent remarkable transformation when the capital was shifted from Shillong to Guwahati in 1972 and has been steadfastly evolving and changing ever since with an increasing population. The region delineated under Guwahati Metropolitan Area (GMA) presently constitutes areas of Guwahati Municipal Corporation, North Guwahati Town Committee. Amingaon Census Town and 21 revenue villages. The total area covered under GMA is approximately 262 sq. km. According to the 2011 census, Guwahati municipal area and Guwahati Metropolitan Area (GMA) had a population of 963,429 and 968,549, respectively. There has been a steady increase in the population living in urban areas from 11.1% in 1991 to 12.9% in 2001 and 14.1% in 2011. The total population of GMA will be 21 lakhs approximately in 2025. There is also a floating population of about 10 per cent, which comes to Guwahati for daytime activities. Thus, the daytime population in Guwahati in 2025 is estimated at 22.94 lakhs. The overall gross city level density is proposed to increase from 34 to 68 persons per hectare by 2025. The Master Plan proposes to expand the city by 66 sg. km., by including some new areas for satellite town and the city space has been classified into 10 land use zones. (See Table next page). 11

However, this proposed plan seems to be inadequate as it has not accurately captured the existing scenario of land use in Guwahati. Based on studies conducted, it has been seen that the residential areas in Guwahati already cover around 60% of the total area and as such impinges on open areas, public spaces and urban commons.

As a result of such rapid expansion of population, there is an increase in built-up areas accompanied by a decline in open spaces

As part of this study, GPS mapping of select areas have been conducted which has brought forth similar results as discussed.

5.1 Land Use Land Cover Classification of the Guwahati Metropolitan Area

Land use/land cover classification was done based on supervised classification of freely available landsat images. Three images of the Guwahati metropolitan area were collected, viz., Landsat MSS image of 1976 of 70m resolution, Landsat TM image of 2000 of 28m resolution and Landsat OLI image of 2016 of 28m resolution.¹⁴

Table: Proposed Land Use Breakup in Guwahati Metropolitan Area

Land Use Categories	Area in Ha. (excluding New Towns)	% of Developed Area)	Area in Ha. (including New Towns)	% of Developed area
Residential	8,646	31.92%	10,383	31.65%
Retail Commercial	360	1.33%	447	1.36%
Wholesale Commercial	81	0.30%	417	1.27%
Industrial	518	1.91%	918	2.80%
Public and SemiPublic	3,270	12.07%	3,606	10.99%
Composite Use I	814	3.01%	814	2.48%
Composite Use II	300	1.11%	841	2.56%
Recreation & Open Space	3,324	12.3%	3,728	11.0%
Transportation	2,853	10.53%	3,407	10.39%
EcoSensitive / Eco Friendly Zone	6,919	25.5%	8,245	26.0%
Total	27,085	100%	32,806	100%

Table: Changing pattern of land use and land cover (LULC) in Guwahati, 1991-201512

LULC class	19	91	2002		2004		2015	
	Area in sq. km.	Area in %						
Wetlands	10.35	4.77	10.04	4.62	10.71	4.93	10.68	4.92
Water body	6.56	3.02	4.00	1.84	2.72	1.25	2.07	0.95
Riverine sand	1.16	0.53	1.07	0.49	0.80	0.37	1.44	0.67
Forest	18.41	8.48	15.29	7.05	15.20	7.00	12.34	5.68
Tree& shrubs	70.49	32.46	60.27	27.76	49.63	22.86	47.11	21.69
Low density settlement	37.23	17.15	40.79	18.78	60.89	28.04	64.04	29.49
High density settlement	39.74	18.30	62.06	28.58	64.42	29.67	67.37	31.04
Open space	33.20	15.29	23.62	10.88	12.77	5.88	12.09	5.57
Total	217.14	100.00	217.14	100.00	217.14	100.00	217.14	100.00

Table: Major land use land cover (LULC) types of Guwahati, 1977-2015¹³

	(1977)	(2015)	(in percentage)
Forest cover	27.17	17.19	- 9.98
Open area	14.12	4.42	- 9.7
Builtup area	22.59	63.24	+ 40.65

^{12.} Bora and Rajbangshi, 2017. Impact of Land Use Land Cover Changes in Guwahati City, Assam, India.

