

related hazard scenarios to reduce the likelihood of accidents during underground construction or operation; (ii) Implement geotechnical surveillance at different stages of urban underground projects, especially during construction and (iii) Complete legal instruments and regulations on risk management, risk control regulations, management

plans, and related technologies in urban underwater construction. Since then, it has contributed to addressing some of the constraints encountered in unifying policies and regulations on the implementation and exploitation of urban underground buildings in future Vietnamese municipalities./

References

- Ministry of Construction (2009), *Urban Underground Development in Vietnam*, Electronic Portal Construction, 2009, <https://moc.gov.vn/>, published on October 7th, 2009.
- Nhan Dan Online Magazine (2024), *Vietnam's urban system develops strongly in quantity and quality*, Nhan Dan Online Magazine, 2024, <https://nhandan.vn/>, published on January 19th, 2024
- Giang Nguyen Cong, Truong Nguyen Huy, Lan Bui Thi Ngoc, and Xuan Nguyen Phuc (2024), *Risk management in Urban underground construction*, Construction Publisher, published in April 2024.
- Debasis Sarkar, Goutam Dutta (2011), *A Framework of Project Risk Management for the Underground Corridor Construction of Metro Rail*, Indian institute of management, Ahmedabad-380 015, India, published in February 2011
- A.P.F.Bourget, E.Chiriotti, E.Patrinieri (2019), *Evolution of risk management during an underground project's life cycle*, *Tunnels and Underground Cities: Engineering and Innovation meet*

- Archaeology, Architecture and Art – Peila, Viggiani & Celestino (Eds), Taylor & Francis Group, London, ISBN 978-1-138-38865-9, 2019
- Heinz Ehrbar (2024), *Project risk management in underground construction*, German Committee for Underground Construction, 2024, published on March 20th, 2024
- Lebedev Mikhail, Romanevich Kirill (2022), *Risk management in the development of underground space in Russian cities*, RT&A, Special Issue № 4 (70) Volume 17, November 2022
- Qihu Qian and Peng Li (2016), *Safety risk management of underground engineering in China: Progress, challenges and strategies*, *Journal of Rock Mechanics and Geotechnical Engineering*, doi: 10.1016/j.jrmge.2016.04.001
- Nhan Dan Online Magazine (2022), *Hanoi publishes draft underground space planning*, Nhan Dan Online Magazine, 2022, <https://nhandan.vn/>, published on April 12, 2022.
- Minh Quan (2024), *Expanding the Underground Space in the Center of HCM*, Online Labour Newspapers, 2024, <https://laodong.vn/>, published on January 24, 2024.

Some safety issues in construction of climbing formwork system...

(tiếp theo trang 60)

attention and level of control to each one. The risk is the chance that somebody could be harmed by these hazards, as well as the potential severity of harm.

Implement measures to control risk

The greatest risk should be addressed first. If you cannot eliminate a risk, you'll need to implement control measures to minimize it. The hierarchy of controls can help you select and implement more effective measures to control risks.

Communicate

Make sure everyone is aware of your risk management program. Provide managers, supervisors, and workers with orientation and training on how to identify hazards and what to do to control the risks. Document and share your safe work procedures and policies with workers.

Monitor and update

Monitor the effectiveness of the control measures in place and improve those that are not working as intended. Look for new or changing hazards and risks when you

conduct your regular safety inspections, and make sure you are observing and supervising work activities that have a higher level of risk.

Partner Collaboration and Government:

Establish a collaborative environment among stakeholders including contractors, engineers, project managers, and government agencies. Effective collaboration ensures compliance with safety regulations and standards, as well as optimizing construction processes and project management.

