

SUSTAINABLE HOUSING AND THE ROLE OF REGULATORY AUTHORITY: A CASE OF DHAKA, BANGLADESH

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ABSTRACT

Attaining membership in a Bangladesh middle-income country club is a momentous achievement that has garnered international recognition since the country's independence. This milestone reaffirms the nation's sovereignty and signifies its financial autonomy and independence. However, elevation to middle-income status should not overshadow future challenges. Experts in the field have raised concerns that Bangladesh may become entrapped in the cycle of middle-income status, thereby impeding further advancement towards achieving developed-country status. To progress, the nation must formulate a comprehensive plan to attain developed country status by 2041.

PURPOSE: Housing is considered a fundamental right for citizens in Bangladesh as per its constitution; however, a significant population in the capital city of Dhaka lives in overcrowded slums or lacks basic shelter altogether (Khasru *et al.*, 2019). The SDGs recognise the need for inclusive, safe, resilient, and sustainable cities for human settlements, particularly for the 1 billion slum dwellers worldwide, who often lack access to public transportation and suffer from poor air quality and solid waste problems. Many countries are implementing various projects to address these issues and meet the SDGs. Bangladesh is one of the few countries to implement the SDGs by the UN, achieving significant indicators even during and after the COVID pandemic; this was due to timely and systemic steps by the government and civil society organisations (CSOs). The primary objective of this paper is to examine the role of Rajdhani Unnayan Kartripakkha (RAJUK) in promoting sustainable housing and its efforts in implementing sustainable housing practices within a city of 20 million people as a regulatory authority aligned with the SDGs.

DESIGN/METHODOLOGY/APPROACH: This study uses primary and secondary data to focus on sustainable housing conditions in Bangladesh's capital city. The study will employ secondary data collection methods such as a literature survey, government document analysis, and archive exploration. To determine the role of the regulatory authority, the study will employ primary data collection methods such as semi-structured interviews with stakeholders. Furthermore, the secondary literature review will determine the regulatory authority's limitations in ensuring sustainable housing in Dhaka, Bangladesh. By employing such methods, the study will propose policy recommendations for better working conditions and improvements in service delivery by Bangladesh regulatory authorities.

FINDINGS: To provide sustainable housing and implement SDG 11, various government agencies and CSOs work together in Dhaka. The Capital Development Authority (CDA), also known as Rajdhani Unnayan Kartripakkha (RAJUK), is the top organisation that makes policies and decisions to ensure the capital is sustainably inhabitable for current and future generations. However, the failure to collaborate with other government agencies, local government

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organisations, CSOs, and individual landowners has prevented RAJUK from implementing its significant policies, including the Detailed Area Plan (DAP) for Dhaka (Ranjbari *et al.*, 2021).

To address the housing crisis and implement SDG 11 in Dhaka, it is essential to develop sustainable solutions. First, the government must ensure that policies are implemented collaboratively with all stakeholders. Second, it is crucial to incorporate affordable and eco-friendly housing designs, energy-efficient building materials, and proper waste management practices (Haque *et al.*, 2022). Third, sustainable transportation options, such as mass rapid transit systems and bike-sharing programmes, must be developed. Fourth, the government must promote public awareness and community engagement through education campaigns and community-based approaches. Finally, partnerships with CSOs can help ensure the involvement of marginalised and vulnerable populations.

KEYWORDS: *Housing; SDGs; Sustainable Housing; Detailed Area Plan; Liveable City*

INTRODUCTION

This paper will discuss the role of the regulatory authority Rajdhani Unnayan Kartipakkhya (RAJUK) within a conceptual framework and its role in managing the unplanned urbanisation of the capital city of Dhaka. Established in 1956 as the Dacca Improvement Trust (DIT) under the TI Act 1953, RAJUK is a statutory government organisation. It was granted extraordinary powers for the development, improvement, and expansion of the capital city of Dhaka, as well as Narayanganj and other nearby areas. In April 1987, it was renamed RAJUK under the Ministry of Housing and Public Works of the Bangladesh government.

Following its establishment, RAJUK's jurisdiction expanded to include significant parts of Savar, Gazipur, and Keraniganj Upazila to facilitate the planned development of the metropolis. In 1987, the jurisdiction area of RAJUK was further increased to cover 590 square miles (1,528 square kilometres). The organisation is currently led by a chairman and five members appointed by the government, with the chairman serving as the organisation's Chief Executive Officer.