^{13.} Source: Survey of India Toposheet, Satellite data

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The land use/land cover classification was done on using supervised classification algorithm and mostly done for extracting vegetation cover and barren & built up land.

From the above findings it can be observed that the proportion of built up area has increased significantly at the cost of vegetation land and water bodies. This can also be highlighted through the data of few select wards

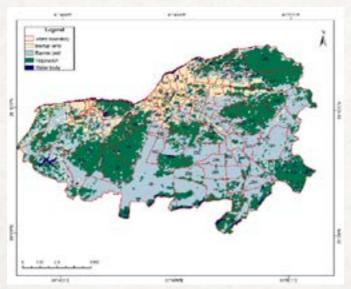


Figure: Land use/land cover map of Guwahati Metropolitan area in 1978

^{14.} The Landsat MSS image of the year 1978 image contains lots of systematic and unsystematic errors because of the aging sensor at the time of acquisition. Moreover, the resolution of the Landsat MSS image is too coarse to be utilized for analysis of data in individual ward basis.

Figure: Land use/land cover map of Guwahati Metropolitan area in 2000

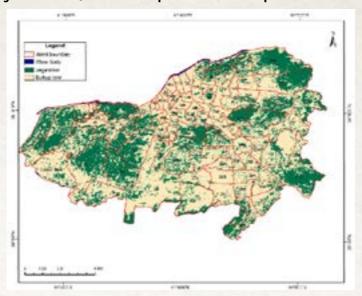


Figure: Land use/land cover map of Guwahati Metropolitan area in 2016



Table: Land use/land cover of the Guwahati municipal area

Land use	Area in Hectares
1978	
Vegetation	7316
Built up land	10,384
2000	
Vegetation	6568
Built up land	11015
2016	
Vegetation	3278
Built up land	13950

Table: Data of Individual wards (area in hectares)

Ward	Landuse/ land cover	2000	2016
Ward No. 1	Vegetation	675	382
Walu No. 1	Built up land	448	685
Ward No. 2	Vegetation	238	172
Walu No. Z	Built up land	99	158
Ward No. 3	Vegetation	792	304
ward No. 3	Built up land	1487	1921
Ward No. 4	Vegetation	821	470
	Built up land	487	818
Ward No. 5	Vegetation	5	1
Walu No. 5	Built up land	200	205
Mand Na C	Vegetation	56	17
Ward No. 6	Built up land	209	250

Study of Uzan Bazar-Kharghuli Area

A study of Uzan Bazar-Kharghuli Area using GPS mapping was also conducted to corroborate these findings.

One of the major issues of this kind of rapid expansion of residential or built up areas is that it leads to congestion in the city. And the convenient

Table: Land use classes in Uzan BazarKharghuli and surrounding region

Land use class	Year (area in hectare)				
Land use class	1917	1965	2018		
Forest/scrub land	269.3	88.2	8.8		
Urban settlement/commercial area	134.7	629.8	726.8		
Water body	5.8	3.3	5.7		
Barren land	320.1	25.1	1.0		
Swampy/marshy land	19.49	0	1.4		
Stadium/play ground	0.0	3.0	6.1		
Total area	749.4	749.4	749.4		