Conclusion and Future Directions:

In the future, continued research and development of new safety solutions are essential to ensure the safety of workers and the construction efficiency of high-rise buildings. Risk management and safety training will also play a crucial role in promoting progress and development in the construction industry in the future./

References

- QCVN 18: 2021/BXD - *National Technical Regulation on Safety in Construction*.
- TCVN 13662:2023 *Scaffolding - Safety requirements*
- TCVN 5308:1991 *Code of Practice for building safety technique*
- (United States): OSHA Standard 1926 Subpart L: *Safety and Health Regulations for Construction - Scaffolds*.

- Nhật Bản: JIS A 8961: *Japanese Industrial Standard for Construction Work - General Rules for Scaffolds*.
- (European Union): EN 12810-1:2018: *Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design*.
- EN 12811-1:2003: *Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design*.
- EN 12812:2019: *Temporary works equipment - Requirements and test methods - Prefabricated scaffolds*.

Social housing for workers and laborers in Ha Long city: status quo and solutions

To Thi Huong Quynh¹, Vu Phuong Ngan^{2*}



Abstract

Ha Long City, the administrative, political, cultural, commercial, tourism, and service center of Quang Ninh Province, is experiencing rapid growth and urbanization, attracting many investors to implement projects that transform both urban and rural landscapes. However, in contrast to this development, many disadvantaged groups in society, such as workers and low-income laborers, are facing difficulties in accessing housing projects. Recently, housing for these groups has not received adequate attention, and efforts to support the implementation of social housing projects and attract high-quality human resources are still facing many challenges. This study investigates the current state of social housing for workers and laborers in Ha Long City. Based on the findings, the authors propose several solutions to help address the existing shortcomings in the development of social housing in Ha Long.

Key words: social housing, workers, low-income laborers, Ha Long

1. Introduction

Housing is a construction project aimed at providing living spaces to meet the residential needs of families and individuals. It serves as a place for the reproduction of labor and the development of human resources. Addressing housing issues effectively contributes to social welfare, as housing needs are a top priority for households, especially for those seeking to improve their living conditions. In recent years, the Party and the State have placed significant emphasis on housing development, affirming that "Housing development is one of the crucial aspects of socio-economic development policy"[1].

Ha Long City boasts favorable conditions such as geographic location, land, mineral resources, and tourism. Coupled with decisive leadership and direction from the party committees and authorities at all levels, the city has achieved remarkable socio-economic growth. Alongside this growth, the demand for housing from residents, workers, and investors has increased significantly. In response, numerous commercial housing projects and new urban areas have been implemented and established, such as the Vu Dung Urban Area, Cao Xanh - Ha Khanh A, B, C Urban Area, Lan Be - Column 8 Urban Area, Hung Thang Urban Area, Staff and Worker Housing in Thong Nhat Commune, and the Residential Area in Cho Village, Thong Nhat Commune. This has led to the phenomenon of "hot development" of commercial housing projects and urban areas. However, this development contrasts with the fact that many disadvantaged groups (such as workers in concentrated industrial zones and coal industry workers) find it difficult to access commercial housing projects and new urban areas. To address this, Quang Ninh Province has simultaneously approved the Housing Development Program until 2030 [2], and the Housing Development Plan until 2025[3]for the entire province. The province is also researching and developing a proposal to build housing for workers, laborers in the coal industry and industrial zones, and attract high-quality human resources and skilled workers to live and work in Quang Ninh. Despite these efforts, the implementation of social housing projects has faced significant challenges. Therefore, the authors believe that studying the current state of social housing projects in Ha Long City is crucial to identifying the limitations and obstacles hindering their implementation. Based on this research, the authors propose several measures to promote the development of this type of housing.

2. Status quo and Limitations in Developing Social Housing for workers and laborers in Ha Long City

2.1 Status quo of social housing, housing for workers and laborers

In recent years, the workforce migrating to Ha Long City for living and working has been on the rise. Safe, stable, and long-term housing is essential for workers to focus on their jobs and maximize productivity. Among these groups, special attention needs to be paid to workers in key economic sectors, such as those in the coal industry, industrial zone workers, high-quality labor, low-income urban workers, service-tourism workers, and policy beneficiaries facing housing difficulties.