This paper aims to provide an in-depth analysis of the major activities planned and implemented by RAJUK over time, while shedding light on the formidable challenges it has encountered. This study explores the various activities that RAJUK has planned and undertaken to pursue effective housing control and urbanisation. Additionally, it seeks to shed light on the considerable challenges faced by the institution throughout its existence. By comprehending these factors, stakeholders and policy-makers can gain valuable insights into the shortcomings of RAJUK's operations and identify potential strategies to enhance its effectiveness in meeting the housing and urbanisation needs of the nation.

MAJOR ACTIVITIES OF RAJUK

Three critical divisions within the organisation primarily govern RAJUK's activities: Planning, Development Control, and Development. These fundamental wings oversee various aspects of the city's urbanisation management. Additionally, there are sub-wings within RAJUK that handle miscellaneous tasks related to the organisation's operations. Furthermore, the government can assign specific responsibilities under RAJUK's jurisdiction. In the following

sections, the reader can get an analysis of the activities of RAJUK with a focus on the organisation's three different wings.

Planning

Planning is a crucial aspect of city development. During the preparation of plans, RAJUK adheres to several principles, such as the National Urban Policy, Project Design, Planning, Multi-Sector Investment Program, and existing policies and programmes of various agencies. The planning department strives to align its plans with the SDG targets in order to achieve them.

Detailed Area Plan (2022-2035) for the Dhaka Metropolitan Development Plan

This project is designed to establish a framework for the development function of RAJUK: to make Dhaka's proposals liveable.

The main objectives of the Detailed Area Plan (2022-2035) are as follows:

- to prepare a revised DAP (2022-2035) according to the analysis of the existing DAP and following the guidelines of the approved higher-level plans;
- to adopt a community-based planning approach, such as Participatory Rapid Appraisal (PRA), as a tool for the preparation of a revised DAP.

Development Control

RAJUK area covers 1582 sq. km. It has been divided into 8 zones and 24 sub-zones to facilitate the planned development of the RAJUK area as designed by RAJUK' DAP.

Responsibilities of the Development Control Wing

1. to regulate building construction activities, enacting rules and regulations and subsequent revision and amendment of those rules and regulations regarding building construction;
2. to approve building plans as per instructions mentioned in the Greater Dhaka Building (Construction, Development, Preservation, and Demolition) Rules, 2008;
3. demolishing unauthorised structures and deviated portions of authorised structures is conducted through mobile court and eviction.

The significant activities of development control over the past year are outlined below.

Plan Approval

After getting land use clearance approval, the plan will be submitted for a construction permit (see Table 1). The approved plan is valid for three years from the approval date.

Table 1: Summary Report (03/05/2022-03/06/2023)															
	May	June	July	August	September	October	November	December	January	February	March	April	May	June	Total
Submitted	991	946	825	1,374	1,206	645	800	366	665	549	556	375	1,813	23	10,734
Approved	947	847	552	837	794	589	1316	60	166	509	891	511	497	29	8,545
Source: RAJUK, Motijheel (2023)															

- **Occupancy Certificate Provided:** After completion of construction, an occupancy certificate must be obtained from RAJUK before occupants are allowed to move in. The occupancy certificate will be valid for five years and must be renewed every five years. If they fail to renew the occupancy certificate, the approved plan will be invalid.
- **Mobile Court/Eviction:** The mobile court of RAJUK started an eviction drive against commercial establishments in residential areas in the capital. RAJUK teams would demolish and close illegal structures, including guesthouses, restaurants, hotels, and bars.
- In the last 10 months from January to October 2023, RAJUK conducted 1,657 evictions. Now people are more aware, they try to follow the rules of RAJUK.

Primary Survey Analysis in the Planned and Unplanned Areas

A sample survey was conducted to identify the fundamental problems in implementing construction buildings as per approval and parking usage. From survey data, it has been shown that, in planned areas such as the Uttara residential area, buildings were constructed as per design; however, in most unplanned areas, it has been shown that the construction did not follow the approved plan. The authority is responsible for controlling such unplanned developments. In unplanned areas, most roads are narrow; the building owners did not eventually follow the approved plan. Figure 1 gives the details of these areas.

