A Comprehensive Valuation Report on a Proposed Mortgage Property

BY

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ID: 181-47-649

FINAL YEAR DESIGN PROJECT REPORT

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Civil Engineering

Supervised By

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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

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APPROVAL

This Project titled "**A Comprehensive Valuation Report on a Proposed Mortgage Property**", submitted by **Md Anower Hossen** to the Department of Civil Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Civil Engineering and approved as to its style and contents.

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DECLARATION

I hereby declare that this project has been done by me under the supervision of **Dr. Miah M. Hussainuzzaman, Associate Professor, Department of Civil Engineering, Daffodil International University**. I also declare that neither this project nor any part of this project has been submitted elsewhere for the award of any degree or diploma.

Supervised by:

MMHzaman 04-Jan-2021

Dr. Miah M. Hussainuzzaman
Associate Professor
Department of Civil Engineering
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Submitted by:

Anower

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ACKNOWLEDGEMENT

First, I express our heartiest thanks and gratefulness to almighty for His divine blessing making it possible for me to complete the final year project/internship successfully.

I am grateful and wish my profound indebtedness to **Dr. Miah M. Hussainuzzaman**, **Associate Professor**, Department of Civil Engineering Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "Property *Valuation Report*" helped me to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts, and correcting them at all stages have made it possible to complete this project.

I would like to express my heartiest gratitude to the Head of the Department of Civil Engineering, for his kind help in finishing our project and also to other faculty members and the staff of the Department of CE, Daffodil International University.

Finally, I must acknowledge with due respect the constant support and patience of my parents.

ABSTRACT

This report presents an in-depth property valuation of a proposed mortgage, located in Dhaka, Bangladesh. The study includes a detailed examination of the land, building structure, utilities, and other factors influencing the property's overall market value. The property surveyed is a three-storied residential building, with a plinth area of 2490 sq. ft. and a total floor area of 6232 sq. ft. The structure is built on a pile foundation with an RCC frame, ensuring durability and stability. Utilities such as gas, water, and electricity are readily available, enhancing the property's appeal.

The market value of the property was calculated at Tk. 4,23,27,500.00, while the forced sale value is estimated at Tk. 3,38,62,000.00. Depreciation was applied using the Straight-Line Method at a rate of 2.5% annually. Furthermore, the value of the property as eligible security was assessed at Tk. 2,11,63,750.00. This valuation report highlights the importance of precise and reliable property assessment, particularly in the context of mortgage security. The findings affirm that the property holds significant market value and serves as a secure asset for both the lender and the borrower due to its advantageous location and the ongoing development of the surrounding area.

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CHAPTER 1

Introduction

1.1 General

In Dhaka, where urbanization is expanding rapidly, the residential property market plays a crucial role in the city's development. As population density increases, the demand for housing and infrastructure continues to rise, making property valuation a key area of interest. According to the Bangladesh Bureau of Statistics (2022)[1], the population of Dhaka district has been experiencing consistent growth, further intensifying the demand for residential properties. This demographic shift highlights the increasing need for accurate property valuation methods to support both investors and financial institutions in the real estate sector. A three-storied residential building in Dakkhinkhan, an area that is undergoing substantial growth has been chosen as the subject of this valuation report. This report aims to provide a comprehensive analysis of various components, such as land value, structural integrity, utility services, and market trends, that contribute to the overall valuation of the property.

A civil engineer needs to explore and understand various aspects of civil infrastructure and construction through both theoretical knowledge and practical applications. This report, based on a detailed property valuation report, is a culmination of those academic learnings, where a thorough and independent assessment of a residential property, is conducted. The main objective of this project was to analyze the property’s market value, forced sale value, and its eligibility as mortgage security. Property valuation is an integral part of civil engineering, especially in the domain of real estate and construction economics, and this report emphasizes the role of an engineer in evaluating the structural, economic, and geographic factors that determine property worth.

1.2 Rationale of the study

Property valuation is not just a financial exercise; it is an essential aspect of civil engineering that involves understanding the technical, environmental, and economic factors influencing real estate. For civil engineers, valuation provides insights into how the quality of construction, choice of materials, and design elements impact the marketability of a property. Moreover, it offers a practical application of skills learned in structural analysis, construction management, and project estimation, blending engineering expertise with economic principles. Through this valuation, the aim is to bring together these various disciplines, offering a balanced view that serves both

financial and engineering purposes.

Civil engineers are often involved in determining the feasibility of projects, whether they be residential, commercial, or industrial. One key element of feasibility is understanding the value of the land and buildings involved, especially when it comes to mortgage lending, insurance, taxation, and even future development. Accurate property valuation ensures that the stakeholders—whether they are banks, individual investors, or developers—have a reliable understanding of the worth of an asset. This report thus serves as a detailed case study of how these factors play out in a practical scenario.

1.3 Objectives

- To determine the market value, forced sale value, and mortgage eligibility of the selected property.
- To analyze the structural, geographic, and economic factors that influence the valuation process.

1.4 Limitations

- The study focuses exclusively on a single property in Dakkhinkhan, limiting generalizability to other areas or property types.
- Constraints in data availability and resources restricted detailed comparison with similar properties in the region.

1.5 Structure of the Report

This report is structured into five chapters:

- **Chapter 1** introduces the study, outlining its rationale, objectives, limitations, and structure.
- **Chapter 2** presents a review of the relevant literature, highlighting existing research in property valuation.
- **Chapter 3** details the methodology employed, including data collection and analysis techniques.
- **Chapter 4** discusses the results and findings, supported by detailed analysis.
- **Chapter 5** concludes the study with key insights and recommendations for future work.

1.6 Summary

This chapter serves as the foundation for the study, establishing its importance within the broader scope of civil engineering. The rationale, objectives, and limitations are clearly articulated, along with an overview of the report structure. The subsequent chapters build on this framework, offering a comprehensive exploration of property valuation in the context of a growing urban area.

CHAPTER 2
Background

2.1 General

Property valuation is a crucial discipline within the realm of civil engineering and real estate, serving as a cornerstone for various financial, legal, and investment decisions. This property valuation is driven by the need to apply engineering principles to assess the physical state and financial worth of real estate assets. This chapter provides a thorough exploration of the related works that shape property valuation methodologies, touching on both academic research and practical applications. By examining the works of scholars and practitioners in the field, a comprehensive background is established that supports the methodology and findings of this property validation report.

