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## Research Article

# Urban Planning and Development: An Analysis of People's Perception Regarding Rajshahi Development Authority's Initiatives

Raihan Kobir<sup>1</sup>, Sabyasachi Saha<sup>2</sup>

1. University of Rajshahi, Bangladesh; s2110848157@ru.ac.bd
2. University of Rajshahi, Bangladesh; sabya4420@gmail.com



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**Abstract.** The Rajshahi Development Authority (RDA), playing a pivotal role in ensuring sound and healthy urban growth, is the main entity responsible for planning and implementing development projects. after forming by the ordinance of 1976, RDA took various initiatives. In this paper, we try to reflect those initiatives, including land use patterns, the creation of residential areas, road infrastructure development, constructing bus and truck terminals, building markets, industrial and commercial area development, recreational facilities, and planning for enhancing open green spaces, etc. In accordance with the first development masterplan of 1984, RDA sorted out the land use pattern of rajshahi City, in which RDA designated the residential areas, commercial areas, agricultural land areas, industrial areas, open spaces, etc. Therefore, through the implementation of the subsequent master plan named the 'Rajshahi Metropolitan Development Plan' (RMDP), RDA accomplished diverse development schemes in designated land areas, such as building housing estates in residential

areas, constructing several industrial and commercial institutions, building markets, and constructing road infrastructures in their respective land areas. Afterwards, the perception of city dwellers regarding these initiatives is measured in a statistical scale, and we tried to provide a notion about what people think, whether these initiatives are satisfactory and sustainable or not. In fine, visualization and recommendations for the further study are drawn in a nutshell.

**Keywords:** Urban Development, People's Perceptions, Analysis, Rajshahi Development Authority, Initiatives

## INTRODUCTION

The United Nations SDG 11 states that by 2030, the world should ensure access for all to adequate, safe, and affordable housing and basic services, and slums should be upgraded, offering inhabitants a good environment and good quality of life (Chan et al., 2016). Rajshahi Development Authority (RDA) is responsible for the sustainable urban planning and growth of Rajshahi city.

Rajshahi district headquarters was established in 1825. In 1876, Rajshahi Pourashava was established, and it was upgraded as Rajshahi City Corporation in 1987. As a result, in many ways, the importance of the city increased, and the city had to grow in an unplanned way. Therefore, to ensure the city's growth and development in a planned and sustainable way, the

Rajshahi Town Development Authority was established in October 1976 by Ordinance No. 78,

Act No. 03 of 2018, formed by the Rajshahi Development Authority (Rajshahi Development Authority, 2024). Actually, urban planning and development refer to regional planning and town or city planning. Whatever it is called, the aim is simple, emphasizing urban planning and development as a structured process aimed at organizing land use and urban environments (Ghebrekidan, 2018). In this regard, to ensure sound and healthy development of Rajshahi city, RDA took and implemented diverse initiatives.

Through this study, we try to find out the answers and solutions to these research questions described in the given below:

- What are the initiatives taken and implemented by the Rajshahi Development Authority (RDA)?
- Is this initiative aligning with the goal of sustainable development?
- What is the perception of city dwellers regarding these initiatives?
- Do they think these initiatives are satisfactory and sustainable?

## OBJECTIVES OF THE STUDY

The objectives of the study are firstly to reflect on these initiatives, including detecting the implementation time and location of these initiatives. furthermore, to find out the perception of city dwellers by using the statistical scale method and to provide a satisfaction index level of the city dwellers regarding these development initiatives from their birth to now. In fine, the conclusion contains a glimpse of the discussion and findings of the paper.

## METHODOLOGY

In accordance with the nature of investigation, both quantitative and qualitative research approaches have been adopted. Quantitative research is based on the measurement of quantity or amount. It is applicable phenomena that can be expressed in terms of quantity (Kothari, 2004).

Both primary and secondary data have been used in this study. Secondary data is collected from various sources such as journals, books, master plans of RDA, reports, etc. For the primary data, we collected data through interview and questionnaire surveys. We tried to collect data from an assistant town planner named Rahenul Islam Roni, who was asked about Rajshahi Development Authority's initiatives, challenges, limitations, etc., and we also conducted a questionnaire survey in the area of Rajshahi city where we took 10 respondents from each ward and provided them with a structured questionnaire with a view to knowing about their perception regarding these initiatives implemented by Rajshahi Development Authority (RDA).