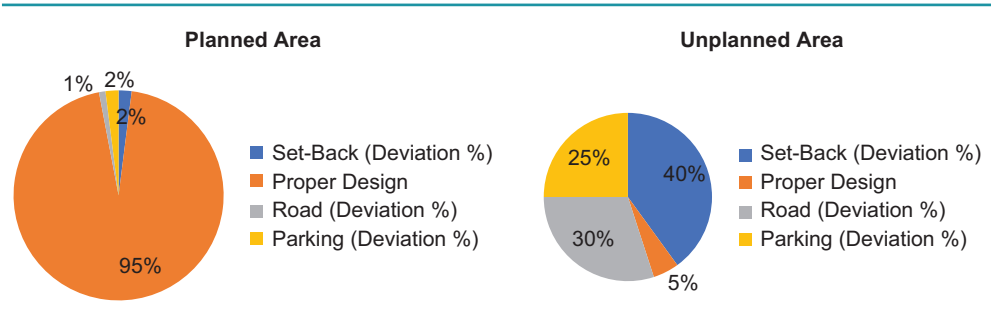


Figure 1: Planned and Unplanned Areas of RAJUK

Source: Constructed by author

Basement Survey: RAJUK decided to survey markets and restaurants in the basements of buildings in the capital. The survey was conducted in 24 sub-zones of the 8 zones. The organisation has yet to act against the misuse of basements in 683 buildings found in a survey in August 2023 following several incidents of building explosions and fires. Basements in 750, or over 35%, of the surveyed buildings are being used for purposes other than parking, according to the survey conducted on 10 March 2023 by Development Control Wing, RAJUK, Motijheel, Dhaka, Bangladesh 2023.

Development

RAJUK plays a crucial role as a prominent “construction actor” in the development of Dhaka. Its primary activities encompass the construction of roads, box culverts, and bridges, as well as land development, excavation, and filling. The organisation also has some financially and administratively extensive projects, as detailed below.

Gulshan Model Town Project

In 1961, RAJUK, the then DIT, took up the Gulshan Model Town Project, and at the same time, it took up 1,000 acres of land development (Banani-Baridhara) for residential purposes. In 1992, the Gulshan Model Town Project was completed. Two lakes are located, one in between Banani Model Town and Gulshan Model Town, and another in between Gulshan Model Town and Baridhara Model Town. The combined area of the two lakes is 200 acres. The water retention capacity of the lakes has been reduced due to the accumulation of waste over a long period (Sultana and Chowdhury, 2013).

Development of Gulshan-Banani Mohakhali and Gulshan-Baridhara Lakes (Figure 2)

By developing the proposed waterways network, these lakes can be transformed into visually appealing features, enhancing the aesthetic appeal of the surroundings, and providing recreational spaces for the public to enjoy.

Benefits of the Project by RAJUK

- to protect the lake from encroachment;
- reformation and preservation of lake areas to increase water retention capacity;
- enhancement of environmental and aesthetic quality;
- development of the environment through the provision of amusement facilities.