As of now, in the total number of social housing development projects for workers approved in the Social Housing Development Plan in Ha Long City for the 2015-2020 period according to Decision No. 2003/QĐ-UBND [4], only one project (a 5-story apartment complex in Cao Xanh Ward by Hon Gai Coal Company) has commenced construction but is not yet completed (one 5-story block remains unfinished). One project is in the preparation stage (the trade union facilities project on Thuy San Hill, Bai Chay Ward, Ha Long City - converted from a social housing project at plot N0 in Thuy San Hill Villa Area, Bai Chay Ward); one project has not

⁽¹⁾ Faculty of Construction Economics and Management, Hanoi University of Civil Engineering

^(2*) Faculty of Urban Management, Hanoi Architectural University, Email: nganvp@hau.edu.vn Tel: 097 5659 357

Table 1. Social Housing Projects by 2025 for Industrial Workers and laborers[5]

No	Project	Investor	Project scale					Implementation status; expected progress	Total investment (billion VND)
			Total project area (ha)	Residential land area (m2)	Number of land plots	Number of apartment	Total floor area (m2)		
1	Trade Union Facilities Project on Thuy San Hill, Bai Chay Ward	Vietnam General Confederation of Labour	1,20	10.668	0	912	78.985,3	Estimated implementation progress: - Construction start: III/2024; - Completion and put into use: III/2027	634,6
2	Coal industry apartment complex - Hon Gai Coal Company Limited, Cao Xanh ward	Hon Gai Coal Company Limited	1,57	15.700	0	86	7.283	Completed 2 5-story apartment buildings, with 1 5-story apartment building undergoing investment preparation; Expected progress: - Start construction: I/2024; - Completion: IV/2024	53,7
3	Housing for Underground Miners of Nui Beo Coal JSC, Ha Tu Ward	Nui Beo Coal JSC	0,55	1.683,2	0	160	11.782,4	Detailed planning adjustment is being prepared; Estimated implementation progress: - Construction start: IV/2024; - Completion: IV/2026	67,3
4	Social Housing Project in Ha Trung Ward	Not yet	6,61	20.429	192	194	57.902,5	Proposing to adjust the detailed planning; Estimated implementation progress: - Construction start: I/2025; - Completion: I/2027	452,3
5	Ha Lam Coal Company Workers Housing Project, Ha Lam Ward	Ha Lam Coal Joint Stock Company	0,37	3.738	0	118	11.040	Investment policy approval is in progress; Estimated implementation progress: - Construction start: II/2024; - Completion: II/2026	186,8

yet had its detailed planning approved (the worker housing project in Viet Hung Industrial Zone); and three projects have been converted into urban areas, no longer including social housing (the worker village project in the coal industry urban area; the collective housing and family housing project in the coal industry urban area; the collective worker housing project in the coal industry urban area, Ha Khanh Ward) (Table 1).

Additionally, the allocation of 20% of residential land in urban and residential area projects in the city for social housing construction is being carried out as per regulations. Currently, the city has about 69 commercial housing development projects that have selected investors or had their projects approved, with an area of over 1.9 million square meters allocated for social housing development, of which 11 projects have been or are being implemented.

2.2. Difficulties and Limitations in Developing Social Housing for workers and laborers in Ha Long City

Although the government has created various mechanisms to develop social housing projects, especially in provinces and cities with many industrial zones and a large workforce, such as Ha Long City, the implementation has faced numerous difficulties and obstacles. Specifically:

- There are no legal regulations on policy mechanisms for developing housing for middle-income workers (who do not qualify for social housing support as they still have to pay personal income tax). Still, these individuals also cannot afford to buy commercial housing at market prices.