In conducting questionnaire survey, we used the cluster sampling method. Firstly, we divided the sampling population into clusters on the basis of each ward, and then we took samples from each ward by using simple random sampling. Simple random and cluster sampling techniques are based on a researcher's ability to identify each element in a population. It is easy to do this if the total sampling population is small, but if the population is large, as in the case of a city, state, or country, it becomes difficult and expensive to identify each sampling unit. In such cases the use of cluster sampling is more appropriate. Cluster sampling is based on the ability of the researcher to divide the sampling population into groups (based upon visible or easily identifiable characteristics), called clusters, and then to select elements within each cluster, using the SRS technique (Kumar.R, 2011).

## LITERATURE REVIEW

A literature review is essential for making the study resourceful. It also helps researchers brainstorm and fulfill the objectives by providing clear conceptions about the overall scenario. In the last decade, no researcher has done any work regarding the measurement of Rajshahi Development Authority (RDA) initiatives. But in a related topic, a few researchers worked in previous. Such mentionable researchers are Faridatul.I & Jahan.S, 2014, and Ahmed.I, 2016.

The Rajshahi Development Authority took and implemented various initiatives from its birth. Consequently, it has faced a lot of problems, constraints, and challenges to implement these initiatives. By studying and observing the RDA master plan of 1984, Farhana Khan Lima provided the scenario of problems and constraints to implement these initiatives in Rajshahi city (Lima.K.F, 2003). By studying Lima's work, we get a concept about the initiatives taken and implemented by the Rajshahi Development Authority (RDA).

Therefore, Fatidatul.I & Jahan.S (2014) try to find out the people's perception regarding the development of community facilities in Rajshahi city. Rajshahi City Corporation (RCC) and Rajshahi Development Authority (RDA) are the major

institutions responsible for providing better community facilities. In that paper, they measure the people's perception regarding facilities that are provided by the Rajshahi Development Authority (RDA) and Rajshahi City Corporation (RCC). another related work done by Ahmed, I. (2016), who thrived to check the viability of RDA's initiatives regarding the creation of new commercial centers.

In these previous works, they contributed to analyzing master plans, finding obstacles and challenges they faced, people's perception regarding community facilities, as well as checking the viability of RDA initiatives, specifically in creating new commercial centers. but no one addresses the overall scenarios of initiatives that RDA took and implemented in order to make Rajshahi a sound and healthy city, as well as no one strives to measure the people's perception regarding these initiatives. In this paper, we reflect on the previous and present initiatives that have been implemented by RDA, as well as measure the people's perception regarding these initiatives by using a statistical scale.