Figure: Percentages different land use in the year 1917

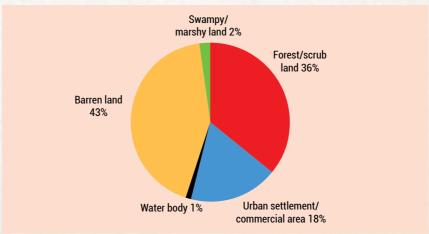


Figure: Percentages different land use in the year 1965

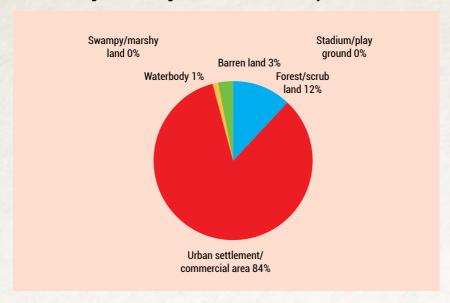


Figure: Percentages different land use in the year 2018

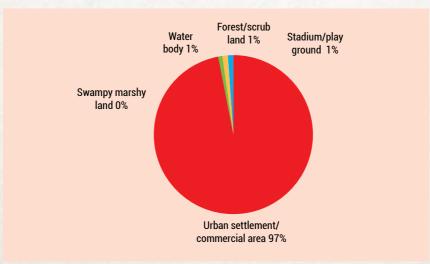


Figure: Land use map of Uzan Bazar-Kharghuli and surrounding region in 1965

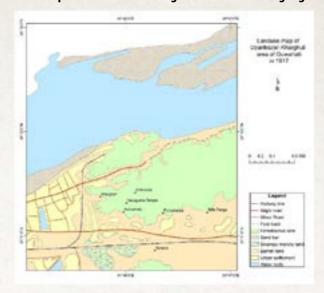


Figure: Land use map of Uzan Bazar-Kharghuli and surrounding region in 1965



Figure: Land use map of Uzan Bazar-Kharghuli and surrounding region in 1965



solution of state agencies to tackle congestion or encroachment is eviction. It is important to highlight here that eviction is more often than not directed towards the marginalized section of the population when land is appropriated in the name of public use. This has been the precedence since capital shift during the 1970s. The process of major structural changes began with Assam's capital shifting from Shillong to Guwahati in 1972. With the shift of the administration to Guwahati. there developed necessary infrastructure along with an administrative class and its associated needs. It was found that during the capital shift when the city underwent major infrastructural changes, then the class or category of land use was transferred from agricultural to non agricultural purpose to meet the ancillary requirements of the new capital. With the change in the land use pattern, the demography also changed from indigenous agriculture based population to accommodate the newly emerging administrative and business class population. The impact of such changes was first experienced along the present Dispur circle of Guwahati as this area is in the vicinity of the Assam Secretariat Office.

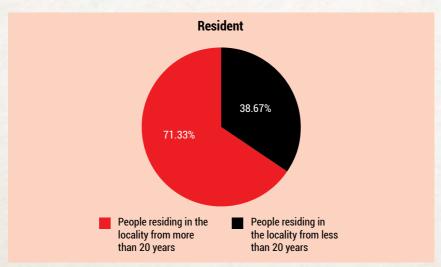
While conducting interviews and FGDs in Hengrabari, it was found that the population most impacted by this shift in land use were the tribal pockets. The entire area under erstwhile Hengrabari was agricultural land comprising of paddy fields as well as fruits and vegetable cultivation. The Karbi population residing there did not experience economic marginalization up to early 1970s as they were a self-sufficient community. But as a consequence of the capital shift and thereafter the development of that area, the agricultural land began shrinking. The state appropriated land for administrative offices and residential colonies. With such change in demography, there were new requirements which led to the emergence of authorized housing colonies and market areas. Also common property resources such as water bodies and hills were appropriated by the state as reserved areas which de-voided the indigenous population of their relationship with those urban commons. This change in land use pattern impacted the Karbi villages in those areas. For example the present PHED hillock in that area was known as Mokoraguri as there were large spiders (mokora) found in those areas which were crushed (quri) and consumed for their medicinal properties. With changes in land use patterns and new administrative names given to these places, the association or claim of the indigenous population with these spaces have been lost. The respondents talk about how they used to freely roam around in the hillocks and now entering those areas would term them as encroachers.

Despite being residents for a long time, there is a growing insecurity among people with regard to their status of ownership. In the wards where FGDs were conducted, it was found that more than 70% of the respondents have been residing for over 20 years.

However, there is an insecurity over land and space which stems from the fact that the ownership status of land is not updated and incorporated by state agencies. Out of 200 respondents in 11 wards, though 68% live on land owned by them but only 33% own myadi patta land and 44.67% do not have myadi patta. Due to this insecurity and fear of eviction, there has been unauthorized construction which had led to high density settlement areas leading to congestion of space.

Such a contestation over space can be seen in the areas around Silsakho beel and the Bahini drainage channel. It was observed during this study that the area around Silsakho beel, which is an important wetland for Guwahati, has been appropriated in the name of expansion and development. This has led to an increasingly privatized nature of space as the new buildings coming up there are either big apartments or have been allocated for private utilization, such as the Rehman School of Nursing, Omeo Kumar Das Institute, Ginger hotel, etc. This is despite the The Guwahati Waterbodies (Preservation and Conservation) Act, 2008¹⁶ which clearly states activities similar to the above as violations which can be treated as punishable offence. The Bahini drainage channel has also been shrunk to accommodate the surrounding residential areas and also in the name of public use with the upcoming area allocated for the office of Directors of various govt. departments. Even the highway has impinged on this drainage channel because of which the water flow gets restricted leading to pollution and flash floods in those areas.