2.2 Key Components of the Valuation Report

The valuation process involves not only calculating the market value but also understanding the long-term potential of the property, its suitability for mortgage lending, and any future risks that could affect its value. Below are the key points that this report will explore in detail:

2.2.1. Land Valuation

Land is the foundation upon which all real estate transactions are built, both literally and figuratively. Its location, size, accessibility, and the availability of essential infrastructure are all critical factors that directly impact its market value.

The valuation of the land was carried out using comparable sales data from recent transactions in the area. The market value of Tk. 3,45,37,500.00 was determined by analyzing the price trends of comparable properties.

2.2.2. Structural Integrity and Construction Analysis

The structural condition of a building significantly influences its valuation. In this report, a detailed analysis of the design and construction of the three-storied residential building situated on the property was conducted. A key structural feature of this building is its pile foundation, reinforced with an RCC (Reinforced Cement Concrete) frame. Pile foundations are particularly advantageous for supporting heavy loads and ensuring stability in areas with less stable soil. In this case, the pile foundation provides long-term durability, making the structure resilient to

environmental stressors, including floods and seismic activity.

The RCC frame enhances the building's load-bearing capacity and provides robustness against vertical and lateral forces, allowing potential vertical expansion up to nine stories. This possibility for future development contributes to the property's value by enabling additional construction. During the valuation process, the construction quality was meticulously assessed, covering materials used in concrete, steel reinforcement, brickwork, and finishes. The building was constructed to a "Standard" quality level, which is appropriate for its intended residential use.

2.2.3. Utility Services and Infrastructure

Utilities and basic infrastructure are essential for making a property livable and increasing its marketability. In this regard, the property benefits from well-established utility services, which are crucial in determining its overall value. The availability of essential services like gas, water, and electricity in the area significantly enhances the property's desirability. In Dhaka, where utilities can often be unreliable, the assurance of consistent services is a major selling point.

The property has access to gas from the Dhaka central supply, which is crucial for domestic use, especially for cooking and heating. Water is supplied by the local municipality, ensuring a reliable and clean source of water for the residents. Additionally, electricity is provided by the Dhaka Electric Supply Company (DESCO), a reputable service provider known for its reliable supply. The presence of these utilities not only increases the value of the property but also makes it a more attractive investment for potential buyers. Furthermore, the property includes a water reservoir, a boundary wall, and other essential structures, which add both security and functionality to the property.

2.2.4. Location and Accessibility

The location of a property is one of the most significant factors influencing its market value. The subject property is situated in Dakkhinkhan, a rapidly developing residential area in Dhaka, which has become increasingly popular due to its strategic position within the city. Located approximately 18 kilometers from the General Post Office (GPO), the central hub of Dhaka, Dakkhinkhan offers convenient access to key areas of the city, making it an attractive residential choice for those working in the central business district, as noted by the Institute of Architects Bangladesh (2019) in their discussion on urban planning and real estate development in Dhaka

[3].

The property benefits from excellent connectivity, being served by a 20-foot-wide road that links it to major highways and public transport networks. This connectivity is a valuable asset, especially in Dhaka, where traffic congestion can significantly impact commuting times. Beyond transportation, the property is also well-located near vital amenities such as schools, hospitals, shopping centers, and recreational facilities. These nearby services not only contribute to the convenience and quality of life for residents but also enhance the property's appeal to potential buyers and tenants, ultimately boosting its market value.

2.2.5. Market Value and Forced Sale Value

A critical component of property valuation is determining the market value under normal conditions and the forced sale value under distressed conditions. The market value represents the price that the property would likely fetch in a standard transaction, assuming no urgent need to sell.

The forced sale value, on the other hand, accounts for the potential of a distress sale, where the property needs to be sold quickly, typically resulting in a lower price. This value is particularly important for mortgage lending purposes, as it provides a conservative estimate of the property's worth in case of a default.

2.2.6. Eligible Security Value

In the context of mortgage lending, the eligible security value represents the amount of the property’s value that can be considered safe for lending purposes. This is typically a more conservative estimate than the market value, as it takes into account potential risks and uncertainties in the real estate market. This estimate ensures that the lender has adequate security in case of default, reducing financial risks associated with the loan.

2.2.7. Future Development Potential

One of the standout features of this property is its future development potential. The building is designed to accommodate vertical expansion, with provisions for constructing up to nine stories. This flexibility makes the property an attractive investment, as it allows for future growth without requiring significant additional investment in land or foundation work. The surrounding area of Dakkhinkhan is also expected to see continued growth, with new residential and commercial developments being planned. The long-term prospects of the area, combined with the property’s existing structural design, make it a valuable asset for developers and investors alike. As Dhaka

continues to expand, properties in areas like Dakkhinkhan are expected to appreciate, making this an excellent opportunity for long-term investment.

2.3 Literature Review on Property Valuation

The process of property valuation is an interdisciplinary task, combining elements of engineering, economics, law, and environmental science. Aluko (2011) suggests that property valuation should not be viewed as a purely financial calculation but rather as a holistic evaluation encompassing physical, legal, and socio-economic factors [4]. Aluko's study emphasizes that accurate property valuation requires a comprehensive understanding of land use, building structures, environmental impact, and legal ownership rights. This view aligns with my approach to the validation report, where I examined not just the physical attributes of the property but also its market potential and legal standing.

Furthermore, numerous works highlight the importance of property valuation in the banking and financial sectors, particularly for mortgage purposes. Isaac and Ofori-Agyeman (2018) conducted a significant study focusing on how banks assess properties for mortgage security [5]. They argue that bank valuations differ from typical real estate appraisals because they incorporate risk management measures, such as forced sale values, in the event of loan defaults. Their research underscores the necessity of including both market and forced sale values, as well as eligibility as collateral security. In my property valuation report, I followed this dual approach, estimating not only the market value but also the forced sale value and the value of the property as eligible security.

2.4 Valuation Methodologies and International Standards

Globally accepted standards, such as the International Valuation Standards (IVS) and the Royal Institution of Chartered Surveyors (RICS) guidelines, provide a robust framework for conducting property valuations. These standards mandate the consideration of various factors such as the physical verification of property, market trends, land rights, and potential future development. Both standards serve as a benchmark for ensuring accuracy, fairness, and transparency in property valuation.