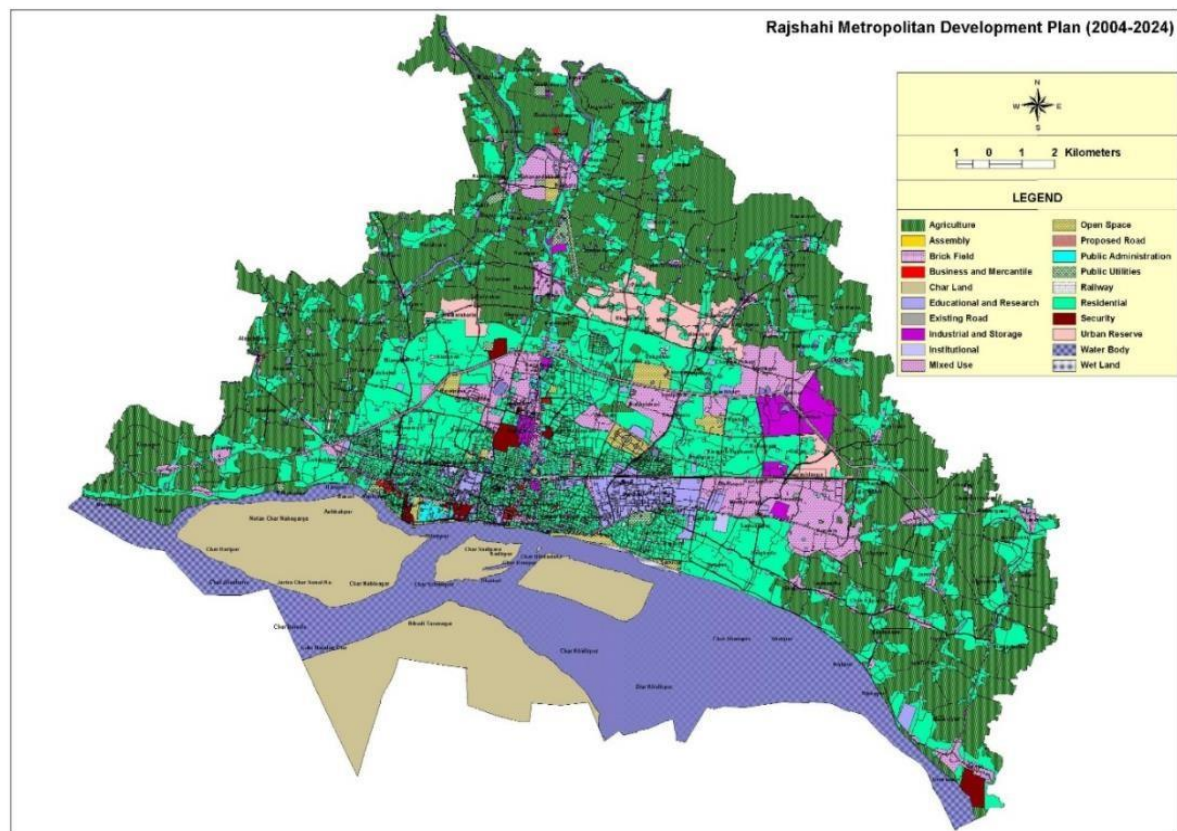
### **Initiatives of Rajshahi Development Authority**

RDA implemented a number of development projects in Rajshahi. RDA created three master plans, including the Rajshahi Metropolitan Development Plan (2004–24) and the 1984 master plan for land use development. The 2021–2041 master plan for metropolitan development aims to accomplish objectives while guaranteeing sustainability. RDA took on and carried out planning and development initiatives in a number of areas, including infrastructure development, land use pattern and zoning, improving green space, and creating residential neighborhoods. It would be preferable if we briefly discussed those initiatives:

#### **Land Use Pattern:**

The Rajshahi Development Authority Master Plan of 1984 is designed and responsible for mainly land use patterns and zoning. In this master plan, RDA carried out the land zoning where they divided the city into various portions and designated them as residential areas, commercial centers, industrial centers, bus and truck terminals, etc.

**Figure 1:** Land Use Pattern designated by RDA (Source: RDA Website)



Here are some of the development projects implemented by RDA in accordance with its land use pattern.

### **Town centre:**

In order to preserve the most densely southern part of the Rajshahi city, a new town was established in the extended northern area where a number of commercial centers were established. The administrative and business activities were mainly concentrated imperatively in the western and southern parts of the city. Consequently, these areas rapidly become densely populated (Lima.K.F, 2003).

In this regard, the Rajshahi Development Authority (RDA) took initiatives and implemented them through the master plan by establishing a new town center in the northern part of the city with a view to diversifying administrative and business activities.

### **Housing and Residential Areas:**

As per the assistant town planner Mr. Rahenul Islam Roni, a number of housing projects, including the creation of new residential areas, improving Ceroil Colony, and service plots for low-income groups, were constructed. He also said that nine

residential areas are constructed and improved by Rajshahi Development Authority's own funding. Here are those residential areas in given table 1 below:

**Table 1:** Residential Areas Constructed by RDA

SI No.	Name	Number of plots	Developed for	Year
01	Padma Residential Area	565	Developed for Middle Class	1992
02	Parijat Residential Area	56	Developed for Middle Class	1993
03	Shyanir Residential Area	224	Developed for Lower income groups	1997
04	Upasahar Housing Estates	1320	Lower and Middle Class	1962
05	Chandrima Residential Area	392	Middle class	2004
06	Banolota Residential Area	159	Middle Class	2006
07	Chayabithi Residential Area	470	Middle Class	2006
08	Mahananda Residential Area	72	Middle Class	2005
09	Prantik Residential Area	203	Middle Class	2006

In the 2023-2024 fiscal year, RDA carried out improvements to the Prantik residential area project. 234 plots, 5 mixed plots, 1 lake, 1 field, 1 mosque, culvert, road, and drainage are made by RDA (Rajshahi Development Authority, 2024).