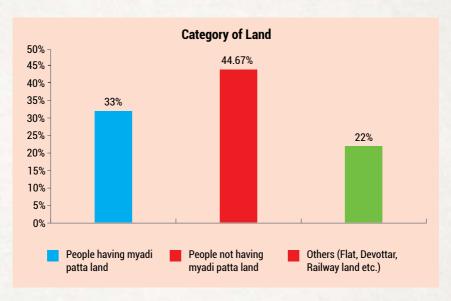
Such appropriation of land in the name of public use or development impinges on the open public spaces and urban commons. In the wards where FGDs were conducted, it was found that 50% of those do not an open playground.



Out of 200 respondents, 160 of them were aware of existing public space (playgrounds, open grounds, clubs, etc.) in the area. Out of those 160 respondents, only around 30% of them actively utilize the public space.

The following diagrams bring forth the nature of public space available to the public, such as clubs, amusement centers, libraries, etc.

Most of these public spaces are not entirely public in nature as they either belong to religious institutions, public schools or clubs, as can be seen in the following diagrams which substantiates the presence of religious and educational institutions in all wards under the study.



^{16.} Restriction on use of land: ... no person shall i). undertake any activities including the filling up of waterbodies which may cause damage or reduce the size of the waterbodies; ii). Construct or erect any structure in the waterbodies; iii). Dump or throw solid waste or garbage in the waterbodies; iv).extend or reinforce of any building standing upon the waterbodies, v). carry out any kind of business except fish curing, aqua culture, conservation measure and flood control measures, that too with the specific previous permission of the Competent Authority.

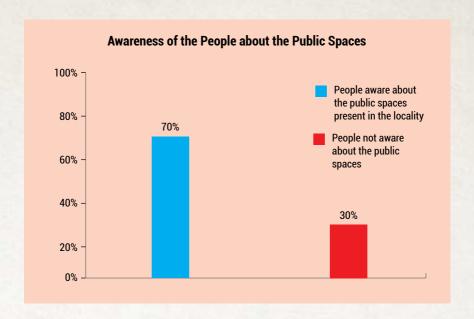
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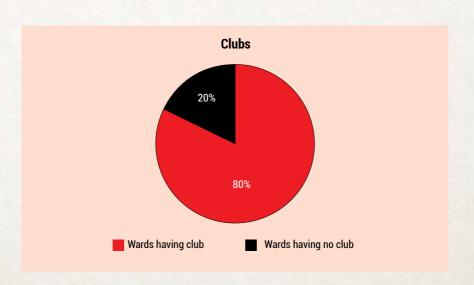
With this kind of a private nature of space, access gets restricted to certain categories of the population as these public spaces are not GMC authorized or maintained public space. For instance, a ground owned by a temple may not be as accepting of people from other religions utilizing the space. This limits the utilization capacity of the space which may be considered a public open space but has authority over its ownership and utilization.

Such a trend can also be observed in the case of market areas. In the wards where FGDs where conducted it was found that only 40% of those areas have a local market. In the absence of a local market, the population is largely dependent on street vendors who provide basic and essential items of everyday. However, this important role of vendors is not taken into consideration when they are evicted. There is insecurity of space and livelihood among vendors because the trend is increasingly towards privatized markets and malls.

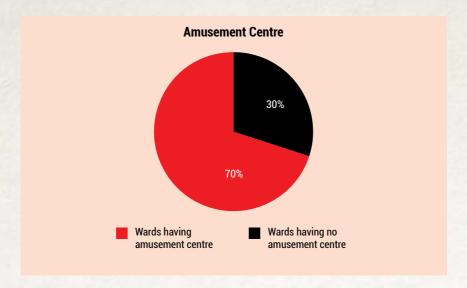
With lack of space that is truly public and inclusive in nature, there is also decline in providing public amenities. In the wards where FGDs where conducted it was found that 30% of the wards do not have access to good roads, and only 10% areas have public lavatory and drinking water facility. The role played by the administration of the successive governments in last two decades is very daunting regarding the people's centric uses of land (spaces) and people's participation in decision making.