In my work, while focusing on a local context, I drew upon these global standards to ensure a rigorous valuation process. The IVS, in particular, emphasizes the need for a standardized approach when conducting valuations, which includes inspecting the physical property, analyzing

the market conditions, and factoring in potential depreciation over time. Additionally, RICS guidelines stress the importance of due diligence in verifying land ownership and legal entitlements, as well as the need to account for environmental factors that may influence property value.

On a more localized scale, property valuation practices in Bangladesh follow national standards and regulations set forth by the Bangladesh Survey and Settlement Act. This legal framework governs property ownership and transaction protocols, ensuring that valuations meet national legal standards. Chowdhury and Hasan (2020) examined the impact of regional differences on property valuation within Bangladesh, noting that urban properties, especially in Dhaka [8], often command higher market values due to infrastructure development and demand. Their research is pertinent to my report, as the property I assessed is located in a rapidly urbanizing region of Dhaka, where such considerations are crucial for an accurate valuation.

2.5 Challenges in Property Valuation

Valuation is not without its challenges, particularly when dealing with market volatility, urbanization, and the subjective nature of property assessments. Many scholars have explored the challenges that arise in the valuation process. For instance, Fanning et al. (2014) noted that a key issue in property valuation is market fluctuation, which can affect both current and future values. In rapidly developing urban areas like Dhaka, property prices are often inflated due to high demand and limited supply[6]. This makes it essential to adopt a cautious approach, factoring in both current and projected market conditions.

Another challenge identified by Bowman and Pagano (2015) is the difficulty in accurately accounting for depreciation, particularly when dealing with older buildings or ongoing construction projects [7]. Depreciation affects the long-term value of a property, and its accurate estimation is crucial for a fair market assessment.

2.6 Related Case Studies

Several case studies have provided insights into how property valuation methodologies are applied in real-world scenarios, particularly in rapidly urbanizing cities. Rahman et al. (2019) conducted a case study on property markets in Dhaka, focusing on the rise of real estate prices in areas undergoing significant development [9]. Their research highlights that properties in developing regions often have inflated market values due to expectations of future infrastructure

improvements and service availability. This phenomenon was evident during my field observation of the Dakkhinkhan property, where the proximity to newly developed roads, utilities, and commercial hubs significantly boosted its market value. Moreover, Begum and Islam (2017) explored the role of government regulations in shaping property valuations in Bangladesh [10].

They found that properties located in areas with well-established legal frameworks and access to government services, such as water and electricity, generally have higher values. This insight directly applies to my validation report, as the property I surveyed benefits from a full range of utility services, enhancing its overall appeal and market worth.

2.7 Practical Application and Relevance

My validation report is firmly grounded in the methodologies and frameworks discussed in the literature. By conducting a detailed physical survey, reviewing relevant legal documents, and consulting local market data, I ensured that the valuation process followed both local and international best practices. This approach aligns with the multi-disciplinary nature of property valuation as highlighted by prior research. Furthermore, the report integrates several methodologies, including the direct comparison and cost approaches, to arrive at an accurate valuation.

By drawing upon the works of scholars and applying established standards, my report contributes to the broader field of civil engineering and property valuation. The findings of this chapter illustrate the complex factors that influence property values, from market trends and legal frameworks to construction methods and utility availability. Through this background, I establish a strong foundation for the analysis presented in the subsequent chapters of this thesis.

CHAPTER 3

Methodology

In this chapter, the methodology employed to conduct the property valuation for the three-storied residential building located in Dakkhinkhan, Dhaka, is explained. A step-by-step account is provided, detailing the physical survey, data collection, analysis, and final valuation of the property. Drawing from principles of Civil Engineering, both theoretical concepts and practical techniques were incorporated to ensure accuracy and reliability in the valuation process. Multiple valuation methods, including the cost approach, market comparison approach, and income approach, were utilized to generate a comprehensive assessment of the property.

3.1 Survey and Field Observation

The first step in the methodology involved conducting a detailed field survey of the property. Multiple visits were made to the site to gather physical and spatial data, including measurements of the plinth area, total floor area, and height of the building. The property, a three-storied building, was found to have a plinth area of 2,490 square feet, with the total constructed area amounting to 6,232 square feet, encompassing the ground floor, first floor, and second floor.

During the field observation, the condition of the building's structure and foundation was assessed. The building was identified as being constructed on a pile foundation, which provides additional strength and stability. The structural system comprises an RCC (Reinforced Cement Concrete) frame, commonly used in urban residential buildings for its durability and ability to withstand environmental stressors such as heavy rainfall and floods. According to the Bangladesh National Building Code (2020)[2], the use of RCC frames and pile foundations adheres to national standards for structural integrity and safety in residential buildings, ensuring long-term stability and resistance to various environmental conditions. The finishing of the building was also examined, revealing that the quality of construction was standard, with basic fixtures and finishes.

In addition to the physical structure, the utilities and amenities available at the property were evaluated. The building benefits from reliable access to gas, electricity, and water supply, which are essential considerations in property valuation. The site is connected to the Dhaka Water Supply and Sewerage Authority (WASA) for water, and electricity is supplied by the Dhaka Electric Supply Company (DESCO). These utilities significantly enhance the market value of the property, as properties with dependable utility services typically command higher valuations.

3.2 Data Collection

Data collection played a crucial role in this report, serving as the foundation for the property valuation process. Various data points were gathered during the site visits, which included:

Plinth area (measured in square feet)

Total floor area (measured in square feet)

Number of stories

Height of the building (in feet)

Quality of construction and materials

Type of foundation and structural system

Year of construction and expected completion

Availability of utilities (gas, water, electricity)

In addition to field data, market data was collected to analyze property prices in the surrounding area. Recent sales of similar properties in Dakkhinkhan were reviewed to estimate prevailing market rates per square foot. This market data was instrumental for the comparative approach to property valuation, enabling benchmarking of the building's value against similar structures in the neighborhood.

To address the challenge of depreciation, the Straight-Line Method was applied, calculating depreciation at a rate of 2.5% annually. This method, widely recognized in property valuation, facilitated a consistent reduction in property value over time, accounting for wear and tear as well as changes in market demand.

Legal documents were also consulted to verify land ownership and construction permits. Ensuring the legal standing of the property was deemed critical, as disputes or inconsistencies could adversely affect the market value.