### Developed Seroil Colony:

The Rajshahi Development Authority (RDA) develops the condition of Seroil Colony. Lowincome groups, mainly the refugees from India and Pakistan, have been living there since the 1950s. Consequently, due to overgrowth of population, the seroil colony became overcrowded and unhealthy (Lima, K.F., 2003).

### Infrastructure Development:

The Rajshahi Development Authority is primarily responsible for planning, constructing, coordinating, and managing the infrastructural development of Rajshahi city in order to provide service to the city dwellers. RDA completed a number of infrastructural developments, including road infrastructure construction, constructing bus and truck terminals, constructing markets, etc.

**Road Infrastructure:**

RDA has been completed and extended a number of road infrastructure development projects. Here are the completed development projects in the given figure 3 below:

**Table 2: Road Infrastructure Initiatives of RDA**

SI No.	Name	Area	Implementation Period
01	Natore-Nawabganje Road simplification and widening projects( Alupatti Junction to Sonadighi Junction)	Length 760m Width 24 m	June,1990
02	Greater Road Extension	Length 3.520km Width 24m	June,1990
03	Sericulture to kalpana Hall Road widening	1.500 km	June,1996
04	Construction of link road from greater road to bypass	4.100 km	June,2009
05	Construction and widening road from saheb bazar to gourhanga mor	1.200km	June,2014
06	Road widening from court to bypass Road	Length 2.25km Width 19.50m	June,2019

Source: (Rajshahi Development Authority, 2024)

Moreover, FY 2021-22. Moreover, a 5.00 km bituminous four-lane road has been constructed from Natore Road (Ruet) to Rajshahi Bypass Road (Ministry of Housing and Public Works, 2024).

**Construction of Bus and Truck Terminal:**

Two bus terminals and one truck terminal were constructed by the RDA. A table is given below by collected data from assistant town planner named Mr. Rahenul Islam Roni.

**Table 3: Bus and Truck Terminals Constructed by RDA**

SI No.	Name	Implementation Period	Capacity	Location
01	Inter District Bus terminal	June,2004	600	Naodapara
02	Shahid Kamarujjaman Bus Terminal	June,1990	300	Railway Station
03	Truck Terminal	June,1998	500	Naodapara

**Construction of Market:**

As per town planner, RDA constructed 6 markets.

Table 4: Markets Constructed by RDA

SI No.	Market Name	Number of shop	Year
01	RDA Market	1952	1990
02	Godhuli Market	273	1990
03	Pubali Market	270	1996
04	Shahid Kamarajjaman Bus Terminal Market	11	1989
05	Inter District Bus Terminal Market	59	2005
06	Truck Terminal Super Market	61	2012

**Recreational Facilities:**

The facilities are inadequate in Rajshahi, and the recreational areas occupy only 0.98% of the total city area. The city occupies 25 play fields, but each of them belongs to the particular educational institutions; therefore, there is no scope for free access to the general people (RDA, 2004).

In consequence of this, RDA took steps to increase recreational facilities. At least five parks were proposed to be constructed in just the southern and western parts of the city. However, RDA constructed parks, gardens, and lakes with boating facilities for city dwellers. As per the recommendations of previous master plans, Padma Garden, Shahid Kamarajjuman Zoo, Captain Monsur Ali Park, Novo Theatre, etc., are constructed with the coordination of Rajshahi City Corporation (RCC). In fiscal year 2023-24, RDA constructed for enhancing the beautification of Captain Monsur Ali Park with a 12.56-acre area where RDA constructed a 4.30 km road, drainage, 99.06 meters, 1 amphitheater, constraints on the 342 m park train line, 70 branches, and 3 bridges for enhancing beautification (Rajshahi Development Authority, 2024).

**Industrial and Commercial Area:**

Rajshahi is mainly dependent on its agricultural production. RDA thrived to establish an industrial and commercial area in order to diversify its economy through the implementation of the master plan.

