

Original Article

# Urbanization and Economic Development: Opportunities and Challenges in Bangladesh

<sup>1</sup>Md Al Amin, <sup>2</sup>Md. Shahinul Islam, <sup>3</sup>S M Al Imran, <sup>4</sup>Nusrat Jahan, <sup>5</sup>Md. Billal Hossain, <sup>6</sup>Fahad Bin Asad, <sup>7</sup>Md. Abdullah Al Mamun

<sup>1,2,5,6</sup>Department of Economics, Pabna University of Science and Technology, Pabna, Bangladesh.

<sup>3</sup>Department: Swarupkathi Sub Branch, Islami Bank PLC, Pirojpur, Bangladesh.

<sup>4</sup>Department of (Mathematics and Economics), Playpen School, Bangladesh.

<sup>7</sup>Senior Officer & Branch Operation Manager, Pubali Bank PLC, Loans & Advance Department, Baridhara Branch, Dhaka, Bangladesh.

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**Abstract:** Urbanization has developed into a prime engine of growth, especially in the burgeoning economies of Bangladesh. Thus, this paper discusses the interaction between urbanization and economic development, highlighting the opportunities that come with this shift and the challenges it brings. Using quantitative data from population metrics and economic performance, together with the qualitative input of interviews and surveys, this study does show that urbanization has come to play an important role in increasing productivity, developing infrastructures, and creating job opportunities in the more critical industries such as manufacturing and service. However, this very rapid growth of cities created significant problems that include locational inequalities, unchecked expansion, environmental degradation, and increasing incidence of urban poverty. The concentration of population in Dhaka cities places heavy pressure on the structure and public amenities, contributing to overcrowding, bottlenecks in traffic movement, and resource depletion. Additionally, the study presents a challenge for strategic planning of an urban environment as it presses for efficient governance and policies that benefit the economic gains in light of sustainability challenges. The findings depict the Janus face of urbanization-simultaneously a growth enhancer and a hotbed of major social challenges outcomes, which can benefit from insights into fostering resilient yet equitable urban development in Bangladesh.

**Keywords:** Urbanization, progress, Bangladesh, Challenges, Dhaka, Development, Rural population, Urban.

## I. INTRODUCTION

Urbanization is how towns and cities expand and evolve from rural settings into larger urban societies. This transformation drives urban areas to become centers of innovation, productivity, trade, science, culture, and social progress, significantly affecting their physical layout, socioeconomic systems, and the behavior of key urban development stakeholders. Since 2007, over half of the global population has been living in urban areas, and by 2050. [1]. In 2015, the world population was approximately 7.35 billion, with estimates suggesting it will grow to 8.50 billion by 2030 and 9.73 billion by 2050. [2]. About 85% of the world's population resides in Africa, Asia, and South America, with China and India making up 19% and 18% of the global population, respectively. The UN projects that by 2030, 90% of urban population growth, equating to 2.5 billion people, will occur in Asia and Africa, with China, India, and Nigeria accounting for 37% of global urban growth by 2050.[3]. Acknowledging urbanisation's role in economic and social progress is crucial, especially considering the historical neglect of cities in national and international development discussions in recent decades. However, to prevent the focus from simply shifting back to rural development in the near future, it is essential that the reasoning and supporting evidence for urbanization's benefits are strong and well-founded. Current arguments presented by development organizations, which suggest that urbanization drives development or that cities act as "engines of growth," are often too general, with limited supporting evidence [4]. The urbanization-growth relationship is frequently depicted as automatic and inevitable, as though it follows an unchanging historical pattern. This overlooks the complexities of urbanization and growth, including the various ways cities can foster growth and the diverse forms it can take. Additionally, the conditions required for urbanization to contribute to growth, along with the impact of growth on impoverished communities and natural resource depletion, are often ignored. Urbanization is often confused with agglomeration, though the two are not the same, particularly if the fastest-growing areas are small cities and towns rather than large urban centers. [5].

Bangladesh, situated in South Asia, ranks among the most densely populated nations globally, with a population exceeding 154 million. It shares borders with India, Myanmar, and the Bay of Bengal and achieved independence from Pakistan in 1971. Since then, Bangladesh has made significant strides in areas like agriculture, education, and healthcare despite facing ongoing challenges such as poverty, political instability, and natural disasters. The economy is primarily fueled by the textile and garment sectors, agriculture, and remittances from a large expatriate community. Dhaka, the capital, is one of the world's fastest-growing



megacities, but rapid urbanization has created substantial challenges in infrastructure, public services, and environmental management. The country is also particularly susceptible to climate change, with rising sea levels and frequent floods posing threats to its low-lying coastal regions. Nonetheless, Bangladesh has achieved progress in improving literacy rates, reducing child mortality, and advancing women's empowerment, demonstrating its resilience and continued path toward development. [6]. Urbanization is increasingly seen as a driving force for a country's growth and development. It has a strong positive correlation with the Gross Domestic Product (GDP), with the urban sector contributing significantly more to GDP than the rural sector in many developing countries like Bangladesh. While agriculture once contributed 50-60% to GDP, this share has now dropped to just 16%. Meanwhile, the urban sector's contribution to GDP has been steadily rising and currently stands at around 65%. In addition to its economic impact, urbanization also plays a crucial role in the socio-cultural and political development of the country. Since gaining independence, Bangladesh has experienced an average urbanization rate of 5%, with the urban population more than doubled from 15% in 1974 to 28.4% in 2011 [7]. However, the rapid rate of urbanization in Dhaka City has led to various challenges that affect the basic rights of its citizens. Demand for utility services such as electricity, water, and gas exceeds supply, and road and transport infrastructure has become severely inadequate to meet the growing needs of the population. Migration is a major driver of rapid urbanization, with over 60% of the population in Dhaka Mega City being migrants. Both pull and push factors contribute to this migration. Dhaka, along with Chittagong, Rajshahi, and Khulna, are the largest cities in Bangladesh. The total urban population in Bangladesh stands at 42.11 million, with Dhaka alone accounting for 40%. By 2014, Dhaka's population was projected to reach 18 million. As a result, Dhaka has become one of the largest megacities in the world. However, life in Dhaka has become increasingly difficult due to overpopulation and its associated challenges. [8]

