

DETERMINANTS OF LICENSING EFFICIENCY IN SOCIAL HOUSING PROJECTS: EVIDENCE FROM BINH DUONG PROVINCE, VIETNAM

Quang Trung Nguyen¹, Quynh Chau Truong^{1*}, Quang Thanh Le²

¹*The University of Danang - University of Science and Technology, Vietnam*

²*Southern Construction Project Management Consulting JSC, Vietnam*

*Corresponding author: tqchau@dut.udn.vn

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Abstract - The development of social housing is essential to meet the needs of low-income populations in rapidly urbanizing areas. However, in Vietnam, project licensing remains hindered by institutional, administrative, and technical barriers. This study examines key factors influencing the licensing process of social housing projects in Binh Duong Province using a mixed-method approach, including literature review, expert consultation, and survey data from 129 professionals. Five main factor groups are identified: stakeholder coordination, legal framework, technical infrastructure, land-use planning, and developer capacity. The results show that governance-related factors, especially stakeholder coordination and legal systems, have a stronger impact on licensing efficiency than technical and financial aspects. The study proposes policy recommendations focusing on institutional reform, improved coordination, and planning alignment, contributing practical insights for policymakers to accelerate social housing development in Vietnam and similar contexts.

Key words - Social housing; project licensing; governance; stakeholder coordination; construction management; Vietnam

1. Introduction

In the context of capital construction investment projects, particularly in a period of rapid urbanization and industrialization in Vietnam, the demand for housing - especially among low-income groups and industrial park workers - has been increasing significantly. Social housing is considered one of the key policy instruments to ensure citizens' access to housing and to contribute to sustainable urban development. According to the 2014 Housing Law [1], social housing refers to a type of housing supported by the State through land allocation, financial assistance, and preferential policies, aimed at serving eligible groups such as low-income individuals, workers, and public officials. However, the implementation of social housing projects in many localities continues to face numerous challenges, particularly those related to land-use planning, administrative procedures, and the coordination mechanisms among relevant regulatory authorities.

Binh Duong Province (formerly) has been one of the fastest-growing industrial regions in Vietnam, characterized by a high concentration of industrial parks and a large influx of migrant workers. The demand for housing among workers in these industrial zones has been steadily increasing, particularly for social housing [2]. However, the implementation of social housing projects in

the province continues to face significant challenges, mainly due to barriers related to investment procedures, land allocation and planning, as well as institutional and policy constraints.

Despite increasing attention to social housing development, limited research has specifically examined the licensing and approval process at the local level, particularly from a governance perspective. Therefore, this study aims to fill this gap by identifying and analyzing the key factors influencing licensing efficiency for social housing projects in Binh Duong Province. The findings are expected to provide both theoretical insights and practical recommendations for improving project implementation in Vietnam.

The study examines key factors influencing the licensing process for social housing projects, including land-use planning, developer capacity, technical infrastructure, stakeholder coordination, and the legal-policy framework. It applies survey methods and quantitative analysis to evaluate the extent of their impacts. The findings are expected to inform policymakers in improving regulatory mechanisms and streamlining the licensing process, thereby supporting social housing development and meeting the housing needs of local workers.

2. Literature review

2.1. Social housing development in a global context

Numerous international studies have examined the factors influencing the development and implementation of social and affordable housing projects in the context of rapid urbanization. Rondinelli [3] highlight that sustainable housing development requires an integrated approach, combining effective urban planning, supportive policy frameworks, and strong coordination among stakeholders throughout the project lifecycle. Other studies emphasize the critical role of legal and housing policy systems in promoting the supply of social housing, particularly through financial support mechanisms, investment incentives, and land policies [4-5]. In addition, research on sustainable urban development indicates that technical infrastructure and connectivity to urban transport systems are key determinants of residents' quality of life in social housing areas, while also influencing the approval and implementation processes of housing projects at the local level.

Beyond planning and policy-related factors, recent studies have increasingly focused on barriers to the implementation of social housing policies at the local level. These studies indicate that social housing programs often face challenges related to project approval procedures, financial mechanisms, and coordination among regulatory agencies. Nana et al. [6] argue that local governments play a crucial role in delivering social housing projects, particularly in planning, developer selection, and project management.

Overall, existing studies highlight that social housing development is shaped by a combination of institutional, financial, and planning-related factors, with increasing emphasis on governance efficiency.