3.3 Valuation Approaches

To achieve an accurate and fair valuation of the property, three different valuation methods were employed: the cost approach, the market comparison approach, and the income approach. Insights into different aspects of the property's value were provided by each of these approaches, ensuring a comprehensive evaluation.

3.3.1 Cost Approach

The cost approach is based on the principle that a property’s value can be estimated by determining the cost to construct the building from scratch, minus depreciation. For this approach, the construction cost per square foot was first calculated based on the current market prices for

labor, materials, and services.

To account for depreciation, the Straight-Line Method was used, applying a depreciation rate of 2.5% per annum. Since the building is still under construction, depreciation was considered minimal.

3.3.2 Market Comparison Approach

The market comparison approach involves evaluating the property based on recent sales of similar properties in the surrounding area. Properties within the same neighborhood in Dakkhinkhan were surveyed to gather market data. This data included sale prices, location, size, and the condition of nearby residential properties.

3.3.3 Income Approach

While the property in question is primarily residential, the income approach was still applied to estimate the potential rental income the building could generate. Rental prices in the area were surveyed, focusing on similar three-storied residential buildings.

3.4 Depreciation Calculation

Depreciation was calculated using the Straight-Line Method, which assumes that the building's value decreases uniformly over time. The building, being newly constructed, has a very low level of depreciation. However, I accounted for depreciation at a rate of 2.5% annually, as per the Bangladesh Survey and Settlement Act. This ensured that the building's future value would reflect potential wear and tear. Depreciation was applied only to the building and not to the land, as land does not depreciate over time.

3.5 Forced Sale Value

The forced sale value was calculated by reducing the market value of the property by 20%. This reduction accounts for the likelihood that the property may need to be sold quickly under distressed conditions, such as foreclosure or legal disputes.

3.6 Eligible Security Value

The eligible security value is a key figure used by financial institutions when properties are evaluated for mortgage loans. It represents the value of the property when used as collateral for a loan, often adjusted by a reduction factor to mitigate risk. In this case, the eligible security value of the land and the building was separately estimated, and the total eligible security value was calculated as the sum of both components. This figure is crucial for assessing the suitability of the property as collateral and determining the loan amount that can be secured against it.

3.7 Conclusion

The methodology used for the valuation of the property in Dakkhinkhan involved multiple steps, including a physical survey, data collection, and the application of various valuation approaches. By employing the cost, market comparison, and income approaches, I ensured a comprehensive and accurate assessment of the property's value. Depreciation, forced sale value, and eligible security value were also calculated to provide a complete picture of the property's financial worth. This multi-faceted methodology underscores the importance of precision and thoroughness in property valuation, particularly when assessing high-value assets such as residential buildings in rapidly urbanizing areas like Dhaka.

CHAPTER 4
RESULTS AND DISCUSSIONS

4.1 Results & Analysis

In the case of this particular property, the land area totals 9.21 decimals, which is equivalent to approximately 4,000 square feet. The property is located on Sangrami Sarani Road in Dakkhinkhan, a rapidly developing area that is seeing substantial growth in residential housing projects. The land is situated in a prime location, which is easily accessible by road and is well-connected to the central parts of Dhaka. This valuation is justified by the property's favorable location and the ongoing urban development in the surrounding area. Land values in Dhaka are known to appreciate rapidly due to the high demand for residential and commercial spaces, and this property benefits from being in a location poised for continued growth.

For this property, a market value of Tk. 4,23,27,500.00 is calculated which is derived from a detailed analysis of comparable property sales in the area, the quality of construction, and the availability of utilities and infrastructure.

In case of a distress sale, a 20% reduction to the market value is applied arriving at a forced sale value of Tk. 3,38,62,000.00. In this valuation, I have assessed the eligible security value at Tk. 2,11,63,750.00, which accounts for a 50% reduction from the market value.

For the property in question, the construction cost was estimated at Tk. 1,250 per square foot.

The total cost of construction for the 6232-square-foot building was estimated to be Tk. 77,90,000. I selected several properties that were comparable in terms of size, type, and age of construction. Based on the comparison, I determined that the average market value per square foot in the area was Tk. 5,000. Applying this rate to the building’s total constructed area of 6232 square feet, I estimated the market value of the building to be Tk. 3,11,60,000. Additionally, I evaluated the land value separately, determining it to be Tk. 3,45,37,500. The combined total market value of the land and building was Tk. 4,23,27,500. Based on my findings, the average monthly rent for such properties in Dakkhinkhan is Tk. 50,000 per floor. Therefore, the building has the potential to generate Tk. 1,50,000 in monthly rental income. Capitalizing this annual income at a rate of 7%, I estimated the property’s income-based valuation to be approximately Tk. 2,57,14,285.

The forced sale value for the building was estimated at Tk. 62,32,000, while the land's forced sale value was calculated at Tk. 2,76,30,000. The total forced sale value of the property amounted to

Tk. 3,38,62,000.

A. Particulars of Investment Client:

Sl.	Particulars	
01.	Name of accounts	**Sumaiya Aktar Alias Mukta Begum**
	Husband's Name	Md. Shaidul Islam
	Father's Name	Md. Younus Miah
	Mother's Name	Renu Akter
	Present Address	Holding # 350, Sangrami Sarani Road, Madda Azampur, Dakkhinkhan, Dhaka.
	Permanent Address	Vill-Sonar Char, Post-Hazirhat, P.S-Monpura, Dist-Bhola.
02.	National ID Card No.	0916523507931.
03.	Phone No.	01956195838.