**Industrial Area:**

As per the master plans, a number of new industrial area to be developed including light and heavy industrial estates. RDA planned to establish the industrial sector in surrounding areas of the city such as Rajshahi Jute Mills in Katakhal, Rajshahi Textile Mills in Sopura. Besides, RDA is working to establish seven new industrial area through the RMDP master plan.



**Commercial Development:**

In Rajshahi City, there are four commercial areas, including Saheb Bazar, New Market, Banalota, and Talaimari (Ahmed.I, 2016). RDA is trying to develop some commercial plots as well as some markets. According to assistant town planner Mr. Rahenul Islam Roni, there are six markets constructed by RDA. Therefore, in the last 20 years, residential and commercial mixed-use structural growth has increased by 14.84% (ICLEI South Asia, 2022).

**Planning and Cooperating for Enhancing Open Green Space:**

Rajshahi Metropolitan Development Plan (RMDP) 2021 has proposed some reserved open green space in order to ensure sound and sustainable development of Rajshahi city. However, due to rapid urban growth and development, the city has lost its open green space, approximately from 11.09% to 4.5% in the last couple of decades (RDA Master Plan, 2021). Over the last 20 years, the residential and commercial mixed-use structural growth has increased by 14.84% and 9.32%, respectively, which reduced 6.59% of open green space and 5.78% of water bodies in the city (ICLEI South Asia, 2022). In this regard, the Rajshahi Development Authority is cooperating with the Rajshahi City Corporation and planting trees to enhance green space. RDA designated the reserved area, such as the zero soil program, tree plantation on roads, etc., and then Rajshahi City Corporation implemented the enhanced green space project.

**RESULT AND FINDINGS**

In this segment, we try to find out the people's perception regarding these initiatives implemented by the Rajshahi Development Authority (RDA) and analyze them by using a statistical scale.

**Study Area and Sampling:**

Rajshahi city has been selected as the study area. It has a total of 30 wards, in which we took 10 respondents from each ward, for a total of 300 respondents, and then we took a sample from each cluster by using the SRS (simple random sampling) technique, and we got the final sample size of 100. This technique is called cluster sampling. Cluster sampling is based on the ability of the researcher to divide the sampling population into groups called clusters and then to select within each cluster using the SRS (Simple Random Sampling) technique (Kothati, 2004).

Then we provided them with a questionnaire survey where we asked about their satisfaction level regarding RDA initiatives implementation. During the questionnaire survey, the data has become recorded on the basis of the following constructed scale:

**Level of Satisfaction:**

The respondents were asked about their satisfaction and dissatisfaction levels regarding the initiatives implemented by the Rajshahi Development Authority (RDA).

Highly Satisfied Dissatisfied	Satisfied	Neutral	Dissatisfied	Highly
1	0.5	0	-0.5	-1

**Computational formula for calculation of satisfaction index as is follows.**  
(Miah,1993)

$I_s = \frac{1*f_{hs} + 0.5*f_s + 0*Nf_o - 0.5*f_d - 1*f_{hd}}{N}$	<p>Where,</p> <p><math>I_s</math>= satisfaction index such that <math>+1 \geq I_s \geq -1</math></p> <p><math>F_{hs}</math>= frequency of responses indicating satisfaction</p> <p><math>F_o</math>= frequency of responses indicating neutral</p> <p><math>F_d</math>= frequency of responses indicating dissatisfaction</p> <p><math>F_{hd}</math>= frequency of responses indicating highly dissatisfaction</p> <p><math>N</math>= total number of observation</p>
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**Measuring the people's perception regarding infrastructure development:**

$I_s = \frac{1*f_{hs} + 0.5*f_s + 0*Nf_o - 0.5*f_d - 1*f_{hd}}{N}$ $= \frac{1 \times 0 + 0.5 \times 60 + 0 \times 20 - 0.5 \times 20 - 1 \times 0}{100}$ $= \frac{20}{100}$ $= 0.2$	<p>Where,</p> <p><math>I_s</math>= satisfaction index such that <math>+1 \geq I_s \geq -1</math></p> <p><math>F_{hs}</math>= frequency of responses indicating satisfaction</p> <p><math>F_o</math>= frequency of responses indicating neutral</p> <p><math>F_d</math>= frequency of responses indicating dissatisfaction</p> <p><math>F_{hd}</math>= frequency of responses indicating highly dissatisfaction</p> <p><math>N</math>= total number of observation</p>
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Here we can see that people's perception of implemented infrastructural development initiatives is about neutral, or we can say the satisfaction index level is on the way to achieving a satisfied level on the scale.