Urbanization is important as cities are key drivers of innovation, productivity, and social advancement. However, the current narrative tends to overemphasize a direct, automatic link between urbanization and economic growth. Cities are often described as "engines of growth" in broad terms, though these claims are often made without sufficient evidence to support them [9]. The urbanization-growth relationship is often assumed to be inevitable without enough attention to the varied forms urban growth can take or the conditions required for it to be both inclusive and sustainable. In addition, the complex dynamics of urbanization—how it differs across regions, city sizes, and economic contexts—are frequently overlooked. Small cities and towns, which are growing at the fastest rates in many parts of the world, especially in Asia and Africa, tend to receive less focus compared to larger cities. [10] Another major concern is the environmental and social impacts of rapid urban growth. Urbanization is often confused with agglomeration, but they are not synonymous, particularly when smaller urban areas are considered. Unchecked urban growth can lead to resource depletion and increased poverty in vulnerable communities if not properly managed. A more nuanced approach to understanding the links between urbanization, economic growth, and social development is essential to shape sustainable policies. [11].

#### **A) Creating sustainable cities in Bangladesh: major challenges**

Urbanization has led to significant development in Bangladesh, though it has also presented considerable environmental, social, and economic challenges. To create a sustainable city, these issues must be addressed effectively and efficiently. This raises the question: what constitutes a sustainable city, and what are the key challenges that must be tackled at this point? Broadly speaking, a sustainable city is one that is economically viable, socially harmonious, and environmentally sustainable. More precisely, it is a place where people can live in harmony, with a good standard of living and a respectable salary, without being subjected to mental or social constraints. The definition of a sustainable city and the main obstacles to achieving this objective are discussed in the parts that follow. [12].

There are many major obstacles to building sustainable cities in Bangladesh, particularly given the nation's socioeconomic situation and rapid urbanization. Important difficulties include:

1. **Infrastructure and Public Services:** Lack of infrastructure and public services is one of the greatest challenges. For example, Dhaka and Chittagong have insufficient transport systems, unhygienic waste disposal, and erratic electricity and water supplies, which fail to keep pace with a growing population. Urban growth in many places often outstrips the growth of necessary service infrastructure, leading to congested traffic, pollution, and low living standards.
2. **Environmental Degradation:** Another major issue related to environmental impact is urbanization. Air and water pollution, uncontrolled industrialization, and the bad practice of waste disposal cause urban ecosystems to deteriorate (Ahmed & Awal, 2019). Flooding, fueled by climate change and poor drainage infrastructure, continues to plague cities at low elevations, making populations living in urban areas more vulnerable. [13]
3. **Affordable Housing and Urban Poverty:** This influx of rural migrants to urban areas has proliferated informal settlements that usually lack the most basic facilities, such as sanitation and clean water. Affordable housing is a big challenge since most people in cities live in overcrowded and unsafe conditions. Urban poverty is also prevalent because rapid urbanization has not been accompanied by adequate job creation or social safety nets.

4. **Governance and Urban Planning:** This has led to rampant informal settlements that rarely afford the most basic amenities, including sanitation and clean water. Many people are living in poorly overcrowded and dangerous houses due to the lack of affordable housing. Poverty within the cities is also widespread since rapid urbanization has not been matched by either adequate job provision or social protection mechanisms.
5. **Social Inequality and Inclusivity:** Urban areas in Bangladesh experience significant social inequality, with wealth and services concentrated among higher-income groups. Poorer communities often face exclusion from education, healthcare, and employment opportunities, creating a divide that hinders social harmony and development. [14].

#### **B) Four Specificities of Urbanization in Bangladesh**

Some unique features of urbanization in Bangladesh must be considered in the broader context. Four key features stand out:

##### **a. From Rural-Urban Divide to Continuum:**

With an average population density of 1,016 people per square kilometer (Population Census, 2011), which is projected to double by 2050, Bangladesh's overall density will resemble that of an urban area. As a result, the traditional rural-urban divide is giving way to a rural-urban continuum, with continuous urbanization being the most likely scenario. In such conditions, transport networks and land-use planning become critical priorities. However, policy focus in both areas remains inadequate.

##### **b. Transport Corridor-Centric Urban Growth:**

Urban growth in Bangladesh is concentrated along transport corridors. Population and economic density maps reveal that growth is centered along a northwest-southeast diagonal and other border transport routes. This pattern highlights the short-term importance of prioritizing urban investments in these corridors to maximize the existing growth potential.

##### **c. Policy-Induced Primate City Development:**

Dhaka's rapid growth as a primate city is largely a result of policy choices driven by extreme centralization of decision-making. In 2010, Dhaka contained 37% of the urban population, with a primacy index of 2.12, meaning its population was over twice the size of the next three largest cities combined (Chittagong, Rajshahi, and Khulna). While other countries like China and India avoid such primate cities, Dhaka's dominance reflects a centralized governance structure that undermines balanced development and weakens city-level governance, leading to poor urban services and planning.

##### **d. Social Poverty Despite Economic Gains:**

Between 2005 and 2010, urban extreme poverty decreased by 50%, yet the urban literacy rate only rose by 2%. This mismatch between economic and social progress highlights a key challenge of urbanization, particularly regarding urban poverty. Efforts to address this issue through a rural poverty framework often fail, as urban poverty presents both greater economic opportunities and more acute social vulnerabilities, such as eviction threats and limited access to public health and education.

#### **C) Challenges of Urbanization**

Urbanization presents several challenges, including:

- Unregulated and spontaneous urban growth leads to persistent issues.
- Insufficient forward planning for essential services, housing, and infrastructure development.
- A lack of proactive planning for road networks, public transport systems, and the installation of utilities like electricity, gas, water, sewerage, and telecommunications.
- Failure to develop urban areas holistically, including the integration of civic amenities such as parks, lakes, and recreational spaces.
- No effective regulatory framework to manage and protect urban public land and waterways, preventing their misuse.
- There is an absence of deliberate policies to utilize urban public land and waterways as resources for developing civic facilities.
- Inadequate attention to environmental protection, including safeguarding urban waterways and managing solid waste and industrial waste.
- Neglect of the needs of poor and slum dwellers.
- Lack of regulations to protect citizens from exploitation by private developers and utility providers.
- Weak mechanisms to coordinate infrastructure development and utility provision across city corporation areas.