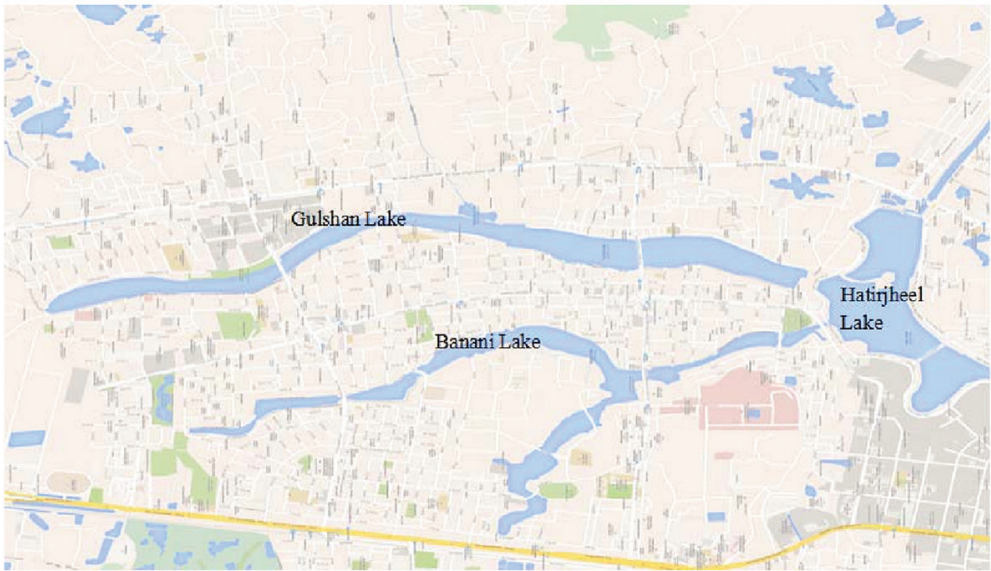


Figure 2: Location of Gulshan, Banani, and Hatirjheel Lakes

Source: Taken from the Internet

Uttara Apartment Project (Figures 3 and 4)

In the 18th sector of the existing part of the city encompassing Blocks A, B, and C, direct access to the project is from the Ashulia-Mirpur Flood Protection Embankment Road and Sonargaon Jonopath of Uttara Model Town. Furthermore, the project area benefits from the proximity of two Mass Rapid Transit (MRT) stations (Central and South) that can be easily reached by walking (Rashid, 2002).

The objectives of the project are:

1. to provide residential flats to low- and middle-income groups of people at an affordable price;
2. for sustainable urbanisation to maintain the balance of the environment;
3. to solve future housing demand.



Figure 3: Uttara Apartment Project by RAJUK

Source: Taken from the Internet



Figure 4: Uttara Apartment Project by RAJUK

Source: Taken from the Internet

Hatirjheel Integrated Development Project and Construction of Several Link Roads (Figure 5)

RAJUK is trying to make Dhaka a planned, liveable, and environmentally friendly city. To achieve a planned city, RAJUK has taken the initiative to make it liveable by solving housing and transportation problems, and creating large-scale water-based public space and open space, such as the Hatirjheel integrated project. The development of the low-lying areas of Begunbari Khal and Hatirjheel as a stormwater retention basin improves the overall environment of the entire area, construction of the peripheral road, cross-bridges, and walkways (Afrin *et al.*, 2015).



Figure 5: Hatirjheel Project by RAJUK at its final phase

Source: Taken from the Internet

Kuril Flyover

The 3.1-kilometre-long Kuril Intersection Flyover was constructed by RAJUK at a cost of Taka 303 crore (US\$27,488,472), opening another gateway to the capital from Purbachal New City. According to the RAJUK claim, it will also ease commuter movement from the northern and eastern regions of the country to the capital. At the same time, vehicles will enter through Kanchan Bridge, Sylhet Bypass, and Purbachal Link Road. Built on 12.82 acres of land, 6.7 to 9.2 metres wide and 14.6 metres high, the flyover has 4 loops and 20 directions (Alam, 2013).

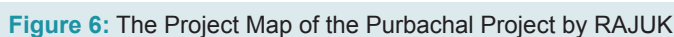
RAJUK Ongoing Projects

As a regulatory authority, the organisation has been actively engaged in various projects to improve living conditions and promote sustainable living in the city. These initiatives are part

Purbachal New Town Project (Figure 6)

The objectives of the project are:

1. to reduce the population pressure in Dhaka city by creating opportunities for residential accommodation for the city dwellers in the vicinity;
2. to create an eco-friendly atmosphere;
3. to address the acute housing problem;
4. to anticipate and mitigate future housing demands.



Source: Taken from the Internet

Bangabandhu Tri-Tower (Figure 7)

On 100 acres of prime land within the Central Business District (CBD) at Sector 19, an iconic skyscraper is being developed as an attraction for the township. The iconic tower project in the CBD area at Purbachal Sector 19 is a prestigious project in Bangladesh. This Bangabandhu Tri-Tower symbolises 3L: Language, Liberty, and Legacy. This represents the historical time of Bangladesh by planning the 52nd floor for Language, the 71st floor for Liberty, and the 111th floor for Legacy.