**Measuring the people's perception regarding land use pattern initiatives implemented by RDA:**

$I_s = \frac{1*f_{hs} + 0.5*f_s + 0*Nf_o - 0.5*f_d - 1*f_{hd}}{N}$	<p>Where,</p> <p><math>I_s</math>= satisfaction index such that <math>+1 \geq I_s \geq -1</math></p>
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$= \frac{1 \times 0 + 0.5 \times 40 + 0 \times 40 - 0.5 \times 20 - 1 \times 0}{100}$ $= \frac{10}{100}$ $= 0.1$	<p>-1</p> <p>F<sub>hs</sub>= frequency of responses indicating satisfaction</p> <p>F<sub>o</sub>= frequency of responses indicating neutral</p> <p>F<sub>d</sub>= frequency of responses indicating dissatisfaction</p> <p>F<sub>hd</sub>= frequency of responses indicating highly dissatisfaction</p> <p>N= total number of observation</p>
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Here we can see that city dwellers of Rajshahi city have a neutral perception regarding the land use pattern initiatives implemented by the Rajshahi Development Authority (RDA). We suggest to RDA that they should follow the principles for giving approval of land use or before constructing any building. Otherwise, the city will experience unplanned growth, and consequently it would be uninhabitable for living.

### Measuring people's perception regarding the initiatives of recreational facilities:

$I_s = 1 * f_{hs} + 0.5 * f_s + 0 * f_o - 0.5 * f_d - 1 * f_{hd}$ $= \frac{1 \times 0 + 1.5 \times 20 + 0 \times 50 - 0.5 \times 30 - 1 \times 0}{100}$ $= \frac{-5}{100}$ $= -0.05$	<p>Where,</p> <p>I<sub>s</sub>= satisfaction index such that +1 ≥ I<sub>s</sub> ≥ -1</p> <p>F<sub>hs</sub>= frequency of responses indicating satisfaction</p> <p>F<sub>o</sub>= frequency of responses indicating neutral</p> <p>F<sub>d</sub>= frequency of responses indicating dissatisfaction</p> <p>F<sub>hd</sub>= frequency of responses indicating highly dissatisfaction</p> <p>N= total number of observation</p>
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Here we can see that people's perception regarding recreational facilities initiatives implemented by RDA has a dissatisfaction level. A minimum number of parks, gardens, and recreational facilities are necessary for recruitment for a standard city, but it is very disappointing that the recreational facilities of Rajshahi city are at a dissatisfied level. The situation must be changed if we want to make this city habitable.

### Measuring the people's perception regarding on planning for enhancing open green spaces:

$I_s = 1*f_{hs} + 0.5*f_s + 0*f_o - 0.5*f_d - 1*f_{hd}$	Where,
$= \frac{1 \times 0 + 0.5 \times 60 + 0 \times 15 - 0.5 \times 15 - 1 \times 10}{100}$	$I_s$ = satisfaction index such that $+1 \geq I_s \geq -1$ $F_{hs}$ = frequency of responses indicating satisfaction $F_o$ = frequency of responses indicating neutral $F_d$ = frequency of responses indicating dissatisfaction
$= \frac{12.5}{100}$	
$= 0.125$	$F_{hd}$ = frequency of indicating highly dissatisfaction $N$ = total number of observation

Here we can see that people are at a neutral level regarding the enhanced open green spaces initiatives planning and coordination with other entities by RDS. Rajshahi is usually dependent on its agricultural production for its economy; that's why it has a good number of green spaces. Although, for infrastructural development in the last ten years, Rajshahi lost a number of proportions of its green space, the respective authorities, such as the Rajshahi Development

Authority (RDA) and Rajshahi City Corporation (RCC), try to make this city green through tree plantation, gardening, planting trees in road dividers, etc.