B. Particulars of the Engineers/ Surveyor/ Values who physically verified the properties and conducted the survey:

Sl.	Particulars	Engineers/Surveyors/Valuers
01.	Name	Md Anower Hossen
02.	Qualification	Surveyor (B.Sc. in CE)
04.	Mobile No.	01679796003
05.	Email	anower47-649@diu.edu.bd

C. Particulars of Physical Verification of the Property:

Sl.	Particulars	Schedule
1.	Date of Physical Verification	02.08.2022
2.	Location and Address of the Place/Sport Visited	Sangrami Sarani Road at Mouza-Purakoir, P.S- Dakkhinkhan, Dist- Dhaka.
3.	Description of Properties Visited	The proposed mortgage property by the side of Sangrami Sarani Road at at Mouza-Purakoir, P.S- Dakkhinkhan, Dist- Dhaka. It is high land. Now there is a 3 (Three) storied under construction building but Foundation 9 (Nine) storied building in the proposed mortgage land. All utilities facilities like Electricity, Gas & Water

		are connected this land. The land is well communicated to the important place of Dhaka city. Also this property is road sided. So it is very important & valuable possession for Residential area. This area is developed day by day.
4.	**Persons accompanied during Visit:**	
	a. Investment Client/Representative of Investment Client	Sumaiya Aktar Alias Mukta Begum
	b. Owner(s)/Mortgagor(s) of the Properties	Sumaiya Aktar Alias Mukta Begum
	c. Any other Person(s) (Name, Father's Name & Address)	i). Engr. Khalil Sarker S/O. Moharam Ali Sarkar House # 5, Road # 4, Ward # 50, Maddah Azampur, Muslimpara, Dakkhin Khan, Dhaka. Mob: 01916712637.
		ii). Md. Moshi Ullah Khan, S/O. Late Abdur Rab Vill- Dakhinkhan, Post- Dakhinkhan, P.S- Dakhinkhan, Dist- Dhaka. Mobile: 01711196190.

D. <u>Particulars of Survey & Valuation:</u>

I. Land:

Sl.	**Particulars of the land and/or building mortgaged/to be mortgaged**	
1.	**Owner's/Mortgagor's information.**	
	a. Name	**Sumaiya Aktar Alias Mukta Begum**
	b. Husband's Name	Md. Shaidul Islam
	b. Father's Name	Md. Younus Miah
	c. Mother's Name	Renu Akter
	d. Present Address	Holding # 350, Sangrami Sarani Road, Madda Azampur, Dakkhinkhan, Dhaka.
	e. Permanent Address	Vill-Sonar Char, Post-Hazirhat, P.S-Monpura, Dist-Bhola.
	f. National ID Card No.	0916523507931.
	g. Relationship with the Investment Client	Himself
2.	Type (whether ditch/agricultural land/housing/commercial land etc.)	
	a. As per deed	Residential
	b. As per Physical verification	Residential
	c. Description of approach road/alongside road:	20'-0" Wide Road

3.	a	Municipal Holding Number		Holding # 305, Sangrami Sarani Road,
	b	District		Dhaka
	c	P.S		Dakkhinkhan
	d	SRO		Badda
	e	J.L No		C.S-197, S.A-15, R.S-3, Dhaka city Jarip-15,
	f	Mouza		Purakoir
	g	Khatian No.		C.S-50, S.A-75, R.S-38, Dhaka city Jarip-578, Mutation-2579, Jote No-112/2.
	h	Plot No.		C.S & S.A-77, R.S-263, Dhaka City Jarip-1264.
	i	Area of the Land	i. as per original Deed	9.21 Decimal
			ii. Actual Possession	9.21 Decimal
4.	Location of the land or building (Identification certificate to be furnished enclosing therewith Site Plan, Mouza Map and Photograph of land and building along with the owners/mortgagors, concerned investment client and branch officials.)			Location map and photograph are attached below.
5.	Whether the Land or Building are free from any acquisition plan of any competent authority.			Free hold property.

sl.	Particulars of the land and/or building mortgaged/to be mortgaged.		Schedule
6.	Importance of the location		The Reported property is situated at about 18.00 Km From GPO, Dhaka & 1.00 Km From IBBL, Uttara Branch, Dhaka.
7.	Boundaries (Chowhoaddi) specially mentioning the availability of access road with particulars including ownership of the road.		North : Road South : Ahammed Ullah Badal & Abdul Awal Gong East : Road & Md. Hasan Miah Gong West : Md. Azizur Rahman Shibu Khan
8.	Legal aspects of the property (encumbered/freehold, etc.)		According to the information it is a free Hold property
9.	Possibilities of future improvement or future disadvantage factors		The properties of at that are as are developing day by day.
10	Unit Price/ Value of Land	a. Market Rate	**Tk. 37, 50,000.00 per Decimal.**
		b. Mouza Rate	Tk. 14, 11,800.00 Per Decimal.
11	Value assessed:		

	a. Present Value	i. As per Market Rate	**Tk. 3,45, 37,500.00** [In word: Three Crore Forty Five Lac Thirty Seven Thousand & Five Hundred only.]
		ii. As per Mouza Rate	**Tk. 1,30,02,678.00** [In word: One Crore Thirty Lac Two Thousand Six Hundred & Seventy Eight only.]
		iii. Forced Sale Value	**Tk. 2,76,30,000.00** [In word: Two Crore Seventy Six lac & Thirty Thousand only.]
	b. Value at the time of Mortgage (if mortgaged earlier)	i. As per Market Rate	N/A
		ii. As per Mouza Rate	N/A
		iii. Forced Sale Value	N/A

12.	**Setback Distance**		Approval Authority	Actual
		Road	20′-0″	17′-0″
		Front	4′-0″ North Side	4′-0″ North Side
		Back	9′-0″ South Side	6′-0″ South Side
		Right	9′-6″ East Side	9′-6″ East Side
		Left	5′-0″ West Side	4′-0″ West Side

E. Valuation of Construction / Building / Structure

II. Building:

01.	**Technical details construction/Structure:**				
	a. Plinth Area of building (as per approved plan)		i. Length (Meter/Feet)	ii. Width (Meter/Feet)	iii. Plinth Area (Meter/Feet)
					2490 sft
	b. Total Floor Area up to completed construction:		i. Nos of storied	ii. Floor to floor height	iii. Total Height of the building
	(Gr. Floor-2490 sft+1st Floor-1871 sft+2nd Floor-1871 sft = **6232 sft**		3 Storied building.	10′-00″	32′-00″
2.	**Structural system**				
	a.	Type of foundation (as per approval of competent authority)	To investigate the working plan discus with Engineering in charge and basis of the observation of whole building it is said that there are pile of foundation laid here. 1. Footing foundation 2. RCC foundation		
	b.	Type of Building(Residential or commercial) purpose	Residential area		

	c.	Type of Finishing: (Standard/Super/Superior)		Standard
03.	Gas/ Water/ Electricity supply system:			1. Gas is available in this area. 2. Water supply is available from Dhaka. 3. Electricity supply system from DESCO also available
04.	Boundary wall, water reservoir and other structure:			1. Boundary wall is available in this area. 2. Water reservoir is available. 3. Others facility available.
05.	Year of construction			2022 Under Construction.
06.	Description of foundation			9 (Nine) storied & RCC frame structure building
07.	Value of Building & civil works			
	a.	Civil works and other facilities at accost price	i. Building	Tk. 1250.00 Per sft
			ii. Boundary wall and others structures	-
			Sub-Total	-
	b.	Others cost	i. Sanitary/Plumbing	-
			ii. Electrification	-
			Sub-Total	-
	Total Cost (a+b)			
08.	Year of completion of construction			2022
09.	Less Depreciation (Straight Line Method @ 2.50% per annum)			
10.	Present Market Value			Tk.77,90,000.00
11.	Forced Sale Value			Tk.62,32,000.00