## **II. REVIEW OF LITERATURE**

#### **A) Relevant Research**

Like many other developing nations, Bangladesh is experiencing a steady rise in urbanization, which poses challenges to urban sustainability due to shortcomings in governance. Although urban authorities are aware of these issues, they often struggle to address them, largely due to the uncontrolled and unpredictable influx of rural migrants to urban areas and the neglect of the

urban poor's need for sustainable living conditions and access to basic services. As a result, rural poverty has essentially shifted to urban areas, particularly in Dhaka City. The lack of adequate infrastructure, basic amenities, and environmental resources, along with environmental degradation, traffic congestion, accidents, violence, and socioeconomic insecurity, are major challenges that have arisen from rapid urbanization. In addition to discussing sustainability difficulties and obstacles that impede sustainable urban growth, especially in Dhaka City, this provides an outline of urbanization in Bangladesh. A case study on Dhaka's water supply that includes an illustration of a "system hijack" problem is also given [15].

Urbanization is a natural process involving the shift of population from rural to urban areas. More specifically, it refers to both the migration of people from rural to urban regions and the transformation of society, where a rural, agriculture-based economy transitions into an advanced, industrialized one. In recent decades, Bangladesh has experienced a rapid increase in urbanization. Various factors have driven this growth, but if not properly managed, it could lead to challenges such as spatial imbalances, environmental issues, inadequate policy frameworks, difficulties in creating sustainable cities, urban poverty, and health concerns. This aims to explore the emerging challenges of urbanization in Bangladesh and consider strategies to address them. The findings critically examine the rapid trend of urbanization and identify the associated challenges in Bangladesh. Finally, the study offers recommendations to overcome these emerging issues. [16].

Urbanization is now seen as a key driver of growth and development in a country. In many developing nations, such as Bangladesh, the urban sector contributes significantly more to GDP than the rural sector. This contribution has been steadily increasing, with the urban sector now accounting for around 65% of Bangladesh's GDP. Urbanization also plays a crucial role in the socio-cultural and political development of the country. Economic growth and urbanization are closely intertwined, with urbanization essential for sustaining growth in developing countries while providing additional benefits. Contemporary growth theories primarily focus on capital and technology, but geography is a fundamental yet often overlooked factor. Geographic elements such as location, climate, resources, and the environment act as drivers of growth, facilitating trade, transport, innovation, and talent. Urbanization typically leads to industrialization, with these two processes being strongly linked. As economic development progresses, the dominance of the agricultural sector gradually declines while industrialization accelerates. Urbanization and industrialization are positively correlated. Although only 28% of Bangladesh's population lives in urban areas, this group contributes 65% to the country's GDP. For example, Dhaka city, home to just 9% of the national population, generates nearly 40% of Bangladesh's GDP. [17].

A significant shift anticipated in Bangladesh over the next decade is the rapid expansion of urbanization. If this growth is not managed properly, it could lead to chaotic conditions and problems such as pollution, unemployment, and increased criminal activities, which may hinder economic progress. This study aims to analyze the current state and trends of urbanization in Bangladesh, with a particular focus on urban migration and population growth in Dhaka city. These factors driving rapid urbanization in the country are identified, and their consequences on the positive and negative impacts of urbanization are evaluated. Finally, several recommendations are proposed to address the challenges posed by urbanization in Bangladesh. [18].

Urbanization and urban poverty go hand in hand, as hasty urbanization often boosts the growth of poor people in cities. Urbanization in Bangladesh has also increased the number of poverty-stricken people in its largest cities during the last 20 years. This chapter talks about the depth and geographical spread of urbanization in Bangladesh from a historical perspective. Urban conditions, growth trends, the proportion of the urban population, and its contribution to GDP were key elements analyzed during the process of urbanization. The chapter also highlights the issue of urban poverty and its growth and implications for the country's economy. [19]. In the twenty-first century, rapid urbanization is observed in developing countries. There is a significant concentration of people in the urban areas and a decline in the rural populations due to increased rural-urban migration.

It also presents grim results to the economic and political growth of developing nations, with African cities at the very forefront. This research will present an analysis of urbanization trends in Africa from pre-colonial times until the current period of globalization to understand the impact that high-rapid urbanization has been having on democratic transitions and food security, as well as the increasingly growing challenges to urban areas of poverty and insurgency. These challenges are largely driven by poor governance, high levels of corruption, and the mismanagement of state resources through various economic reforms and development strategies. The study concludes that urbanization requires effective management and clear institutional roles to foster organizational coordination, efficiency, and fairness in the distribution of resources. This approach is crucial not only for the development of urban areas but also for rural regions, ultimately promoting political and economic growth in African cities while mitigating poverty, insurgency, and food crises. [20]

### ***B) Positive and Negative Impacts of Urbanization***

Like many major cities worldwide, urbanization in Bangladesh brings both benefits and challenges to its population and environment, briefly outlined here.