### Measuring the people's perception regarding the initiatives of establishing industrial and commercial areas:

$I_s = 1*f_{hs} + 0.5*f_s + 0*f_o - 0.5*f_d - 1*f_{hd}$	Where,
$= \frac{1 \times 0 + 0.5 \times 40 + 0 \times 20 - 0.5 \times 30 - 1 \times 10}{100}$	$I_s$ = satisfaction index such that $+1 \geq I_s \geq -1$ $F_{hs}$ = frequency of responses indicating satisfaction $F_o$ = frequency of responses indicating neutral $F_d$ = frequency of responses indicating dissatisfaction
$= \frac{-5}{100}$	$F_{hd}$ = frequency of indicating highly dissatisfaction $N$ = total number of observation
$= -0.05$	

Here we can see that people's perception regarding the establishment of industrial and commercial areas by RDA is at a dissatisfied level. The industrial and commercial initiatives aspect is the most disappointing thing to the city dwellers.

The lowest level of this satisfaction index level is placed on infrastructural and commercial initiatives of the Rajshahi Development Authority (RDA).

## DISCUSSION AND ANALYSIS

The urban development initiatives of the Rajshahi Development Authority (RDA) demonstrate a structured yet partially inclusive approach to city planning. This section critically examines the effectiveness of those initiatives in light of both the public's perception and global best practices in urban governance and sustainability.

### Infrastructure Development

The satisfaction index for infrastructure development ( $Is = 0.2$ ) indicates a positive yet cautious outlook from citizens. While initiatives like road widening, terminal construction, and market establishment have been appreciated, interview feedback pointed to concerns over durability and traffic management. This reflects findings from UN-Habitat (2020), which emphasizes that infrastructure without integrated planning often leads to congestion and urban sprawl. Moreover, there is a growing recognition that infrastructure is not just about roads or terminals, but about how efficiently they contribute to mobility and accessibility (Bertolini, 2017). RDA must embrace transit-oriented development and incorporate walkability and public transport into future plans.

### Land Use and Zoning

Although the zoning under RDA's 1984 and 2021 plans is appreciated ( $Is = 0.1$ ), enforcement remains weak. Many residents noted illegal constructions and deviations from designated land uses. This supports earlier concerns by Lima (2003) and parallels global experiences where policy without enforcement weakens planning legitimacy (Angel, 2012).

Urban resilience depends not only on planning but on the governance structure that ensures compliance. In Rajshahi, that institutional capacity appears limited, suggesting a need for improved monitoring mechanisms and accountability structures.

### Recreational and Green Spaces

Recreational facilities received a dissatisfaction score ( $Is = -0.05$ ), reflecting residents' concern about the scarcity and inaccessibility of open spaces. Urban green spaces are critical for both physical health and social cohesion (Kabisch et al., 2016). Despite some efforts by RDA and RCC, green space coverage remains far below WHO recommendations of 9 m<sup>2</sup> per capita (WHO, 2010).

### Commercial and Industrial Expansion

Public dissatisfaction was strongest ( $Is = -0.1$ ) regarding industrial and commercial initiatives. While RDA constructed markets and attempted industrial zoning, economic diversification remains inadequate. Rajshahi's economy is still predominantly agro-based, and industrial development is largely centralized. This echoes Ahmed's (2016) concerns and supports global arguments that secondary cities