2.2. Social housing development in Vietnam

In Vietnam, numerous studies have explored issues related to social housing development in the context of rapid urbanization and the rising housing demand among low-income groups, particularly in highly industrialized regions. These studies mainly focus on aspects such as social housing policies, land allocation planning for social housing, and mechanisms to attract investors to participate in this sector. However, most existing studies focus on policy design and housing supply issues, while limited attention has been paid to the licensing process as a critical bottleneck in project implementation. This gap underscores the need for empirical research examining the determinants of licensing efficiency at the local level.

Several domestic studies indicate that the implementation of social housing projects often encounters significant challenges, particularly in procedures for investment policy approval, land-use planning, and investor selection mechanisms. Pham Duy Hieu [7] argues that promoting social housing development should be based on five key policy pillars: planning orientation, investment policy, land policy, financial and tax policy, and administrative reform. In addition, it is indicated that [8] the approval process for social housing projects in Hanoi takes an average of approximately 2.5 years, from the planning stage to the selection of a project developer, highlighting administrative procedures and approval processes as significant bottlenecks. Similarly, Ngo et al. [9] argues that inconsistencies in the legal framework governing land, investment, and construction have led to delays in land allocation and project licensing. Furthermore, Dinh et al. [10] identify multiple barriers to social housing development, including administrative constraints, limited financial resources, insufficient land availability, and the capacity of stakeholders involved in project implementation.

From the synthesis of both international and domestic studies, it can be observed that the factors influencing the licensing and implementation of social housing projects are generally grouped into several main categories. First, there are factors related to land-use planning, including land allocation and the integration of social housing into urban planning. Second, the capacity of project developers, particularly their ability to mobilize capital

and implement projects, plays a crucial role. Third, technical infrastructure conditions, including transportation systems and supporting urban services, are important. Fourth, coordination among stakeholders, including local authorities, investors, and regulatory agencies, is a significant factor. Finally, the legal and policy framework, including legal regulations, incentive mechanisms, and administrative procedures related to the licensing and implementation process, also has a major impact.

3. Research methodology

3.1. Research design

This study adopts a mixed-method research design, combining qualitative insights from literature and expert consultation with quantitative analysis of survey data. Figure 1 illustrates the research process for social housing projects, outlining the main steps from literature review and factor identification to data collection, analysis, and formulation of recommendations.

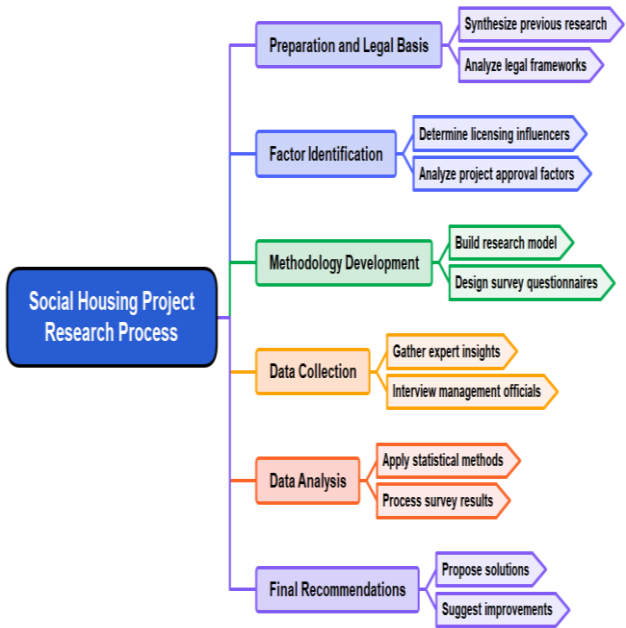


Figure 1. Research process of the study

3.2. Data collection and questionnaire design

Based on a review of previous studies, both domestic and international scholarly articles, as well as the 2025 report by the Ministry of Construction on the implementation of social housing projects nationwide [11], and expert consultations with professionals experienced in social housing development, a structured questionnaire was developed. The survey includes 23 factors influencing the licensing process for social housing projects in Vietnam, categorized into five main groups: land-use planning, project developers, technical infrastructure, stakeholder roles, and legal regulations. A five-point Likert scale was applied to assess the level of influence, ranging from 1 (no impact) to 5 (very strong impact).