Figure 7: Bangabandhu Tri-Tower, Purbachal

Source: Taken from the Internet

Jhilmil Residential Park Project (Figure 8)

The Jhilmil residential project is proposed to be developed over an expansive 100-acre land area, envisioning the construction of approximately 15,000 apartments. This extensive housing infrastructure aims to cater to the housing needs of a substantial portion of the population, thereby reducing the strain on the existing residential areas.

Objectives of the project are:

- to increase the availability of affordable housing in a planned and structured manner;
- to reduce the existing acute housing problems;
- to develop new townships and expand economic facilities;
- to promote Public-Private partnerships (PPP) in housing sector development.



Figure 8: The Proposed Jhilmil Residential Project by RAJUK

Source: Taken from the Internet

Urban Resilience Project: RAJUK Part

To strengthen the capacity of Government of Bangladesh (GoB) agencies to respond to emergency events efficiently and effectively and to improve the quality of new construction in Dhaka and Sylhet, RAJUK is implementing the Urban Resilience Project: RAJUK Part,

which is mainly being financed by the World Bank and partly by the GoB. It is implemented for the betterment of our city's people, especially Dhaka dwellers. This project is aligned with SDG goal 11 and target 11b (URP Office, RAJUK). Its major components are:

- conduct a vulnerability assessment of critical and essential facilities and lifelines;
- support the Development of a Risk-Sensitive Land Use Planning Practice in Dhaka;
- establish an electronic construction permit system;
- improve Building Code Enforcement within the RAJUK jurisdiction;
- establishment of research training, testing, and laboratory building for disaster risk reduction activities, mainstreaming.

Waterway from Kuril to the Balu River

The excavation and development of a 30.5 metre wide Khal (waterway) (from Kuril to Balu River) along both sides of Purbachal Link Road is one of RAJUK's priority projects.

Objectives

1. to drain the excess water from Kuril, Baridhara DOHS, Dhaka cantonment, and Shahjalal international airport during the monsoon;
2. to maintain congestion-free existing traffic and accommodate future road traffic from Kuril to Kanchan due to gradual urbanisation;
3. to maintain the ecosystem of natural canals and the surrounding nature.

Madani Avenue to Balu River (Major Road 5) and Balu River to Shitalakkhya Road Project (Figure 9)

The number of existing roads in Dhaka city is around 8%, while the requirement for a standard city is 25%. For this reason, RAJUK has planned to construct a road from Pragati Sharani at Madani Avenue to the Bhulta intersection on the Dhaka-Sylhet Highway. The proposed significant roads will play a key role as they will connect Dhaka city with numerous roads across the eastern parts of the country (Rahman, 2013).

Objectives

- to reduce the excessive traffic jams in Dhaka city;
- to enhance the east-west connectivity for vehicles;
- to upgrade living standards and the environment;
- to boost the economic condition of the area.



Figure 9: Madani Avenue by RAJUK for Connectivity with Dhaka

Source: Taken from the Internet

Other Activities

RAJUK participates in various training programmes to improve its organisational capabilities. RAJUK is an active member of Citynet, SAARC-Shelternet, and Habitat II. RAJUK organises seminars and workshops on different urban issues regularly; the seminar on World Habitat Day is an example.

SDG GOAL 11 IMPLEMENTATION (FIGURE 10)

As per the implementation of the SDGs, the organisation exclusively works with Goal 11 and three specific targets to make cities and human settlements conducive to habitation for most of the country's citizens. Many city dwellers cannot afford to live in the city because of the expense and living conditions. This is why RAJUK needs to ensure the sustainability of the city's living conditions.



Figure 10: SDG 11 with connection to Sustainable Housing and RAJUK

Source: Taken from the Internet

Making Cities and Human Settlements Inclusive, Safe, Resilient, and Sustainable

Today, over half of the world's population resides in urban areas. By 2050, 70% of the world's population is projected to live in cities. Cities catalyse economic growth, accounting for a significant share of global GDP.

Target 11.1: Safe and Affordable Housing

According to Vision 2021 and the SDGs, the government of Bangladesh wants to ensure everyone has a living space independently. Therefore, this project will solve the housing problem for low- and middle-income people in Bangladesh. This project will increase the living standards of the people of Dhaka city and the surrounding areas. General people, especially low- and middle-income groups, will get a living space within their means.