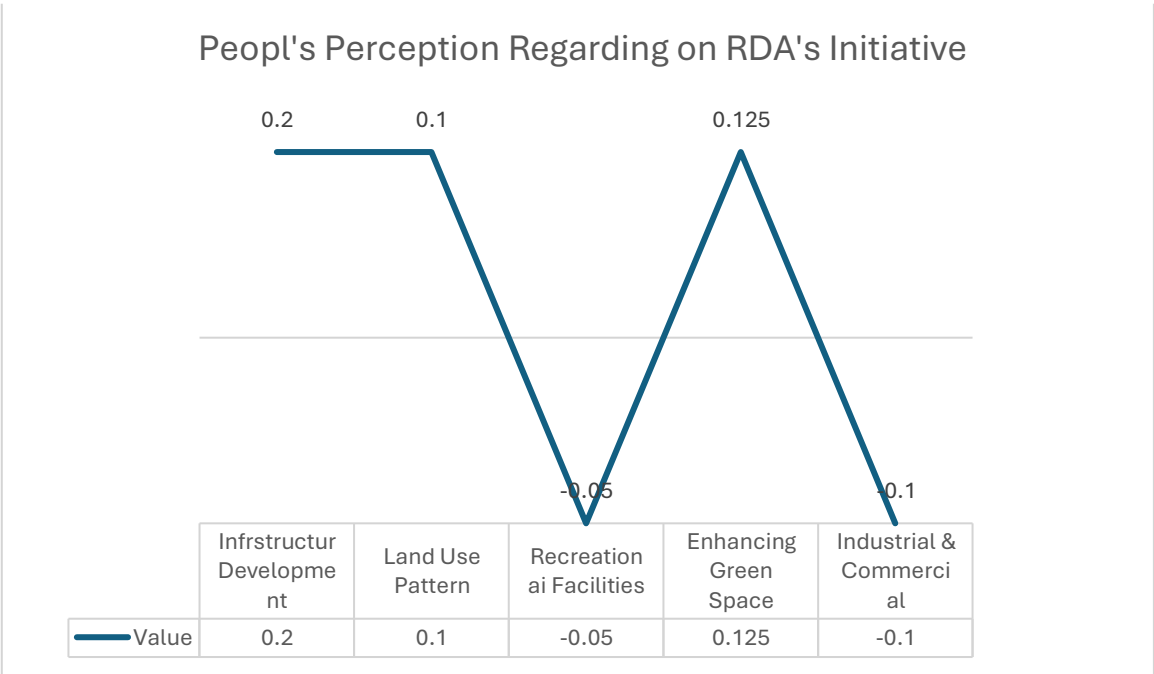
often lack economic planning to match spatial growth (Roberts et al., 2016). Without robust economic visioning, urban planning risks becoming merely cosmetic.

Public Participation and Governance

A recurring theme from the survey and interviews is the limited involvement of citizens in decision-making. While participation is widely promoted in planning literature (Arnstein, 1969), in practice, it is rarely institutionalized in cities like Rajshahi. Moving toward participatory governance, through local consultations or digital civic platforms, could enhance both transparency and effectiveness.

Graphical Representation of people’s perception in a nutshell

Figure 2: Graphical Representation of People’s Perception



The Rajshahi Development Authority is the main figure in planning, managing, and implementing development projects in Rajshahi city. They took various initiatives and implemented them till now. We discussed and evaluated those initiatives based on people’s perception. Where we see that most of the respondents are neutral as well as slightly satisfied in some respective aspects of initiatives such as land use pattern and zoning, infrastructural development, and planning for enhancing green space. On the other hand, the other respondents give their opinions on the site of dissatisfaction levels. In this regard, we suggested that the Rajshahi Development Authority should ensure people’s participation in planning and decision-making processes when they are initiating any development project so that the development project would be more beneficial for city dwellers and sustainable development goals is achieved.

## RECOMMENDATIONS

While this study has provided a foundational understanding of the RDA's initiatives and public perceptions, several areas remain underexplored and merit future research:

- 7.1. Longitudinal Impact Studies: Future research can focus on assessing the long-term social and economic impacts of RDA projects (e.g., how residential areas have evolved in terms of socio-economic diversity and accessibility).
- 7.2. Comparative Analysis: A comparative study between Rajshahi and other mid-tier cities in Bangladesh (like Khulna or Sylhet) could highlight which planning approaches work best and under what circumstances.
- 7.3. Environmental Impact Assessment (EIA): More in-depth studies are needed to quantify the ecological loss due to rapid urbanization and the effectiveness of RDA's green initiatives.
- 7.4. Citizen-Led Urban Audits: Researchers can design participatory audit tools to systematically capture citizen feedback on public infrastructure and services.
- 7.5. Policy Implementation Gap Analysis: Exploring the reasons why certain policies (e.g., land use regulations) are poorly implemented would help in identifying institutional weaknesses.
- 7.6. Technology Integration in Urban Management: The potential of GIS, remote sensing, and civic technology in improving planning, monitoring, and community engagement deserves exploration.
- 7.7. Gendered Urban Spaces: Examining how urban development affects women differently (in terms of safety, accessibility, and mobility) would help in promoting inclusive city planning.

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