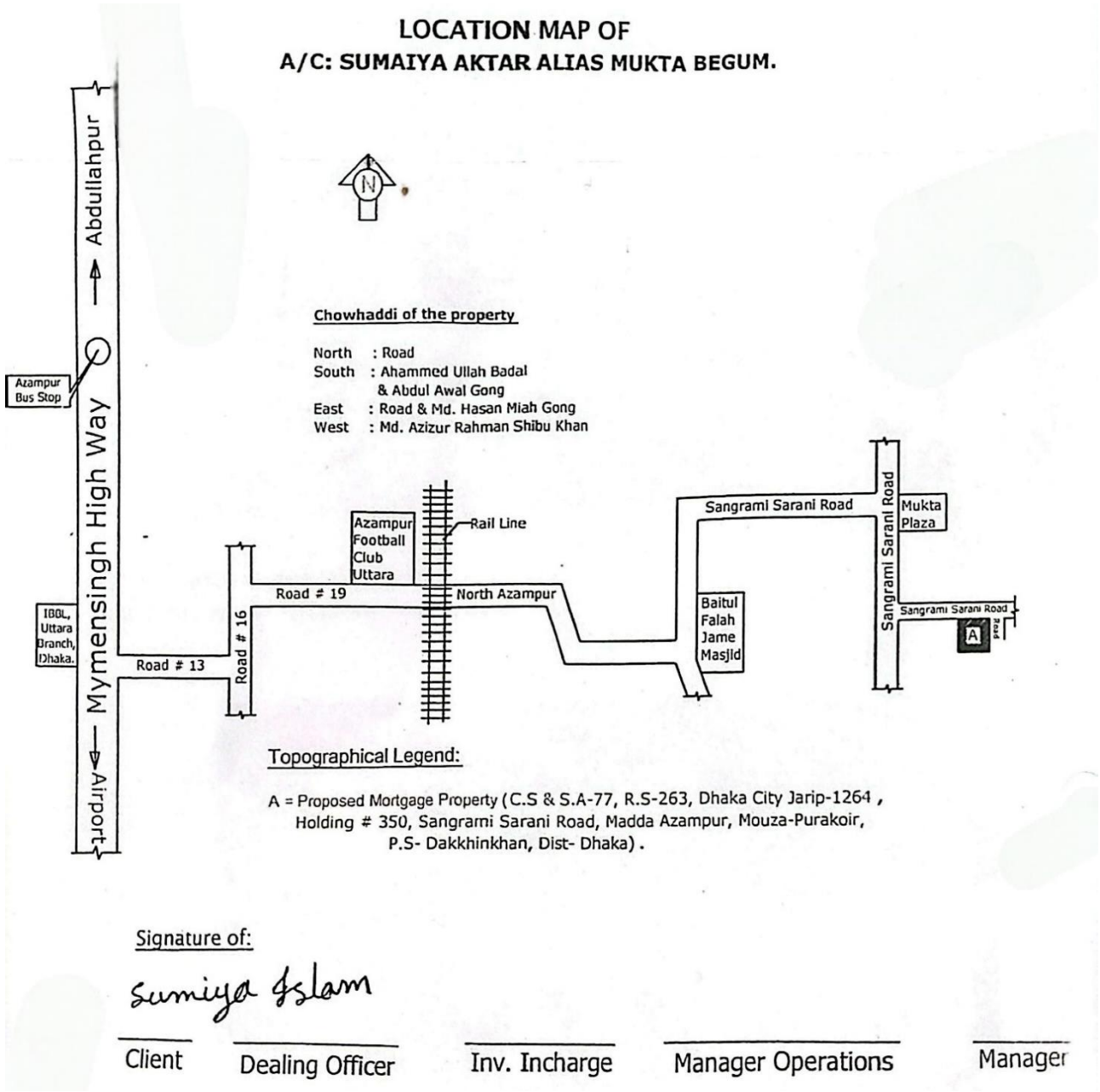
F. SUMMARY OF PRESENT VALUATION:

Sl.	**Particulars**	
1.	**Market Value**	
	i. Land	Tk. 3,45,37,500.00
	ii. Building	Tk. 77,90,000.00
	iii. Machinery	-
	iv. Pledged Goods	-
	Total	Tk. 4, 23,27,500.00
	Grand Total of Market Value	**Tk. 4, 23,27,500.00**
2.	**Forced Sale Value (20% Less)**	
	i. Land	Tk. 2,76,30,000.00
	ii. Building	Tk. 62,32,000.00
	iii. Machinery	-
	iv. Pledged Goods	-
	Total	Tk. 3,38,62,000.00
	Grand Total of Forced Sale Value	**Tk. 3,38,62,000.00**
3.	**Value as Eligible Securities (50% Less)**	
	i. Land	Tk. 1,72,68,750.00
	ii. Building	Tk. 38,95,000.00

	iii. Machinery	N/A
	iv. Pledged Goods	N/A
	Total	Tk. 2,11,63,750.00
	Grand Total Value	**Tk. 2,11,63,750.00**

SOME PHOTOGRAPHS ARE PRESENTED

A/C. Sumaiya Aktar Alias Mukta Begum.