Purbachal New Town Project (Figure 11)

In Purbachal New Town, 25,016 residential plots have been allocated, covering 976.3ha (38.7% of the total land area). It also includes non-residential functions (administrative,

commerce, industrial, diplomatic, and institutional areas), road networks (together with footpaths, pedestrians, and walkways), open spaces (forest, eco-park, green belt, urban green, and lake or canal), sports facilities, and other facilities (health, education, social infrastructure, and urban utility facilities).

**Allocation of Ammenities in New Residential Projects
by RAJUK**

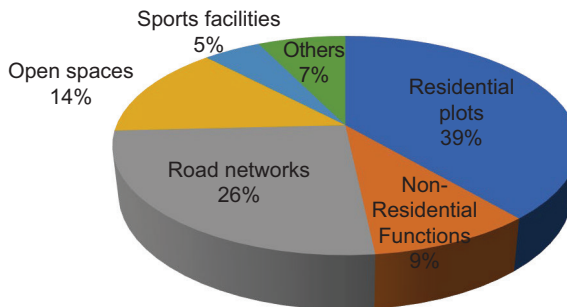


Figure 11: Purbachal New Town Project by RAJUK

Source: Taken from the Internet

Detailed Area Plan (2022-2035)

The Detailed Area Plan (DAP) has faced significant resistance from housing, landowners, and business communities. The approval and implementation of the plan would potentially disrupt the existing market for apartment buildings, leading to concerns about its sustainability. Consequently, the government is engaging in negotiations with key business leaders to find a way to implement the DAP that benefits all stakeholders, including regular citizens, landowners, and business communities.

Target 11.3: Inclusive and Sustainable Urbanisation

There has been a significant improvement in housing quality in recent years; flats and houses are being constructed to ensure housing facilities for public sector employees. Regarding urban projects, RAJUK has reserved specific spaces for low-income groups in the Purbachal, Uttara, and Jhilmee projects.

The Jhilmil residential project is situated across the Burigonga River in Keranigonj. Covering an area of 381.11 acres, the project will feature approximately 1,740 residential plots and 9,500 apartments designed for lower- and middle-income groups (Nandy, 2022). Moreover, the project will offer state-of-the-art amenities and facilities and advanced commuting options for the convenience of the residents.

The Uttara Apartment Project provides residential flats to low- and middle-income groups of people at an affordable price. The objective of reducing high density in the central city by building an independent residential community in Satellite Town was not a practical solution until and unless the same population was decentralised to the township. Uttara Apartment Project handed over 4,561 out of 6,636 flats in block ‘A’ (Table 2).

Table 2: Uttara Apartment Project Capacity by RAJUK

Block	Flat Size	No of Buildings	Total Flats
Block A	Net: 1,276 sq. ft	79	6,636
Block B	Net: 1,250 sq. ft	52	4,368
Block C	Net: 850 sq. ft	52	4,368
Total		183	15,372
Source: Constructed by author			

Target 11.7 of the Sustainable Development Goals (SDGs) aims for sustainable public spaces by 2030. This target emphasises the importance of ensuring that everyone, including women, children, older persons, and persons with disabilities, has access to these spaces.

Developing the Begunbari and Hatirjheel park areas in Dhaka is a positive step towards making the city more beautiful and liveable. This integrated development project was recently recognised with a bronze prize in the landscape architecture/urban design category by the Architecture Master Prize. The award committee praised this “Urban Oasis” as an exceptional example of environmental restoration and a source of inspiration for similar projects throughout Bangladesh (Nowreen, 2018).

By focusing on developing green and public spaces, Dhaka can enhance its liveability and provide its residents with relaxation, recreation, and improved well-being opportunities. The accolades received for the Begunbari and Hatirjheel Park areas reflect the positive impact of such initiatives and serve as a reminder of the importance of environmental restoration and preservation in creating sustainable and vibrant cities (see Figure 12).

Uttara Apartment Project: About 55% of the total area in each block has been kept for a playground, park, greenery, road network, etc. Every block has an open parking area for guests and for managing events or occasions inside the apartment complex. Approximately 2.38 acres of land have been kept for open/surface car parking at block A, where more than 400 cars can park (Jhumur, 2021).

The Purbachal new town project also provided many community facilities; this will be helpful to meet Target 11.7 of the SDGs.