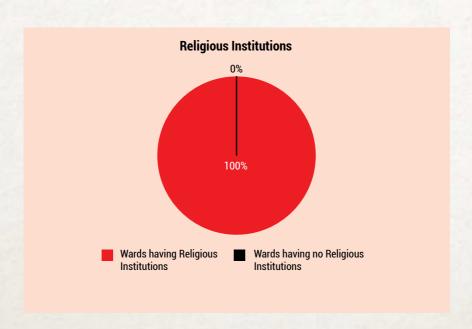
It is interesting to note here that the limited provision of public amenities is not free of cost but is pay and use. This system of revenue generation on basic facilities may dissuade the economically marginalized section of the population from cultivating a habit of utilizing these facilities. Similarly, in the case of the parks which charge entry fee, which is the case in most parks in the city now, it automatically discourages the lower income groups who cannot afford to spend such money frequently for leisure. With the nature of public space and public amenities becoming increasingly privatized, these facilities are not inclusive in nature and cater only to a particular section of the population, creating further marginalization and discrimination.



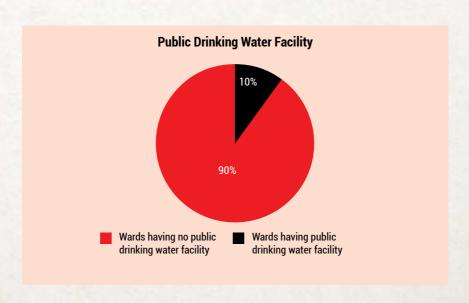


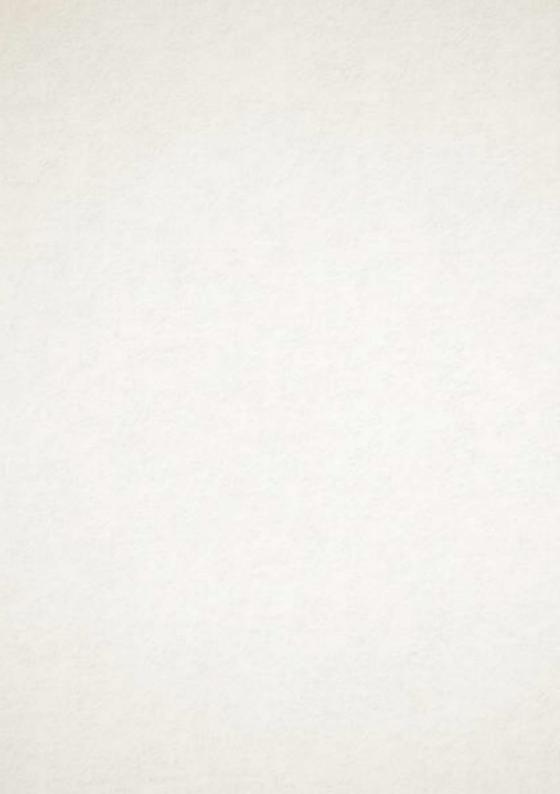
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Chapter VI

Citizen and Media Perception Study

The citizens of greater Guwahati city have some common perceptions and understandings on the 'growth' and expansion of the city in last two and half decades. They have witnessed of the massive expansion of the city during this period. In this study, we tried to understand the perception of the common citizen regarding the issues they are connected with in their day to day life. 220 respondents from 11 study wards have stated their views against four basic questions. This perception study has shown that the citizens are very much concerned about the happenings in the city like its development projects, expansions, planning process and governance.

Total ward – 11 Respondent per ward- 20 Total Number of respondents- 220

- 1. Do you feel that the city is growing in a right direction?
 - » Yes 33 %
 - » No 68 %
 - >> Do not Know nil
- 2. Do you feel that the governance of Guwahati city is sensitive about your expectation?
 - >> Yes- 22 %
 - » No- 58%
 - » Do not Know- 30 %

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- 3. What are the primary / urgent needs of the city which are yet to be addressed?
 - >> 76% Water
 - >> 58% Drains
 - >> 38% Good Government Schools
 - 30 67% Good service in Government Hospitals
 - >> 29% Security from thievery
 - >> 68% Effective flood management
 - 23% Raised platform near schools and public places
 - >> 54% Disaster risk
 - >> 34% Allotment of land
 - >> 51% Housing
 - >> 24% Mother and child care
 - Markets with quality food and reasonable price.
- 4. What are the services you feel that there is a need to intervene more actively

Common issues seen in responses:

- >> Water supply according to the standard
- Effective PDS
- » Sewerage system
- » Water bodies to restored
- » Street lights
- >> Crime control
- » Allotment of land to landless
- » Electricity connection
- » Preservation of historical monuments and traditions.