- a. **Economic Activity and Income Base:** Dhaka, as the capital, has the most significant economic influence among urban centers in Bangladesh. The garments industry alone accounts for nearly 80% of the nation's export earnings. Dhaka contributes approximately 13% to the country's GDP.  
The city is home to many organized service sectors, such as government, banking, construction, and trade. Due to this concentration of economic opportunities, the city's per capita income is significantly higher than the national average and other cities in Bangladesh. In 1999/2000, the average per capita income in Dhaka was about \$872, more than twice the national average of \$363.
- b. **Employment and Education Levels:** Rapid migration combined with increasing female workforce participation has accelerated the growth of Dhaka's labor force at a much faster rate than the national average. By 2000, the city's labor force was estimated at 3.5 million, representing 59% of the working-age population (10 years and older), with 84% of males and 33% of females in this category. The service sector dominates employment in Dhaka, accounting for two-thirds of jobs compared to just 25% for the country overall. While there is limited agricultural activity on the outskirts of Dhaka, it represents about 11% of employment. Industry contributes 20% to employment, with half of those jobs in the garment sector primarily filled by female workers. Nationally, industry accounts for only 10% of employment. [21]  
Education levels in Dhaka are higher than in the rest of the country. Over 50% of the working population aged 15 and above have completed at least grade 6 education, compared to only 50% for the entire country. Women make up about one-third of the labor force in Dhaka, largely due to the garment industry, in contrast to 18% in Delhi and 14% in Kolkata.
- c. **Housing Conditions:** According to a statistical survey in 1995 (Islam et al., 1997), 16% of the poor in Dhaka were homeowners, 56% were tenants, 8% lived rent-free, and nearly 20% were squatters or illegal occupants. Dhaka's low homeownership rate contrasts starkly with other Indian cities like Delhi (47%) and Mumbai (59%) (World Bank, 2005), as well as with cities in the Middle East and North Africa, where homeownership is prevalent even among the poor.  
The root cause of Dhaka's housing crisis is its extraordinarily high land prices, comparable to those in suburban New York or London. Land costs remain high even in the city's outskirts, making affordable housing inaccessible to the poor. Consequently, a large concentration of the impoverished population resides in slum areas, leading to various social and legal issues. Additionally, the supply of moderately priced housing remains a pressing concern. [22]
- d. **Electricity:** Two public electric distribution companies, Dhaka Electricity Supply Authority (DESA) and Dhaka Electric Supply Company (DESCO), provide electricity in Dhaka. Both companies purchase power from the publicly owned Power Development Board (PDB). Approximately 90% of Dhaka's population has access to electricity, surpassing much of the rest of the country. The per capita consumption is 45 kWh, and demand is rising at a rate of 12% per year. However, system losses remain significant, ranging from 20-30%, and load shedding is common, particularly in the summer, due to insufficient peak load capacity. Although DESA has recently improved its collection efficiency, losses remain a problem.
- e. **Water Supply:** Around 70% of Dhaka's population has access to piped water supplied by the Dhaka Water and Sewerage Authority (DWASA), an autonomous water agency. DWASA relies heavily on an over-exploited aquifer for most of its water supply. Due to rapid population growth, the proportion of residents with access to piped water is decreasing. At the same time, Dhaka's groundwater level has dropped by 20 meters over the past decade because of overuse. Industrial pollution also threatens the development of future surface water sources. DWASA is currently unable to meet the full demand of the city, with high system losses of around 40% and collection efficiency at about 80%. Despite these challenges, deficits in water supply have decreased in recent years, both in absolute terms and as a percentage of total demand. There are still widespread complaints about the long wait times for new connections, illegal payments, and inconsistent water supply. [23].

### III. METHODOLOGY

#### A) Research Design

This research utilizes a mixed-methods framework, combining quantitative data analysis with qualitative evaluations to thoroughly examine the connection between urbanization and economic growth in Bangladesh. The quantitative component includes statistical analyses of urbanization trends and economic indicators. At the same time, the qualitative aspect involves conducting interviews and surveys to gather opinions from urban dwellers, policymakers, and urban planners.

#### B) Data Collection

##### a. Quantitative Data

Quantitative information was gathered from various secondary sources, including:

- **Population and Urbanization Statistics:** The data on the proportion of total and urban populations are acquired from Worldometer and the Bangladesh Bureau of Statistics, BBS. The historical data from 1960 to 2020 are detailed in Tables 1 and 2, which outline urbanization.
- **Economic Indicators:** GDP growth and employment figures with respect to various sectors have been obtained from government reports and economic surveys conducted by the BBS. These are the indicators by which the impact of urbanization on the economy can be evaluated.

**b. Qualitative Data**

To gain deeper insights on the challenges and prospects of urbanization, qualitative data were collected using:

- **Interviews:** Semi-structured interviews were conducted with key stakeholders like government officials, urban planners, and community leaders from the cities of Dhaka and Chittagong. The interviews focused on the perceptions of the impacts of urbanization, governance problems, and infrastructure needs.
- **Surveys:** A structured questionnaire was distributed among city dwellers in different neighborhoods to assess the issues concerned with urban expansion, services, and economic opportunities.

**C) Data Analysis**

**a. Quantitative Analysis**

- **Descriptive Statistics:** Descriptive statistical techniques were used to examine the gathered urbanization data and provide an overview of urban growth patterns throughout time. In this method, growth rates, population proportions, and patterns of urbanization were calculated.
- **Correlation Analysis:** To investigate the link between urbanization and economic development, correlation analysis was applied to assess the relationship between urban population growth and GDP growth rates. This statistical approach assists in identifying possible causal connections.

**b. Qualitative Analysis**

- **Thematic Analysis:** Thematic analysis was used to analyze the qualitative information obtained from surveys and interviews. Major topics pertaining to urban challenges were identified and grouped, including urban poverty, health issues, and infrastructural deficiencies. This study makes understanding the intricate experiences of stakeholders and urban dwellers easier.
- **Content Analysis:** Survey data were quantitatively coded to identify prevalent concerns and viewpoints regarding how urbanization affects economic possibilities and quality of life.

**D) Addressing Research Challenges**

Various challenges were anticipated and effectively managed throughout the research process:

- **Data Reliability:** Ensuring the credibility of secondary data was crucial. Multiple sources were cross-verified to confirm the accuracy of the statistics and reports.
- **Participant Accessibility:** Overcoming logistical obstacles was necessary to recruit interview and survey participants. Access to participants was made possible in large part by local community leaders, guaranteeing a varied representation of urban realities.

**E) Ethical Considerations**

Ethical codes were maintained during the research. All individuals participating in interviews and questionnaires received informed consent for interviews and questionnaires so as not to infringe upon their rights to privacy as well as the confidentiality of responses. Finally, the study took a gentle touch regarding the socioeconomic settings in the city and its vulnerable subjects.