Figure 12: The Transformation Moderated by RAJUK in the City Landscape

Source: Taken from the Internet

CHALLENGES

- **Lack of proper plans and projects:** More than 90% of the city's buildings have disobeyed construction rules. The DAP's vision is unclear to most stakeholders, which needs to be specified.
- **Lack of expertise:** It needs a lot of expertise while doing project approval, formulation, implementation, and monitoring. It does not have sufficient expertise in different stages, and it must suffer in each and every step for that.
- **Lack of monitoring:** RAJUK approved many projects for the planned city, but after that, they did not monitor them at the implementation stage.
- **Lack of manpower:** As per the organogram, total manpower is 1,980. But at present, less than 64% of people work here, and about 36% of posts are vacant. That is why the organisation cannot run smoothly.
- **Unplanned urbanisation:** Planned urbanisation is the main motive of RAJUK, but they are not successful in achieving their purpose.

- **Indiscipline in maintaining building codes:** While projects are implemented, in many cases, RAJUK does not follow building codes for different reasons. RAJUK officials and owners are liable for that.
- **Irresponsibility:** Employees of RAJUK are not committed or sincere with their job, and irresponsibility with irregularity is a significant barrier.
- **Enlargement of RAJUK Jurisdiction and Formation of a New Peripheral Area:** It becomes more challenging to manage urban peripheral areas. RAJUK also did not take any steps to build awareness, control, or manage those areas. As a result, those areas developed haphazardly.
- **Others:**
 - Lacking modern equipment, eviction cannot be done properly;
 - Complicated and lengthy procedures are so complicated and time-consuming;
 - Failure to fulfil public demand does not provide the expected services due to various problems.

THE WAY FORWARD AND RECOMMENDATIONS

- **Institutional Arrangement:** The organisational structure of RAJUK should be reviewed, and duties and responsibilities should be re-examined.
- **Institutional Strengthening:** To enhance capacity, it is necessary to train all staff, phase by phase. The charter of duties is to be fixed.
- **Awareness Building:** As we know, town planning practice is not very familiar in Bangladesh, mainly due to ignorance about the advantages of planned development and the evils of haphazard or scrambled development. This can be achieved through a mass campaign.
- **Others:**
 - Re-development and regeneration of old and worn structures;
 - BNBC enforcement and implementation for new structures;
 - The professional registration programme for engineers, architects, and planners is to be continued;
 - Training programmes for construction workers to be continued.

Creating awareness about the benefits of planned development and the drawbacks of haphazard and sprawling development is essential. Mass campaigns and easy accessibility of planning documents will enable people to understand and follow the guidelines set by RAJUK.

Additional recommendations include redeveloping and regenerating old and dilapidated structures, enforcing the Bangladesh National Building Code (BNBC) for new structures, continuing professional registration programmes for engineers, architects, and planners, and training programmes for construction workers.

By implementing these proposals and recommendations, Dhaka can move towards sustainable urban development, managing its rapid urbanisation while ensuring its residents' better quality of life.

FINAL REMARKS

In conclusion, this paper highlights the importance of sustainable housing and the role of the regulatory authority, RAJUK, in managing unplanned urbanisation in Dhaka, Bangladesh. Achieving sustainable housing is crucial for achieving SDG 11 and creating inclusive, safe, resilient, and sustainable cities. The study identifies several challenges faced by RAJUK, including political instability, limited capacity, and insufficient resources; these have hindered its effectiveness in meeting the population's housing needs.

The study proposes policy recommendations to address these challenges and promote sustainable housing. These include the collaborative implementation of policies with stakeholders, the incorporation of affordable and eco-friendly housing designs, energy-efficient building materials, and proper waste management practices. The study also emphasises the development of sustainable transportation options, public awareness campaigns, and community engagement. Partnerships with civil society organisations (CSOs) are highlighted to involve marginalised and vulnerable populations.

The originality of this study lies in its focus on the role of the regulatory authority in the development of sustainable housing, and its examination of RAJUK's activities and challenges in managing unplanned urbanisation. The findings and policy recommendations can serve as valuable resources for policy-makers and contribute to Bangladesh's overall development and well-being.