- Although there is a mechanism to support investment in technical infrastructure within the project area for investors developing social housing in the province (according to legal regulations, the project investor is supported by the provincial People's Committee for all or part of the investment in technical infrastructure within the social housing project), the support (including methods, procedures, and documentation) still lacks specific guidance, confusing implementation.

- The sale of social housing has issues and is not suited to actual conditions: Buyers or lease-purchasers of social housing are not allowed to mortgage or transfer the property in any form for at least 5 years. When allowed to sell social housing to those in need, in addition to the necessary fees for selling the property, the seller must pay the government 50% of the allocated land use value for the apartment; in the case of selling low-rise social housing, 100% of the land use fee must be paid. If the social housing is sold within 5 years from the full payment, the buyer or lease-purchaser can only sell it back to the government, the project investor, or other eligible social housing buyers according to the Housing Law[6], [7], with the selling price capped at the cost of similar social housing at the same location and time, and without personal income tax. Thus, buying social housing is purely for living and does not effectively constitute an asset, making it less attractive to buyers.

- According to State regulations in Decree No. 49/2021/ND-CP[8], if the investors of commercial housing projects with a 20% land fund directly invest in social housing projects, these projects are not considered social housing projects. Therefore, they do not benefit from preferential policies such as allocating 20% of the land area for commercial purposes in social housing projects.

- Raising funds for developing social housing also faces difficulties due to the lack of government support (after

the end of the preferential loan package of 30 trillion VND, there is currently no mechanism to support funding for social housing project investors).

3. Proposed Solutions

Given the rapid economic and social development in Ha Long City, particularly with the strong growth of industrial zones and economic clusters attracting many large investors and businesses, the demand for housing, especially social housing, is expected to rise significantly. Recently, the Social Housing Project in the Banking Hill Residential Area of Hong Hai Ward and Cao Thang Ward, with a construction scale of over 25,900 m², a total investment of 1,361 billion VND, and 790 apartments, has entered the final stage of preparation for handover[9]. This project marks a new step in providing ideal living conditions for low-income workers in the province. To replicate such projects citywide, the authors propose several specific solutions as follows:

3.1. Solutions for Improving Policies and Laws on Social Housing

- The Current Housing Law does not allow enterprises or cooperatives to buy, lease, or lease-purchase social housing, even though there is a significant demand from businesses and cooperatives wanting to provide social housing for their employees. Therefore, regulations should be added to permit enterprises and cooperatives to purchase, lease, or lease-purchase social housing for their employees.

- According to the Housing Law, "In cases where social housing is built to accommodate workers in industrial zones, the infrastructure business or manufacturing enterprises in the industrial zone, or real estate businesses assigned by the State, shall be the project investors." However, this assignment is not in line with bidding regulations. Moreover, it is inconsistent with current investment and land laws. This issue has led to difficulties and delays in selecting project investors for social housing projects. Therefore, regulations should be issued to allow designated investors to manage social housing projects for workers, by public investment, investment, bidding, and land laws.

- Currently, social housing projects must allocate at least 20% of the area for rent, and the investor can only sell after 5 years. However, many projects cannot rent out this portion, leading to unused and wasted apartments while investors cannot sell them, hindering capital recovery and reducing investment attractiveness. To attract private investors, the selling time for the 20% rental area should be adjusted.

- Facilitate procedures related to investment, land, environment, fire protection, design appraisal, and construction permits; minimize the time for these procedures to encourage organizations and individuals to invest in social housing for workers. Enhance coordination among relevant units, review unfeasible projects, and address unauthorized construction.

- Strengthen inspection, supervision, and monitoring of housing development to ensure compliance with legal regulations on housing and construction. Monitor the disclosure of information about planning and housing development projects as required by law, and have penalties for investors providing false information for profit.

3.2. Solutions for Funding and Finance for Housing Development

- Encourage various economic sectors to use equity capital, bank loans, and legally raised funds to invest in

social housing construction. Provide incentives for investors in social housing projects, including exemptions from land use fees, VAT, corporate income tax reductions, access to preferential loans from policy banks and commercial credit institutions, and support for technical infrastructure investment within the project.