## **IV. RESULTS AND ANALYSIS**

The results section of such a study on Urbanization and Economic Development: Opportunities and Challenges in Bangladesh typically would present findings showing a complex relationship between urbanization and economic growth. This suggests that urbanization is primarily responsible for the growth of Bangladesh's economy through increased productivity, job opportunities, and infrastructure development, mainly within the manufacturing and services industries. It may focus on the fact that urbanization is highly correlated with GDP, and cities like Dhaka are central to economic development. However, the outcome may also reflect inadequate infrastructure, environmental degradation, and growing urban poverty. While the growth of cities provides economic benefits, it also exacerbates issues like overcrowding, traffic congestion, and overburdened public services, creating a gap between economic development and social welfare. Further, the conclusions may emphasize that although urbanization offers channels for poverty reduction, sustainable economic development will depend on better governance, city strategic planning, and socially and environmentally sensitive policies.

**A) The Trends of Urbanization**

Bangladesh has a long history of urbanization. In 1901, at the start of the 20th century, only 2.43% of the population (around 0.7 million people) lived in urban areas. Urban population growth remained relatively stagnant during the first half of the century. By 1941, less than 4% of the population lived in cities, with the total urban population at 1.54 million. Urbanization accelerated after 1947, when the Indian subcontinent gained independence from British rule, resulting in the creation of India and Pakistan, with East Bengal (now Bangladesh) becoming part of Pakistan. Between 1951 and 1961, the urban population grew substantially (45.11%) compared to the previous decade (18.38%), increasing from 1.8 million in 1951 to 2.6 million in

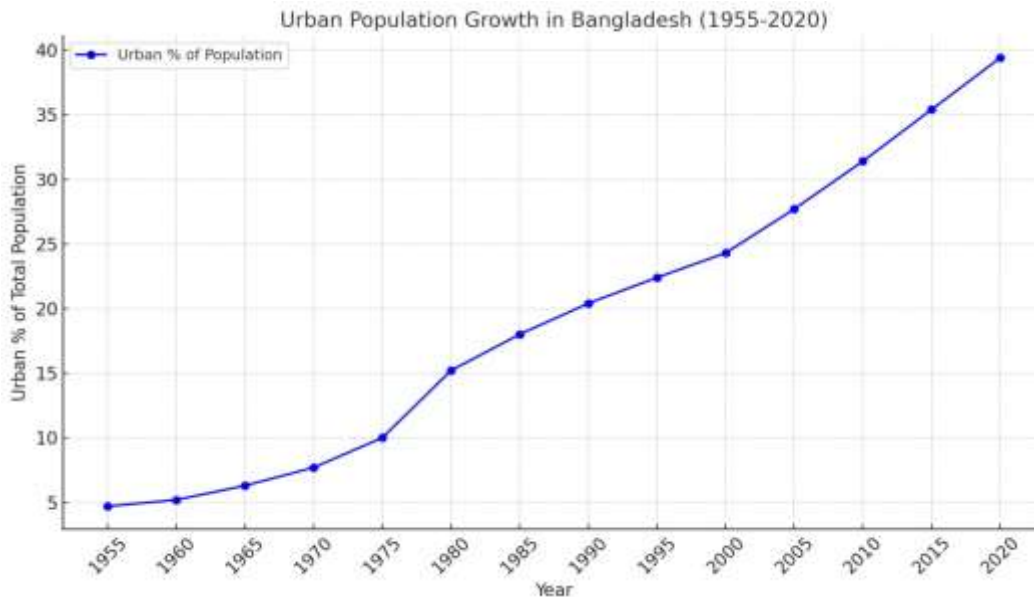
1961. A significant reason for this rapid growth was the migration of Muslims from India after 1947, many of whom settled in urban areas. [24]

Urbanization slowed during the early 20th century, with only 4.7% of the population living in cities by 1955. After Bangladesh gained independence in 1971, the urban population share increased from 4.7% to 10% by 1975. While urbanization continued to rise, it did so at a slower rate. The most significant growth occurred between 1980 and 2000. By the start of the 21st century, urbanization was recognized as a global trend, including in Bangladesh. By 2020, approximately 64.81 million people lived in urban areas, up from 38.45 million in 2005. From 2000 to 2010, the urban population grew from 24.3% to 31.4% ; by 2015, it had reached 35.4%. Both migration and natural growth contributed to this trend, though industrial development and changes in sociopolitical conditions have become the primary drivers of recent urban growth. By 2020, 39.4% of the population was living in cities, compared to just 10% in 1975 after independence.

**Table1. Level of Urbanization in Bangladesh**

Year	Total Population	Urban Population	Urban % of population
2020	164689383	64814953	39.4
2015	156256276	55305132	35.4
2010	147575430	46347089	31.4
2005	139035505	38452976	27.7
2000	127657854	31040651	24.3
1995	115169930	25751454	22.4
1990	103171956	21037450	20.4
1985	90764183	16305971	18.0
1980	79639491	12099053	15.2
1975	70066301	7013461	10.0
1970	64232482	4938975	7.7
1965	55385112	3467675	6.3
1960	48013504	2474987	5.2
1955	42086301	1974441	4.7

*Source: Worldometer, 2020a*



Here is the graph representing the urban population growth as a percentage of the total population in Bangladesh from 1955 to 2020. The trend shows a steady increase in urbanization, with the urban population percentage rising significantly over the decades

### **B) Spatial Imbalance**

Rapid urbanization creates the challenge of spatial imbalance between the rural and urban proportion of the population. The spatial imbalance and the changes in the share of rural and urban population for the last 60 years in Bangladesh are shown in Table 2.