6.1 Media Concern Appraisals

Monitoring months

July, August and September, 2018

Newspapers- Asomiya Pratidin, The Assam Tribune and The Telegraph

The citizen and media concern appraisal has shown the status that has been existed in the city, and how the common people are concerned about the burning issues. The media coverage on the issues is also reasonably high. It is substantial that people are very much active to express their grievances loudly and they have been writing to newspapers and other media frequently. It has reflected the situation precisely.

Issue-Water and Sanitation

Newspapers	July	August	September	Photographs
The Assam Tribune	12	10	13	7
Asomiya Pratidin	17	15	17	9
The Telegraph	6	8	5	2

Issue- Roads and drains

Newspapers	July	August	September	Photographs
The Assam Tribune	10	9	13	2
Asomiya Pratidin	17	15	17	9
The Telegraph	3	3	6	0

Issue- Land, public space

Newspapers	July	August	September	Photographs
The Assam Tribune	4	7	5	2
Asomiya Pratidin	12	16	12	6
The Telegraph	5	4	6	2

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Issue - Vendor and market

Newspapers	July	August	September	Photographs
The Assam Tribune	7	11	12	5
Asomiya Pratidin	15	17	11	7
The Telegraph	4	6	3	4

Issue - Crime

Newspapers	July	August	September	Photographs
The Assam Tribune	23	20	24	4
Asomiya Pratidin	54	50	53	15
The Telegraph	11	14	16	5

Chapter VII

Conclusion and Recommendations

The major difference between urban and rural situation lies in the use of land. While in rural setting yield of land is horizontal, in the urban it has to be sooner or later vertical. This very fact brings a dramatic shift in the perception of the urban dwellers. For him or her bigger plot of land does not necessarily is an asset, rather, can become a burden even if it is available. He or she has to convert his or her dwelling place into a manyin-one resource / survival work station. The basic minimum necessities that he or she gets comes with a price in form of tax, rent and bills. All this necessitates money or rather hard cash. Unlike the rural setting, this has a dead line and must come on time. As a result, the biggest challenge for then urban dweller is to get a livelihood which is certain and secure. All other amenities like water, sanitation, health, education, are depended upon this.

More importantly, though apparently the individual has to manage his or her survivality in this context, the system has to create space for all such individuals to survive here. Unlike in the rural settings where many of amenities can be availed without paying a price in the urban situation the civic authorities have to create it. It requires a vision, will and meticulous planning on part of the civic authorities.

From this perspective Guwahati has seen a major paradigmatic shift in 50 years or more so in last two decades. Before it became the capital of the state it was more of a sleepy town with its limited inhabitants with still more limited traditional occupations - such as government jobs, patty business and some traditional farming by the tribal communities. But once it became the capital, the number of government jobs holders

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increased manifold. It resulted in needs for more shops and commerce, construction activities, supply and transportations. As this increase in demand was not catered through planned activities, a whole ecology of support services emerged. Initially, people from surrounding villages and semi towns supplied the necessary work force in ad hoc basis. But suddenly, for various reasons it had its own energy which led to huge number of professionals entered to fill up the void. It became important for them also to become a part of the city staying here full time.

This became a bane and boon for the city. Initially, this influx created a huge problem for the civic authorities as the infrastructure in terms of house, roads, water and sanitation, health and education, was hopelessly insufficient to address this. As a result, the traditional mechanism of providing civic amenities collapsed resulting in a chaotic situation. Many thought this was the end.

However, paradoxically, the solution came from here. The new work force becomes a vibrant economic engine creating huge livelihood possibilities. All those who joined this new economy came with both a survival instinct and holistic view to the life.