Table 1. Factors influencing the licensing process for social housing projects in Binh Duong

No.	Criteria code	Evaluation criteria
I	QH	Land-use planning and allocation factors
1	QH1	Inappropriate land-use planning prolongs the project approval process.
2	QH2	Projects are often delayed due to misalignment with the timing of land-use plan issuance.
3	QH3	Inconsistencies in zoning and master planning create difficulties during the appraisal process.
4	QH4	Unclear land origin makes it difficult for projects to obtain approval.
5	QH5	Delays in updating housing development plans negatively affect the approval timeline.
II	CDT	Developer-related factors
6	CDT1	Project developers often fail to meet the required financial capacity.
7	CDT 2	Investment policy proposal documents are often incomplete and lack clear justification.
8	CDT 3	The demonstration of construction and real estate development capacity remains limited.
9	CDT 4	Low profit margins discourage investors from actively participating in social housing projects.
III	HTKT	Technical infrastructure factors
10	HTKT1	The lack of a wastewater drainage system prevents project approval.
11	HTKT2	Insufficient power supply prolongs the time required for agreements and project implementation.
12	HTKT3	Inadequate transportation infrastructure delays project approval.
13	HTKT4	Technical requirements related to clearance height limit the project scale.
14	HTKT5	The lack of water supply and stormwater drainage systems affects the approval feasibility of the project.
IV	BLQ	Stakeholder-related factors
15	BLQ1	Weak performance of consulting firms prolongs the document preparation process.
16	BLQ2	Coordination among relevant authorities is ineffective during the approval process.
17	BLQ3	Population assessment in the project area significantly influences the approval decision.
18	BLQ4	Lack of information sharing among agencies reduces the efficiency of the approval process.
V	PL	Legal and regulatory factors
19	PL1	The legal framework for social housing remains inconsistent and difficult to enforce.
20	PL2	The investment policy approval process is still complex and involves multiple intermediary steps.
21	PL3	Guidelines for implementation are unclear, creating difficulties for stakeholders.
22	PL4	Frequent policy changes affect investment decisions.
23	PL5	The lack of flexible mechanisms hinders the rapid implementation of social housing projects.

3.3. Data analysis methods

The data analysis process includes reliability testing using cronbach's alpha and descriptive statistical analysis based on mean values and standard deviations. These methods are employed to evaluate the internal consistency of measurement scales and to rank the relative importance of identified factors.

4. Results and discussion

4.1. Research sample size

The empirical rule for determining sample size in quantitative analysis requires the number of observations (sample size) to be at least 4 to 5 times the number of variables included in the analysis [12]. Therefore, the minimum number of samples needed for data collection ranges from 92 to 115, based on this rule for 23 observed variables. The survey ultimately received 129 valid responses, exceeding the minimum requirement of 115 samples, ensuring that the research results are reliable and accurate.

4.2. Sample characteristics

The statistical analysis of the survey sample indicates that the participants possess relevant professional qualifications and experience aligned with the research topic. Table 2 shows characteristics of survey respondents, including 129 participants with diverse educational backgrounds, organizational affiliations, and work experience. As seen in Table 2, most respondents hold at least a bachelor's degree (85%), indicating strong professional knowledge in construction and project management. The sample represents key stakeholders in social housing projects, including authorities (28%), project developers (26%), project management boards (18%), consulting firms (12%), contractors (9%), and residents (7%). Regarding experience, 84% of participants have at least three years in construction or project management, with 43% exceeding five years. This combination of expertise and stakeholder diversity ensures that the data are representative and reliable for analyzing factors influencing licensing and implementation of social housing projects.

Table 2. Characteristics of survey respondents

Characteris- tics	Categories	Frequency	Percentage (*%)
Education level	Intermediate	5	4
	College	14	11
	Bachelor	81	63
	Postgraduate	29	22
Organization type	Authorities	36	28
	Project developer	33	26
	Project manager	23	18
	Consultant	15	12
	Contractor	12	9
Work experience	Residents	9	7
	< 3 years	21	16
	3-<5 years	53	41
	≥ 5 years	55	43

4.3. Reliability analysis

To assess the reliability of the measurement scales in the research model, the study conducted a reliability test of the observed variables using cronbach’s alpha. This method is employed to determine the internal consistency among observed variables within the same factor group. Basically, a scale is considered reliable if the cronbach’s alpha coefficient is greater than 0.7 and the corrected item–total correlation of the observed variables is greater than 0.3 [13]. The results of the cronbach’s alpha test for the measurement scales in this study are presented in Table 3, providing a basis for screening suitable observed variables prior to conducting exploratory factor analysis (EFA) in the next step.