- Allocate budgetary funds for constructing state-owned social housing for eligible individuals, prioritizing high-quality human resources. Support partial investment in technical infrastructure within project boundaries. In the period leading up to 2025, allocate local budget plans for pilot social housing projects owned by the state in the city.

- Implement mechanisms for entrusting provincial and district budget funds to the provincial Social Policy Bank according to credit law to prioritize loans for public servants, employees, and workers needing social housing.

- Integrate housing support into central government programs to utilize government funds for housing construction and renovation for those with housing difficulties, concentrating resources to improve program efficiency.

- Through salary support policies, facilitate public sector employees to buy or lease social housing in the area.

3.3. Solutions for Science and Technology

- Encourage organizations and individuals to apply, design, construct, produce, and supply innovative building materials and technologies in housing development to

enhance technical and aesthetic quality, economic efficiency, and reduce costs.

- Prioritize investment projects using high-quality materials and technologies. Provide incentives for businesses to use locally available materials, energy-saving new materials, non-fired materials, and recycled materials. Promote the development of local branded building materials like Dat Viet bricks, Giếng Đáy tiles, Ha Long tiles, Dong Trieu bricks, Viglacera ceramics, and other premium finishing materials.

- Build a database on housing development and beneficiaries of social housing policies.

- Publicize housing information and real estate market data through media to ensure all interested parties can access information.

4. Conclusion

To implement the province's set goals, Ha Long City has focused on developing housing to attract high-quality human resources, skilled workers, and employees in economic and industrial zones. However, assessments reveal several issues with current regulations and policies in meeting the specific housing needs of workers, such as coal miners and high-quality human resources. To address these challenges and limitations, the authors propose solutions related to policy improvements, funding, and technological advancements to support housing for these groups and contribute to social welfare objectives in Ha Long City./.

Land fund for social housing development in hanoi city, current situation and challenges

Bui Quoc Thang^{1*}, Nguyễn Thị Trang²



Abstract

Social housing is a special concern of the Party, State and Hanoi City. Over the years; Housing laws are issued relatively fully and synchronously, creating a favorable legal corridor to promote housing development in general, including social housing. However, the urbanization process is taking place strongly, at a fast pace, with economic development leading to an increasing demand for housing in cities and urban areas. The demands for social housing are very large while the supply accounts for a low proportion of the total housing area built, so it cannot meet the actual demands. One of the reasons leading to this situation is that the land fund for social housing development is not consistent with reality. Therefore, research examining the current status quo, regulations on social housing development and considering planning orientation to find appropriate solutions will be important at the present time.

Key words: social housing, social housing for low-income people, social housing development in Hanoi, land fund for social housing in Hanoi

1. Overview of the current status of social housing development in Hanoi City

1.1. Guidelines and legal policies on social housing development in the previous period

The term "social housing fund" was first mentioned in the Prime Minister's Decision on housing development orientation to 2020, as "housing fund for sale in installments and for rent". Buy and rent for policy beneficiaries who have difficulty improving their accommodation [1]. When the 2005 Housing Law was promulgated and took effect, the term "social housing" was included in the law as a method of housing development and was completed in the 2014 Housing Law and Decrees, Guidance Circular.

From very early on, the City People's Committee and Hanoi People's Council have thoroughly grasped the Party and Government's instructions on the housing floor fund and land fund expected to develop social housing (Hanoi People's Committee has issued Regulations on management of social housing). Management of investment projects to renovate and construct housing areas and urban areas in Hanoi City [2-5]; the City People's Council has also issued regulations on the ratio of residential area and housing for housing development society in commercial housing development projects in new urban areas in Hanoi city) [6]...