The three verticals of the study have clearly represented the reality which people of Guwahati city has been facing in the recent years. There is no need to mention that Guwahati is an emerging city with its increasing load of population. People are migrating to Guwahati from different parts of north-eastern states every day in search of higher education and livelihood. And, in comparison to the extension of all spheres of needs, Guwahati has been lacking behind in achieving the common and basic amenities. The overall status of water supply, degraded sanitation systems and absence of sewerage, excluded interest of low-income group in governance are the major issues of concern. Here, the role of governance, more particularly the Urban Local Governance and its wings are showing their inabilities in addressing the common issues of the city life. After a six-month long study with number of FGDs, in depth interviews, roundtables and the wide secondary studies on the people's issues, team of this action research has found certain issues which are to be addressed immediately for the

sustenance of the city. From the perspective of Sustainable Development Goals (SDGs) too, these concerns are the vital area to be addressed with both scientific and humane hand.

The issues -

- 1. Communication gaps and conflicts among the government departments and agencies
- 2. ULB's role in formation of the new agencies companies to execute the development plan and programs
- 3. Arbitrary decisions by the various implementing and policy agencies of the urban governance
- Alienation of people's participations in development planning and executions. The absence of councillor's role according to the Municipal Act.
- 5. The role of the coordination committees to plan and execute the programs is inactive
- 6. The role of the deputed officials in GMCs and other agencies in handling the long-term projects is very traditional and they have created a huge gap
- 7. Fund allocation and distribution among the marginalised groups is not done properly
- 8. Quasi statutory bodies, their roles in performing governance is not define properly
- The role of the Jal Board, Smart city mission and other new Public limited companies and organizations formed by the government are not focusing on the people's participation in development practices
- Ambiguity in GMC in performing the good governance as the Urbam Local Body
- 11. Erosion of overall delivery of public amenities
- 12. No inclusive plan in planning process, water ATM, Air conditioned Bus stops, Bio-Toilets in city's posh areas are the examples of such

- initiatives where development of slums, livelihoods of marginalised low income groups, tax reduction, creation of space for new market, development of slum areas, health and hygiene are largely absent
- Departure and sharp decline in all spheres of common goods like water, sanitation, sewerage systems, communications, public space, livelihood of low-income groups
- 14. Major setback in implementing the Acts and regulations in the areas like-
- 15. Construction and other worker's safe guards and social security
- 16. Manual Scavenging is still going on and the authority is promoting it by neglecting the modern assistance in combating up the challenges
- 17. The issues and rights of the street vendors and other low-income population have not been addressed and the legal framework on their issues is neglected. The sharp declining and apathy towards the poor and lower income groups has been created social imbalances in recent times
- Capital finance in up gradation of public amenities is a major area of concern, where no comprehensive plan is designed with proper need assessments.

7.1 Recommendations

The study team has realized that a comprehensive participatory planning process has to start in all the spheres of development activities is indispensable to ensure the right and entitlements of the commons. The absence of participatory planning is the root cause of scattering distrust on the governance of Guwahati city. Most comments and the views of the respondents of this study had clearly shown their decreasing faith on the governance and its way of performing the task. In the same time, the public representatives elected to the Urban Local Governance i.c Guwahati Municipal Corporation (GMC) had also expressed their concern about the non-implementation of the 73th amendment of the constitution where more power was entrusted on the ULB. In context of Guwahati city 73th amendment of constitution is to be implemented with immediate effect.

It seems that the incorporation of the provisions of this constitutional amendment will encourage the public representatives to raise the voice on behalf of the peoples of the city. It will enhance the participatory planning in development process which should be the primary focus of the good and effective governance.

The other major areas where some effective intervention can lead Guwahati to an ideal city to live with:

- A workable master plan with maximum priorities in available drinking water facilities, judicious land use, sanitation and sewerages
- 2. The development finance and investment in creating and managing the public amenities should be done properly without misuse of the resources
- The major concern suggested by Sustainable development Goal (SDGs) should be addressed with time bound plan and activities. In context Guwahati city the serious concerns are as below –
 - a. Clean water and sanitation (SDGs 6)
 - b. Reduce Inequality (SDGs 10)
 - c. Sustainable city and communities (SDGs 11)
 - d. Life below water (SGDs 14)
 - e. Life on Land Social security (SDGs 15)
 - f. Partnership to achieve the goal (SDGs 17)
- 4. Implementation of 73th amendment of constitution with immediate effect
- 5. Effective and meaningful protocols to be fixed to regulate the expansion of the city towards the adjunct rural areas. This is to be looked into in context of the formation of the State Capital Region (SCR) which is already been proposed by Government of Assam.
- The preservation of the tribal belt and blocks and ensuring the rights and entitlements of the inhabitants of belts and blocks are the major area to be addressed.