The reliability test results show that the cronbach’s alpha coefficients for all measurement scale groups are greater than 0.7, indicating good internal consistency among the observed variables within each factor group and meeting the reliability requirements of the scales. This suggests that the observed variables can reliably represent the research concepts and are suitable for further analysis. Based on this, the observed variables within each factor group were retained, and their mean values were calculated to represent each factor in the research model, providing a basis for assessing the influence of these factors on the licensing and implementation of social housing projects.

Table 3. Corrected item–total correlation of hypothesized factor groups

No.	Hypothesized factor group	Cronbach’s alpha coefficient
1	Land-use planning and allocation	0.788
2	Project developers	0.756
3	Technical infrastructure	0.913
4	Stakeholder roles	0.852
5	Legal and regulatory framework	0.828

4.4. Factor ranking

The study ranked the key factors based on their mean values. The analysis of these mean values indicates the relative influence of each factor on the licensing and implementation of social housing projects. Factors with higher mean values reflect a greater impact on the project implementation process, highlighting aspects considered important by the survey participants in practice. Conversely, factors with lower mean values indicate a relatively smaller influence or are given less attention during project implementation.

Table 4. Ranking of key factors

Factor Group	Mean Value	Standard Deviation	Rank
Stakeholder roles	4.09	0.677	1
Legal and regulatory framework	3.86	0.567	2
Technical infrastructure	3.80	0.813	3
Land-use planning and allocation	3.75	0.575	4
Project developers	3.65	0.637	5

The analysis of mean values and standard deviations indicates varying levels of influence among factor groups affecting the licensing and implementation of social housing projects. Stakeholder-related factors have the highest impact (Mean = 4.09; SD = 0.677), with strong agreement among respondents, underscoring the critical role of coordination among government agencies, developers, and consultants in improving procedural efficiency. This finding is consistent with prior studies emphasizing stakeholder coordination as a key determinant of project performance [6], [10].

The legal and regulatory framework ranks second (Mean = 3.86; SD = 0.567), highlighting the importance of clear, transparent, and consistent policies in facilitating project approval processes. This aligns with international literature identifying institutional and administrative barriers as major constraints on social housing development [14].

Technical infrastructure (Mean = 3.80) and land-use planning (Mean = 3.75) follow, indicating that infrastructure availability and effective land allocation significantly influence project feasibility and implementation. These results are consistent with studies stressing the importance of location and urban integration in affordable housing development [5].

Although ranked lowest, the project developer factor group (Mean = 3.65) remains significant, reflecting the role of financial capacity and managerial competence in project execution.

Overall, the findings suggest that institutional, legal, and coordination factors exert a stronger influence than technical and developer-related aspects, highlighting their decisive role in determining the efficiency and progress of social housing projects

4.5. Policy implications and strategic solutions

Based on the empirical findings, this study proposes a structured policy framework to improve the efficiency of the licensing process for social housing projects. The framework is developed following a systemic governance perspective, recognizing that licensing inefficiencies arise from the interaction between institutional structures, coordination mechanisms, and planning conditions. Accordingly, policy implications are organized into three interrelated pillars: (i) institutional and legal reform, (ii) governance and coordination enhancement, and (iii) planning and infrastructure alignment.

4.5.1. Institutional and legal reform

Given that legal and regulatory factors are identified as one of the most influential groups, improving the coherence and transparency of the legal framework is a critical priority. The findings suggest that inconsistencies among laws related to land, investment, housing, and construction significantly prolong the licensing process by increasing administrative complexity and uncertainty.

First, it is essential to harmonize overlapping legal provisions governing social housing development. This can be achieved through the development of integrated regulatory guidelines that clarify the relationships and

sequencing between relevant laws, thereby reducing ambiguity during project appraisal and approval stages.

Second, administrative procedures should be standardized and simplified, particularly for social housing projects. Establishing a unified and transparent licensing procedure with clearly defined timelines for each approval step would enhance predictability for investors and reduce procedural delays.