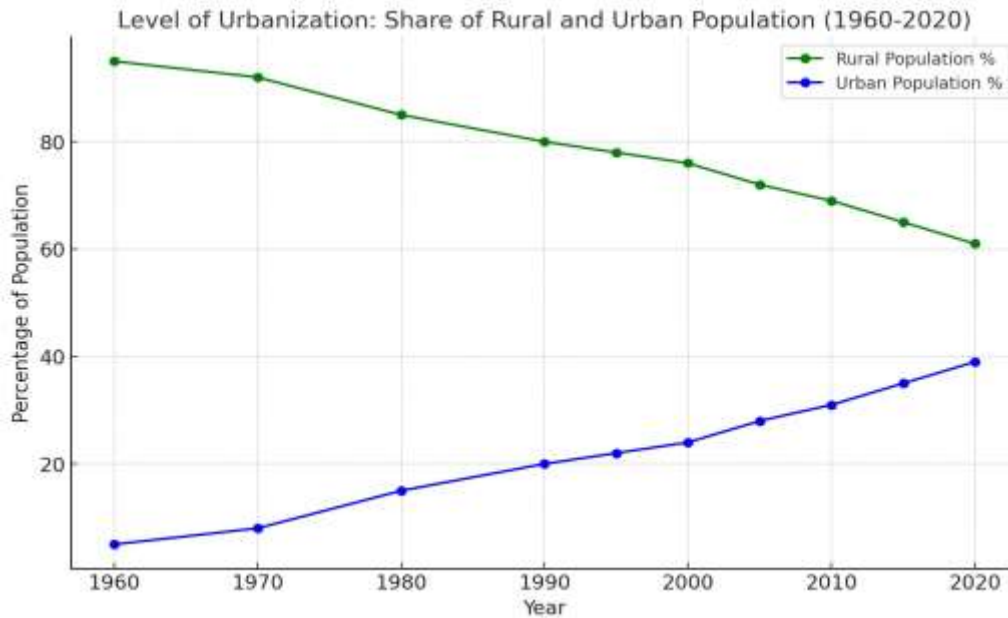
Table 2 highlights Bangladesh's shifting balance between rural and urban populations from 1960 to 2020. Over these 60 years, the data shows a significant decrease in the rural population percentage and a corresponding increase in the urban population share. Just 5% of Bangladesh's population lived in cities in 1960; the majority, 95%, lived in rural areas. This reflects the largely agrarian society that existed in the nation then. In contrast, the urban population increased to 39% by 2020, whereas the rural population fell to 61%. This change reflects a continuous urbanization process fueled by the development of urban infrastructure, immigration from rural to urban areas, and the rise of industry.

The period from 1970 to 2020 saw the fastest rate of urbanization. While the urban population increased from 8% to 39%, the rural population share decreased dramatically from 92% in 1970 to 61% in 2020. This demonstrates Bangladesh's economic change and the increasing significance of urban areas in the nation's growth, with cities like Dhaka emerging as key hubs for the industrial and service sectors. To put it briefly, the table illustrates the steady but progressive trend of Bangladesh's transition from a predominantly rural society to a more urbanized one, with cities now playing a bigger role in the nation's social and economic landscape.

**Table 2. Level of urbanization with the share of the rural and urban population**

Year	Rural population	Rural % of population	Urban population	Urban of % population
2020	99874430	61	64814953	39
2015	100951144	65	55305132	35
2010	101228341	69	46347089	31
2005	100582529	72	38452976	28
2000	96617203	76	31040651	24
1995	89418476	78	25751454	22
1990	821345506	80	21037450	20
1980	67540438	85	12099053	15
1970	59293507	92	4938975	8
1960	45538517	95	2474987	5

Source: Worldometer, 2020b



There was not much of a transition from rural to urban life in Bangladesh's early urbanization phases. However, as time went on, the urban population grew, and the rural population gradually declined. The population expansion of rural and urban areas is out of balance as a result of this fast urbanization.

#### a. Urban Health Issues

With rapid expansion, the cities of Bangladesh have lost all livability and have presented serious public health issues. The causes are air and water pollution, noise pollution, improper waste disposal, decreased green cover, and increased heat. All these factors can be quite dangerous for physical and mental health. Many urban population dwellers, especially the slum people, cannot maintain hygienic conditions at all. Overcrowded living spaces, poor access to clean water, and inadequate



sanitation further worsen these health risks. In addition, improper waste management and sanitation systems degrade urban living standards, especially for the urban poor, who suffer from many health and social problems.

**b. Unplanned Urban Growth**

Uncontrolled growth of towns has become an issue for Bangladesh. As a result of rapid urbanization, cities in Bangladesh grew haphazardly, and such a trend grew after 1947 and continued even in the 21st century. The absence of proper town planning has led to uncontrolled growth, making the cities incapable of managing their growth process.

**c. Rapid Growth of Population in Cities**

With about 40% of the population residing in urban areas, Bangladesh's cities are seeing a dramatic surge in population. Due to the tremendous strain this fast urban population increase has placed on infrastructure, services, and resources, issues like traffic jams, resource depletion, and unemployment have arisen. The sustainability and livability of metropolitan areas are at risk due to this rapid population expansion if it is not controlled.

**d. Challenges of Sustainable Cities**

Bangladesh's fast urbanization has led to a conundrum: environmental degradation on the one hand and economic prosperity on the other. Unchecked industrialization is the primary cause of air, water, and noise pollution, which poses serious threats to urban sustainability. Efforts to develop sustainable urban environments are being further hampered by insufficient amenities and growing socioeconomic insecurity.

**e. Urban Poverty**

Poverty has become more concentrated in metropolitan areas as more people relocate there. There are significant social issues as a result of urban poverty surpassing rural poverty in some areas. Inadequate housing, subpar healthcare, and the incapacity to deliver essential offerings to expanding populations are all directly related to the rise in urban poverty.

**f. Environmental Challenges**

Rapid urbanization has worsened environmental degradation by depleting cities' green spaces and biodiversity. Air pollution has become a major problem due to industrial waste, poor waste management, and car emissions. Inadequate sanitation and water pollution are two other environmental issues that lead to declining living standards in cities.

**g. Challenges of Urban Utilities and Services**

Implementing basic amenities in Bangladeshi cities has been negatively impacted by unplanned urban growth. Housing, healthcare, education, water supply, power, and waste management services are all under stress due to the rapid population expansion. Addressing these issues would become even more challenging in the absence of adequate preparation.

**h. Vulnerability in Urban Transport System**

Cities' quick growth has also placed a great deal of strain on transportation networks, increasing pollution and traffic jams. Bangladesh's inadequate urban transportation system exacerbates everyday problems like traffic congestion, air pollution, and greenhouse gas emissions. These problems are made worse by insufficient legislative frameworks and ineffective transportation planning.