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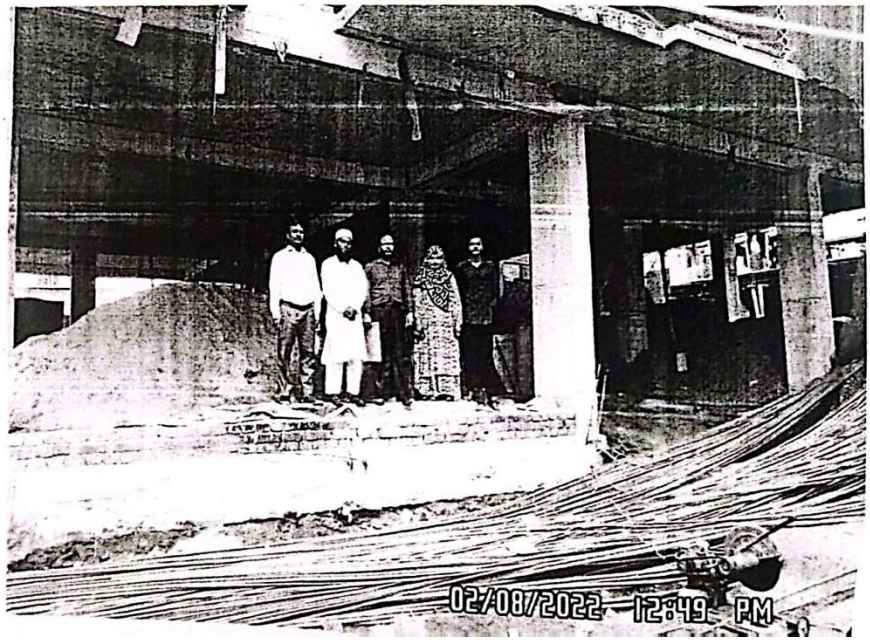

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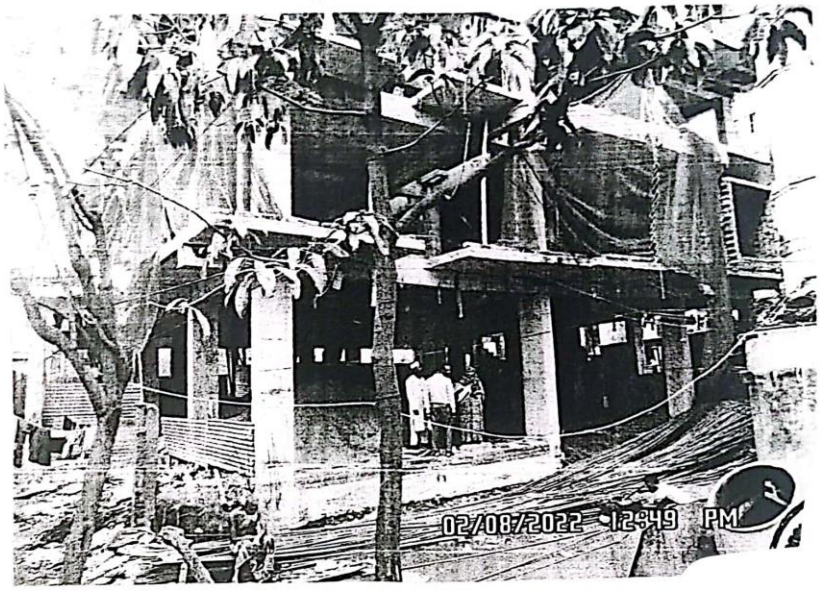

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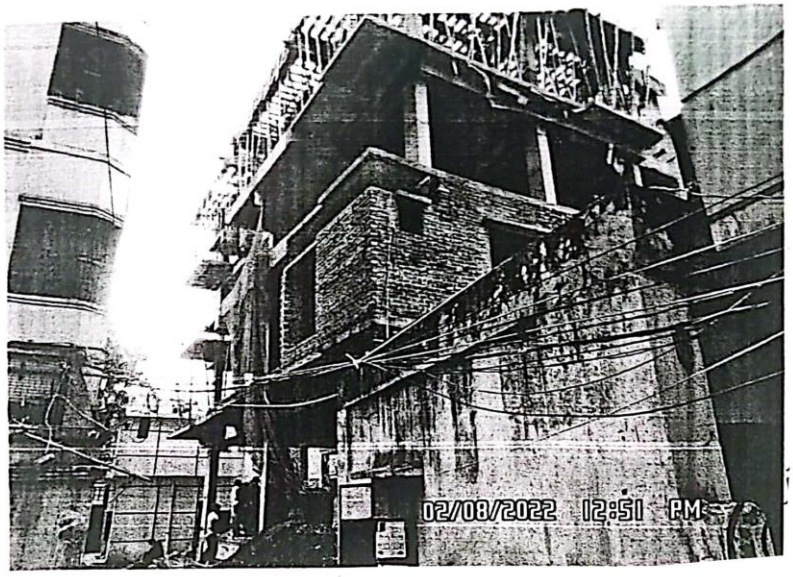

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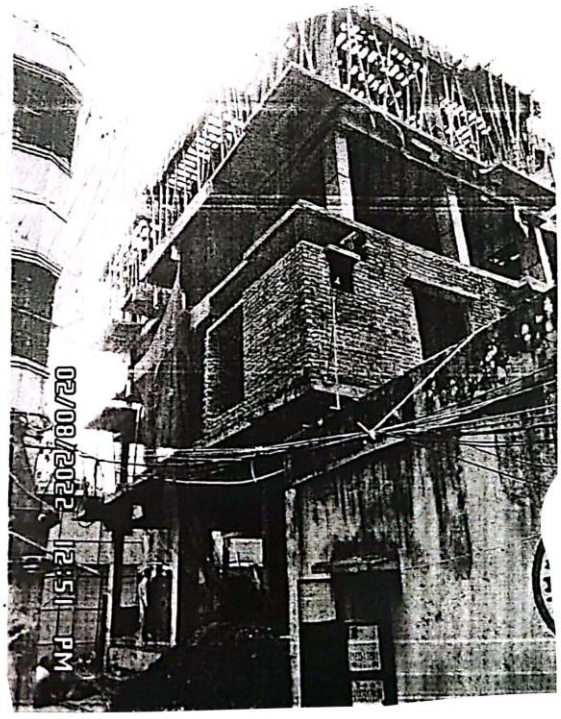

CHAPTER 5

Conclusion and Recommendation

5.1 Conclusion

This report presents a comprehensive valuation of a three-storied residential property located in Dakkhinkhan, Dhaka. The objective was to provide an accurate assessment of the market value, forced sale value, and eligible security value of the property. The valuation was carried out using three main approaches: the cost approach, the market comparison approach, and the income approach. Key findings include:

- **Structural Assessment**: The building has a plinth area of 2490 square feet, with a total floor area of 6232 square feet. It is constructed using an RCC frame and pile foundation, ensuring long-term stability.
- **Utilities**: Essential utilities such as gas, water, and electricity are readily available, which increases the property's overall marketability.
- **Market Comparison**: The total market value was estimated at Tk. 4,23,27,500 based on comparable properties in the Dakkhinkhan area.
- **Depreciation**: A straight-line depreciation method was applied to account for the building's age, though the impact was minimal due to its recent construction (2022).
- **Valuation Results**: The forced sale value was calculated as Tk. 3,38,62,000, and the value as eligible security was determined to be Tk. 2,11,63,750.