However, the study acknowledges some limitations, including the lack of financial resources, potential bias in stakeholder feedback, and uncertainty regarding the political situation. Despite these limitations, the study has practical implications for regulatory bodies in enhancing service delivery and promoting effective working practices for sustainable housing in Bangladesh. By implementing the recommendations, policy-makers can foster improved conditions and practices in sustainable housing, ultimately creating a liveable city for future generations.

REFERENCES

- Afrin, S., Islam, M.M. and Rahman, M.M. (2015): Assessment of Future Flow of Hatirjheel Begunbari Drainage System due to Climate Change. *Journal of Modern Science and Technology*, Vol. 3, No. 1, pp.102-116.
- Alam, H. (2013): Kuril flyover opens Aug 4. *The Daily Star*, 19 July 2013. Available at: <https://www.thedailystar.net/news/kuril-flyover-opens-aug-4>.
- Haque, S., Nasir, N., Rahman, M.F. and Huq, S. (2022): Sustainable Development in Bangladesh: Bridging the SDGs and Climate Action. In Low, P.S. (Ed.): *Sustainable Development: Asia-Pacific Perspectives* (pp.327-338). Cambridge University Press. doi: [10.1017/9780511977961.030](https://doi.org/10.1017/9780511977961.030).

- Jhumur, T.S. (2021): Evaluating The Cooling Effect and Thermal Comfort of Small Urban Green Spaces on The City People: The Case of The Planned Residential Area of Uttara, Dhaka. *International Journal of Research-Granthaalaya*, Vol. 9, No. 1, pp.99-111. Available at: https://www.granthaalayahpublication.org/journals/granthaalayah/article/view/IJRG21_A01_5035.
- Khasru, S.M., Nahreen, A. and Radia, M.A. (2019): SDGs in Bangladesh: Promises, Prospects, and Opportunities. In Khemka, N.M. and Kumar, S. (Eds): *Social Development, and the Sustainable Development Goals in South Asia* (pp.23-48). Taylor and Francis. doi: [10.4324/9781351035262-3](https://doi.org/10.4324/9781351035262-3).
- Nandy, D. (2022): RAJUK's Jhilmil housing project: 5 years gone by, work yet to start. *The Daily Star*, 24 September 2022. Retrieved from <https://www.thedailystar.net/news/bangladesh/news/rajuks-jhilmil-housing-project-5-years-gone-work-yet-start-3126581>.
- Nowreen, S. (2018): Hatirjheel-Begunbari Lake Project Area as an Urban Tourist Destination: A Study on Residents' Perception. Available at: https://www.researchgate.net/profile/Samshad-Nowreen/publication/347496969_Hatirjheel-Begunbari_Lake_Project_Area_as_an_Urban_Tourist_Destination_A_Study_on_Residents'_Perception/links/5fde51c892851c13fea36ae3/Hatirjheel-Begunbari-Lake-Project-Area-as-an-Urban-Tourist-Destination-A-Study-on-Residents-Perception.pdf.
- Rahman, S. (2013): A study of the Dhaka by-pass road: its impact on land use change and local economy. Available at: <http://lib.buet.ac.bd:8080/xmlui/handle/123456789/1514>.
- Rajdhani Unnayan Kartipakkha (RAJUK) (2023): Construction Permit System (CP), Development Control Wing, RAJUK, Motijheel, Dhaka, Bangladesh. Available at: <https://www.rajuk.gov.bd>.
- Ranjbari, M., Esfandabadi, Z.S., Zanetti, M.C., Scagnelli, S.D., Siebers, P.O., Aghbashlo, M., Peng, W., Quatraro, F. and Tabatabaei, M. (2021): Three pillars of sustainability in the wake of COVID-19: A systematic review and future research agenda for sustainable development. *Journal of Cleaner Production*, Vol. 297, p.126660.
- Rashid, M. (2002): Housing at Uttara Model Town: An Analysis and Exploring Ways to Tackle the Housing Problem of the Middle Class. Available at: <https://www.lth.se/fileadmin/hdm/alumni/papers/hd2002/hd2002-01.pdf>.
- Sultana, R. and Chowdhury, U. (2013): Development Prospect of Gulshan-Baridhara Lake and Lake-Side Area: Learning from the Dhanmondi Lake Experience. *International Journal of Civil Engineering*, Vol. 2, No. 4, pp.15-30.

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