**i. Weak Policy Framework**

The problems posed by fast urbanization have not been adequately addressed by Bangladesh's uneven and ineffectual urban development strategies. Despite efforts to design an urban development policy in 2004, the government has been unable to execute it fully. The laws in place are antiquated and unable to handle the problems facing modern cities.

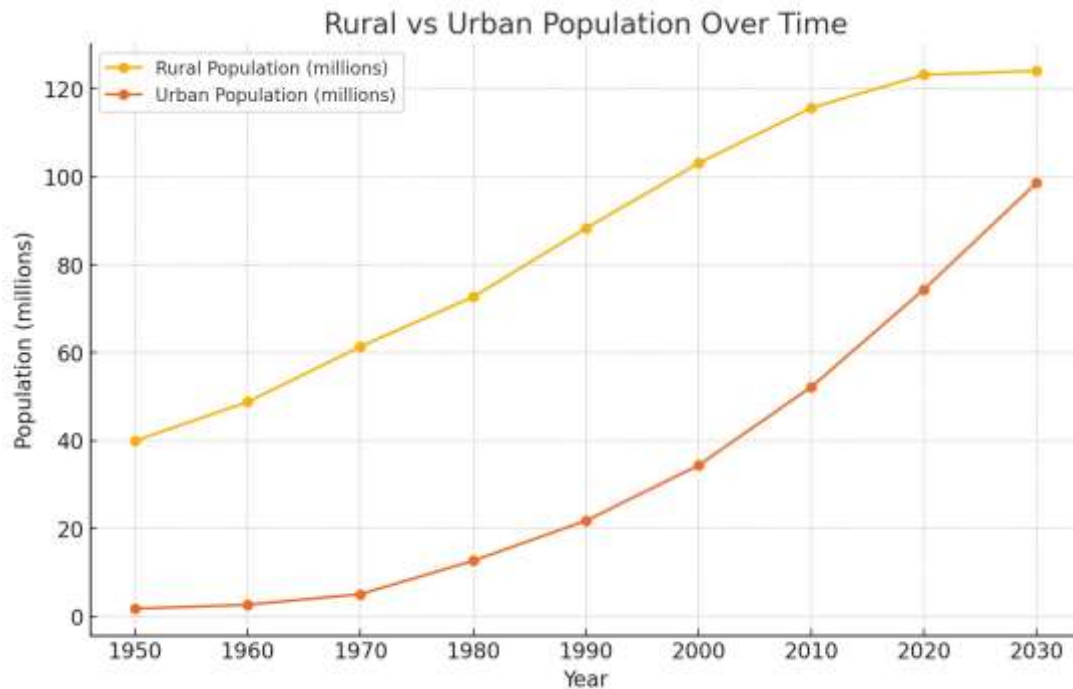
**C) An Urbanized Future**

The need to focus on urbanization is pressing because it is no longer a minor issue. When Bangladesh was founded, the urban population was less than 5 million. By 1990, it had grown to 22.4 million, and by the mid-2000s, it reached 42.3 million. With an annual growth rate of 3.7%, Bangladesh's urban population growth has surpassed all other South Asian countries except for Nepal. A new definition of urban areas revised the current urban population to 23% (Census, 2011). However, the population density, which increased from 834 people per square kilometer in 2001 to 964 in 2011, suggests a more extensive urbanization than the formal definition indicates. Forecasts estimate the urban population could reach nearly 100 million (98.6) by 2030.

**Table 3 Projected Growth in Urban and Rural Population, 1950-2030**

	(millions)		Share of incremental Population (millions)		Year Population percentage of the total	
	Rural	Urban	Rural	Urban	Rural	Urban
1950	40.0	1.8	-	-	95.7	4.3
1960	48.8	2.7	8.9	0.9	94.8	5.2
1970	61.4	5.1	12.5	2.4	92.3	7.7
1980	72.7	12.7	11.3	7.6	85.1	14.9
1990	88.3	21.8	10.6	9.1	80.3	19.8
2000	103.1	34.4	14.8	12.6	75.0	25.0
2010	115.7	52.2	12.6	17.8	68.9	31.1
2020	123.2	74.4	7.5	22.2	62.3	37.7
2030	124.1	98.6	0.9	24.2	55.8	44.3

*Source: Computed from UN 2002: Table 3 and 4. Cited in ESCAP 2003:25*



Here is the line graph that shows the rural and urban population trends from 1950 to 2030. The graph highlights the significant increase in urban population over time, especially from the 1980s onwards, while the rural population growth begins to slow down, reflecting the shift towards urbanization in the future

## V. CONCLUSION

The study results on urbanization and economic development in Bangladesh reveal a multifaceted relationship between urban expansion and economic growth, alongside the challenges that stem from rapid urbanization. Urban growth has been one of the principal drivers of Bangladesh's economic success. It has substantially improved productivity and employment levels while fostering significant infrastructure improvements, mainly through manufacturing and services. All the evidence from the case supports the close relationship between GDP growth and urbanization. One of the cities at the heart of this transformation was Dhaka. Despite such benefits from urbanization, enormous challenges exist related to it. The rapid influx of people into cities has resulted in overcrowding, traffic congestion, and more pressure on public services; thus, there is a gap between economic progress and social welfare. Environmental problems, including air and water pollution, depletion of green spaces, and urban poverty, pose serious threats to the health of the public and the quality of life of people in cities. The examination of urbanization patterns reveals a huge transition from a largely rural society to a more urbanized nation, with the urban population increasing from just 5% in 1960 to almost 39% by 2020. This shift emphasizes the need for strategic urban planning and enhanced governance to promote sustainable economic growth. As urban areas continue to expand, urgent attention is needed to address

the challenges posed by inadequate infrastructure, uncontrolled urban growth, and the increasing rates of urban poverty. Looking forward, projections indicate that Bangladesh's urban population may approach 100 million by 2030, thus bringing out the critical need to tackle the intricacies of urbanization. It is crucial to ensure effective policies that encourage sustainable urban development, enhance public services, and provide inclusive economic opportunities to address the issues resulting from rapid urban growth. Unless properly planned for and addressed through proactive measures, the benefits of urbanization can easily be overshadowed by widening disparities and environmental concerns, thus threatening the overall well-being of the city's residents.