The detailed analysis ensured that the valuation process was transparent, thorough, and reflected the current market dynamics. The findings indicate that the property holds substantial value, both for mortgage security purposes and in terms of its potential as a residential investment.

The valuation of the property was carried out with the objective of determining its worth in the context of mortgage and security requirements. The property was assessed using multiple valuation methods to ensure accuracy and reliability in the final value. The results showed that the property is a viable asset with significant value, both in terms of its market worth and its potential in the forced sale market.

- The **cost approach** provided an estimate based on the construction costs, highlighting the building's structural and material quality.
- The **market comparison approach** delivered the most comprehensive valuation, incorporating current real estate market trends and prices for comparable properties.
- The **income approach** suggested that the property could generate a substantial rental income, making it a potentially lucrative investment for residential purposes.

The final market value of Tk. 4,23,27,500 reflects the building's favorable location, solid construction, and availability of utilities, all of which contribute to its overall desirability. The forced sale and eligible security values also indicate that the property would remain a strong asset even under less favorable conditions.

5.2 Recommendations

Based on the findings of this report, several recommendations can be made for potential buyers, financial institutions, and future researchers:

1. **For Buyers**: The property offers substantial market value and could be a sound investment for individuals or families looking for residential space in a developing area. The RCC frame and pile foundation ensure structural integrity, while the availability of essential utilities adds convenience.
2. **For Financial Institutions**: Given the property's solid market value and secure construction, it is a reliable asset for mortgage financing. The forced sale value indicates that, even in a distressed sale scenario, the property would retain significant value, making it a low-risk option for lenders.
3. **For Investors**: The income approach shows that the property could generate stable rental income due to its location and size. Investors seeking long-term returns through rental income could consider this property as a high-potential option.
4. **Further Structural Enhancements**: To enhance the property's future value, minor improvements in finishing quality or landscaping could be considered. These enhancements would likely increase both the market value and rental potential.
5. **For Aspiring Valuation Practitioners:**

   (i) Understand the Basics: Familiarize yourself with key valuation approaches, including the cost, market comparison, and income methods. Each has unique applications and insights.
   (ii) Conduct Detailed Field Surveys: Develop skills to measure and document property dimensions, assess structural conditions, and evaluate amenities thoroughly.
   (iii) Legal and Market Research: Learn to analyze market trends and verify legal documents, such as land ownership and permits, as these significantly affect property value.
   (iv) Depreciation Calculations: Practice applying methods like the Straight-Line Method to account for wear and tear or market changes affecting older properties.
   (v) Report Preparation: Focus on crafting clear and structured reports that include both technical analysis and practical recommendations. This skill is crucial for conveying findings to stakeholders.
   (vi) Continuous Learning: Stay updated on local regulations, market dynamics, and emerging valuation techniques to enhance your expertise and credibility in property valuation.

5.3 Implications for Future

This valuation study offers a framework for future property assessments, but several areas could benefit from further investigation:

1. **Comparative Market Studies**: As Dakkhinkhan is a developing area, the real estate market is likely to evolve over time. Future studies could compare the property's value against newly developed areas to assess trends in market appreciation.

2. **Sustainability Considerations**: Given the increasing importance of sustainability in real estate, future research could explore the environmental impact of the construction and utility systems in similar properties. This would help buyers and investors assess the long-term viability of properties from both an environmental and financial perspective.
3. **Technological Integration in Valuation**: As property valuation tools and technologies advance, integrating AI-based or GIS-based systems into the valuation process could offer more dynamic and real-time valuation results. Future research could focus on how such technologies might be implemented in property assessments like this one.
4. **Depreciation Models**: This report applied the straight-line method of depreciation. Future studies could examine alternative depreciation methods, such as the diminishing value method, to explore their impact on the final valuation.

The analysis presented in this report provides a thorough valuation of the residential property located in Dakkhinkhan, Dhaka. The property's structure, utilities, and market context contribute significantly to its market value, making it a strong asset for potential buyers and financial institutions alike. Through the application of multiple valuation methods, a well-rounded and accurate estimate of the property's value was achieved. Future research in this area could expand on the findings by incorporating evolving market trends, sustainability factors, and advanced technological tools.

REFERENCES

[1] Bangladesh Bureau of Statistics, *Bangladesh Population and Housing Census 2022: Dhaka District Report*, 2022.

[2] Bangladesh National Building Code, *Bangladesh National Building Code 2020*. Dhaka: BNBC, 2020.

[3] Institute of Architects Bangladesh, *Urban Planning and Real Estate Development in Dhaka*, 2019.

[4] Aluko, B. T. (2011). Understanding the dynamics of property valuation: An integrated perspective. Journal of Property Investment & Finance, 29(2), 124-139.

[5] Isaac, A., & Ofori-Agyeman, E. (2018). The role of property valuation in banking and mortgage financing. International Journal of Real Estate Studies, 12(3), 67-82.

[6] Fanning, S. F., Grissom, T. V., & Pearson, T. D. (2014). Market analysis for real estate: Concepts and applications in valuation and highest and best use. Appraisal Institute.

[7] Bowman, A. O., & Pagano, M. A. (2015). Urban land use and market forces: Challenges in the valuation of older properties. Journal of Urban Economics, 87, 25-38.

[8] Chowdhury, M. I., & Hasan, S. R. (2020). Impact of regional differences on property valuation in Bangladesh: A case study of Dhaka. Bangladesh Journal of Urban Development, 12(4), 45–58.

[9] Rahman, M. S., Kabir, R., & Ahmed, T. (2019). Urbanization and its effects on property valuation: A case study of Dhaka. Journal of Real Estate and Urban Studies, 8(2), 23–36.

[10] Begum, S., & Islam, N. (2017). Impact of government regulations on property valuation in Bangladesh. Journal of Property and Infrastructure Studies, 5(1), 45–57.