Third, a dedicated legal framework or fast-track mechanism for social housing projects should be considered. Given the social importance of this housing segment, differentiated regulatory treatment - such as reduced procedural steps or prioritized review - could significantly accelerate project implementation while maintaining regulatory oversight.

4.5.2. Governance and stakeholder coordination enhancement

As stakeholder-related factors are ranked as the most influential, improving coordination mechanisms among relevant actors is the most critical intervention area. The results indicate that fragmented responsibilities and ineffective inter-agency collaboration are key sources of delay in the licensing process.

A primary solution is to establish a “one-stop-shop” (single-window) mechanism for social housing project licensing. Under this model, a single lead agency would be responsible for receiving, coordinating, and processing all project-related applications, thereby minimizing the need for investors to interact with multiple authorities. This approach can significantly reduce transaction costs and eliminate redundant procedures.

In addition, it is necessary to assign clear institutional responsibilities and accountability among stakeholders. Defining a lead coordinating authority for each project, with explicit responsibility for managing timelines and inter-agency communication, would improve process efficiency and reduce delays caused by overlapping mandates.

The adoption of digital governance tools is also recommended to enhance transparency and coordination. Developing an integrated digital platform for application submission, tracking, and inter-agency communication would allow stakeholders to monitor progress in real time, reduce information asymmetry, and improve administrative accountability.

Furthermore, implementing performance-based evaluation mechanisms for public agencies involved in project licensing - such as key performance indicators (KPIs) linked to processing time - can incentivize more efficient administrative behavior.

4.5.3. Planning and infrastructure alignment

Although ranked lower than governance and legal factors, planning and infrastructure conditions remain essential determinants of project feasibility and approval outcomes. The findings suggest that misalignment between social housing projects and urban planning frameworks, as

well as inadequate technical infrastructure, can create significant barriers during the licensing process.

To address this issue, local authorities should proactively integrate social housing into urban and land-use planning from the early stages. This includes allocating dedicated land zones for social housing development within master plans and ensuring that these areas are aligned with infrastructure development strategies.

A particularly effective solution is the development of a pre-approved land bank for social housing projects. By identifying and preparing suitable land parcels in advance - complete with clear legal status and basic infrastructure conditions - authorities can significantly shorten the project preparation and approval timeline.

In parallel, investment in synchronous technical infrastructure (transportation, water supply, drainage, and utilities) should be prioritized in areas designated for social housing. This would not only improve project feasibility but also reduce the need for additional technical assessments during the licensing process.

4.5.4. Prioritization of policy interventions

Given limited administrative resources, it is important to prioritize policy interventions based on their relative impact. Based on the study's findings, the following priority order is recommended, as shown in Figure 2.

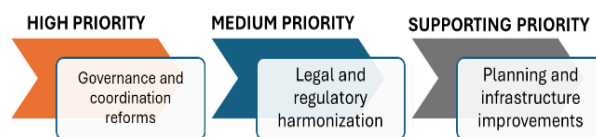


Figure 2. Prioritization of policy interventions

This prioritization reflects the empirical evidence that process-related and institutional factors have a more immediate and significant impact on licensing efficiency than structural or technical conditions

5. Conclusion

This study investigates the key factors influencing the licensing process of social housing projects in Binh Duong Province, Vietnam. Based on a mixed-method approach and empirical data from industry professionals, five major factor groups were identified and analyzed, including stakeholder coordination, legal framework, technical infrastructure, land-use planning, and developer capacity.

The results reveal that governance-related factors, particularly stakeholder coordination and institutional frameworks, play a more decisive role in determining licensing efficiency than technical or financial aspects. This finding highlights the importance of addressing systemic administrative issues to improve project implementation outcomes.

From a theoretical perspective, the study contributes to the existing literature by emphasizing the role of governance and institutional dynamics in construction project licensing, particularly in the context of transitional economies. From a practical perspective, the research

proposes a structured policy framework that prioritizes coordination reform, legal harmonization, and planning integration. However, this study has certain limitations. The analysis is based on data collected from a single province, which may limit the generalizability of the findings. Future research could expand the scope to multiple regions or apply advanced analytical methods, such as regression or structural equation modeling, to further validate the relationships among factors.

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