## VI. RECOMMENDATIONS

1. **Strategic Urban Planning:** It is crucial to implement coordinated urban planning that addresses gaps in infrastructure, promotes environmental sustainability, and manages population growth. Well-designed urban development strategies are needed to regulate unplanned expansion and ensure cities can adequately support their growing populations.
2. **Strengthening Urban Governance:** Addressing rapid urbanization challenges requires effective governance. Enhancing local governance systems and encouraging cooperation between policymakers, urban planners, and community stakeholders is essential for achieving sustainable urban growth.
3. **Upgrading Infrastructure and Services:** Investments in urban infrastructure, such as transportation, sanitation, and waste management, are critical. The government should prioritize improving public services to meet the demands of expanding urban populations.
4. **Environmental Sustainability:** Urban growth must be balanced with environmental concerns. Policies that reduce pollution, promote green spaces, and improve waste management are necessary for creating livable and sustainable urban environments.
5. **Addressing Urban Poverty:** Targeted efforts are needed to reduce urban poverty. Policies that promote affordable housing, better healthcare, and access to quality education should be key components of urban development strategies aimed at improving the quality of life for city dwellers.
6. **Policy Reform:** Bangladesh requires a comprehensive, updated urban policy framework. Current policies need revision to address the contemporary challenges of urbanization, ensuring alignment with sustainable development goals and their proper implementation at both national and local levels.

## VII. REFERENCES

- [1] Netrapalli, P., UN, N., Sanghavi, S., Anandkumar, A., & Jain, P. (2014). Non-convex robust PCA. *Advances in neural information processing systems*, 27.
- [2] UNDESA, U., & UNECLAC, U. (2015). Water for a sustainable World. *World Water Development*.
- [3] Cohen, B. (2006). Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. *Technology in society*, 28(1-2), 63-80.
- [4] Turok, I., & McGranahan, G. (2013). Urbanization and economic growth: the arguments and evidence for Africa and Asia. *Environment and urbanization*, 25(2), 465-482.
- [5] Alghamdi, S. A. (2017). *Toward 2030: Greening the urban superblock of post-oil Saudi cities*. Illinois Institute of Technology.
- [6] Marinova-Petkova, A., Feeroz, M. M., Rabiul Alam, S. M., Kamrul Hasan, M., Akhtar, S., Jones-Engel, L., ... & Webster, R. G. (2014). Multiple introductions of highly pathogenic avian influenza H5N1 viruses into Bangladesh. *Emerging microbes & infections*, 3(1), 114.
- [7] Boye, E., & Mannan, M. A. (2014). Bangladesh: Public-Private Partnership in Higher Education (Financed by Asian Development Bank). *Asian Development Bank*.
- [8] Islam, N. (2013). Urban governance in Bangladesh: The post independence scenario. *Journal of the Asiatic Society of Bangladesh (Hum.)*, 58(2), 289-301.
- [9] Jain, R. (2021). The urban transformation: issues and challenges. *Urban Growth and Environmental Issues in India*, 17-34.
- [10] Tacoli, C., McGranahan, G., & Satterthwaite, D. (2015). *Urbanization, rural-urban migration and urban poverty*. London, UK: Human Settlements Group, International Institute for Environment and Development.
- [11] Turok, I., & McGranahan, G. (2013). Urbanization and economic growth: the arguments and evidence for Africa and Asia. *Environment and urbanization*, 25(2), 465-482.
- [12] Akash, M., Akter, J., Tamanna, T., & Kabir, M. R. (2018, February). The urbanization and environmental challenges in Dhaka city. In *7th International RAIS Conference on Social Sciences*.
- [13] Hossain, M. I., Rahman, M. M., & Islam, M. S. (2015). Infrastructure Development in Urban Bangladesh: Challenges and Opportunities. *Journal of Urban Affairs*.
- [14] Siddiqui, T., & Khan, R. (2017). Urban Inequality in Bangladesh: Issues and Policy Implications. *Urban Policy Review*.
- [15] Rana, M. M. P. (2011). Urbanization and sustainability: challenges and strategies for sustainable urban development in Bangladesh. *Environment, Development and Sustainability*, 13, 237-256.
- [16] Lipi, A. I., & Hasan, N. (2021). Urbanization in Bangladesh: Emerging challenges and the way forward. *Bangladesh Journal of Multidisciplinary Scientific Research*, 3(1), 33-44.
- [17] Ahmed, S. S., & Ahmed, M. (2017). Urbanization and Economic Development of Bangladesh: the primacy of Dhaka and Competitiveness. *Bangladesh Economics Association*.
- [18] Zaman, A. K. M. H., Alam, K. M. T., & Islam, M. J. (2010). Urbanization in Bangladesh: present status and policy implications. *ASA University Review*, 4(2), 1-16.
- [19] Panday, P. K., & Panday, P. K. (2020). *Urbanization and urban poverty in Bangladesh* (pp. 43-55). Springer Singapore.
- [20] Özden, K., & Enwere, C. (2012). Urbanization and its political challenges in developing countries. *Eurasian Journal of Business and Economics*, 5(10), 99-120.

- [21] Lipi, A. I., & Hasan, N. (2021). Urbanization in Bangladesh: Emerging challenges and the way forward. *Bangladesh Journal of Multidisciplinary Scientific Research*, 3(1), 33-44.
- [22] Islam, M. M., Hossain, M. A., & Sanjowal, R. K. (2022). Bangladesh at Fifty: changes and challenges in population and development. *Journal of Governance, Security & Development*, 3(1), 1-38.
- [23] Ahsan, R. (2015). Climate change context: migration and urbanization in Bangladesh. In *International joint conference of SENVAR-iNTA-AVAN. Universiti Teknologi Malaysia*.
- [24] Hossain, S. (2008). Rapid Urban Growth and Poverty in Dhaka City. *Bangladesh e-journal of sociology*, 5(1). 25.