However, going through many stages and times of applying regulations of different legal documents resulted in products that were not consistent and difficult in management (at times projects with Any scale must arrange a land fund and floor fund, but there are times when it is prescribed to arrange social housing funds according to scale (for example: Projects with a scale of 3000m² must be arranged, there are periods when it is stipulated that the project has If the scale is from 10 hectares, it must be arranged) but there is a period when projects under 10 hectares are allowed, payment in cash is allowed;...)

1.2. Overview of current status of social housing development programs and projects in Hanoi City

Implementing the National Housing Development Strategy for the period 2021-2030, with a vision to 2045, the directions of the Central Government, the Government, and the City People's Committee have approved the Hanoi Housing Development Program for the period 2021- 2030 [7]; Approval of Hanoi City's Housing Development Plan for the period 2021-2025 [8]. Hanoi City's Social Housing Development Plan for the period 2021-2025 [9].

On April 3, 2023, the Prime Minister approved the Project "Investment in building at least 01 million social housing apartments for low-income people and industrial park workers in the period 2021-2030" [10], in which Hanoi was assigned a target according to the Project: 56,200 units, of which 18,700 units in the period 2021-2025 and 37,500 units in the period 2026-2030.

Hanoi City has integrated the implementation of the Project with directing the implementation of Resolution No. 33/NQ-CP dated March 11, 2023 of the Government on a number of solutions to solve and promote the market. safe, healthy, sustainable real estate; Establish a special working group of the city to remove difficulties and obstacles and effectively support businesses and investors in the city.

2. Current status and challenges of land fund for social housing development.

2.1. About the goals for social housing development

Based on the targets in the City's Housing Development Program for the period 2021-2030 [7] to determine housing development goals for the period 2021 - 2025 [8]:

References

1. Government, "Decision No. 2161/QĐ-TTg of the Prime Minister: Approval of the National Housing Development Strategy for the period 2021 - 2030, with a vision to 2045," 2021. [Online]. Available: <https://doi.org/10.1016/j.solener.2019.02.027%0Ahttps://www.golder.com/insights/block-caving-a-viable-alternative/%0A???>
2. People's Committee of Quang Ninh Province, "Decision No. 3895/QĐ-UBND dated October 09, 2020, of the Provincial People's Committee on the approval of the Housing Development Program of Quang Ninh Province until 2030," 2020.
3. People's Committee of Quang Ninh Province, "Decision No. 998/QĐ-UBND dated April 02, 2021, of the Provincial People's Committee on the approval of the Housing Development Plan in Quang Ninh Province for the period 2021-2025," 2021.
4. People's Committee of Quang Ninh Province, "Decision 2003/QĐ-UBND Approval of the Social Housing Development Plan in Ha Long City, Quang Ninh Province for the period 2015-2020," 2015.
5. People's Committee of Ha Long City, "Draft Report on the Social Housing Development Project for Ha Long City citizens until 2025," 2023.
6. National Assembly, Law No. 27/2023/QH15 of the National Assembly: Housing Law, 2023.
7. National Assembly, Law No. 65/2014/QH13 of the National Assembly: Housing Law, 2014.
8. Government, "Decree No. 49/2021/NĐ-CP of the Government: Amending and supplementing a number of articles of Decree No. 100/2015/NĐ-CP dated October 20, 2015, of the Government on social housing development and management," 2021.
9. C. Quynh, "276 individuals and households have signed contracts to buy social housing in the Bank Hill area (Ha Long City)." Accessed: Jul. 26, 2024. [Online]. Available: <https://quangninh.gov.vn/chuyen-de/chu-de-nam/Trang/ChiTietTinTuc.aspx?nid=140067>

^(1*) Faculty of Urban Management, Department of Real Estate Management, Hanoi Architectural University
Email: thangbp@hau.edu.vn
Tel: 0903298145

⁽²⁾ Officer of the national Agency for Technology Entrepreneurship and Commercialization Development, Ministry of Science and Technology
Email: nguyentrang@most.gov.vn