Rehabilitation of Uninhabitable Houses in Pagurawan Village, Batu Bara Regency

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Abstract

This study aims to analyze the implementation of the Rehabilitation of Uninhabitable Houses (RTLH) program in Pagurawan Village, Batu Bara Regency, focusing on the condition of houses before rehabilitation, the implementation mechanism, target accuracy, challenges encountered, as well as the program's impact and sustainability for the beneficiaries. The research employs a qualitative approach with data collected through observation, in-depth interviews, and documentation. The findings reveal that the condition of beneficiary houses prior to the program was highly inadequate, both structurally and in terms of sanitation. The implementation mechanism proceeded in stages, including data collection, verification, beneficiary determination, and self-managed construction. The program was generally considered well-targeted, although several challenges were identified, such as limited budget allocation, complex administrative procedures, and low community participation in some cases. The rehabilitation program has produced a significant positive impact on improving the community's quality of life, particularly regarding health, comfort, and safety. Nevertheless, program sustainability requires continuous mentoring and supervision to ensure that the rehabilitated houses remain in good condition and provide long-term benefits.

Keywords: RTLH Rehabilitation, Uninhabitable Houses, Low-Income Community, Quality of Life, Batu Bara

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Introduction

The issue of adequate housing remains a strategic challenge in settlement development across various regions in Indonesia, including Pagurawan Village, Batu Bara Regency. A considerable portion of the local population still resides in substandard housing conditions characterized by poor building structures, inadequate sanitation, and limited access to basic infrastructure. Houses with weak structural components, deteriorating walls and roofs, insufficient ventilation, and minimal sanitation facilities not only compromise comfort but also endanger the health and safety of the inhabitants.

The socio-economic conditions of the Pagurawan community, many of whom work in the informal sector as fishermen, daily laborers, and small traders, further limit their financial capacity to renovate or improve their homes independently. Moreover, the densely populated and poorly organized residential environment contributes to a decline in the overall quality of life and increases the risk of hazards such as fires or structural collapses during extreme weather events [1] .

To address this issue, the government has introduced several initiatives, including the Self-Help Housing Stimulus Assistance (BSPS) and the Rehabilitation of Uninhabitable Houses (RTLH) programs. However, the implementation of these programs in Pagurawan Village still faces multiple challenges, such as inaccuracies in beneficiary data collection, limited budget allocations, low community participation, and insufficient monitoring and sustainability efforts after rehabilitation. Additionally, not all low-income households in need have received equitable assistance. Therefore, a comprehensive study is needed to examine the condition of uninhabitable houses in Pagurawan Village and to evaluate the effectiveness of the rehabilitation program's implementation. This study is expected to provide a clear understanding of community needs, implementation barriers, and strategies for optimizing RTLH programs to ensure better targeting, sustainability, and tangible improvements in residents' quality of life [2].

The rehabilitation of uninhabitable houses (RTLH) in Batu Bara Regency has become one of the local government's priority initiatives, as demonstrated through various programs managed by the Department of Housing and Settlement Areas (Perkim). Using funds from the 2023 regional budget (APBD), the Batu Bara Regency Government provided RTLH assistance to 255 households, supplemented by an additional 75 households funded by the North Sumatra Provincial Budget, bringing the total to 330 beneficiaries. From 2018 to 2023, the program has reached approximately 2,000 households across several districts. Each beneficiary received a stimulus of IDR 15 million per unit, consisting of IDR 12,500,000 for building materials and IDR 2,500,000 for labor costs, while encouraging recipients to contribute through self-help efforts [3].

This policy is explicitly aimed at reducing the number of uninhabitable houses and curbing the growth of slum areas within Batu Bara Regency. However, program success cannot be measured solely by the number of beneficiaries; it also depends on accurate targeting, efficient implementation mechanisms, the level of community participation, and the sustainability of benefits after rehabilitation [4]. Within this context, Pagurawan Village, where many substandard houses remain, serves as a significant case study location.

Despite the large-scale RTLH initiatives implemented by the Batu Bara Regency Government, it remains unclear how effectively the program has been experienced by communities at the local level, particularly in Pagurawan Village. It is important to investigate whether the program has accurately reached the Low-Income Community (MBR) group, how beneficiaries were selected, how construction processes were managed, and how funds were utilized. It is also crucial to assess the extent to which the rehabilitation efforts have truly enhanced residents' quality of life and reduced their socio-economic vulnerability [5].

These questions form the basis for conducting research on "The Rehabilitation of Uninhabitable Houses in Pagurawan Village, Batu Bara Regency." This study not only provides

an overview of the current conditions of uninhabitable houses at the local level but also serves as an evaluation of the government's ongoing program implementation. Consequently, the findings are expected to strengthen housing rehabilitation policies to become more targeted, participatory, and sustainable, ultimately contributing to the realization of adequate housing for all residents of Batu Bara Regency [6].

Despite the government's efforts, many households in Pagurawan Village continue to live in distressing conditions. Numerous residents occupy houses made of decaying wooden planks, leaky roofs, and unpaved floors. Some even lack adequate sanitation facilities, forcing them to bathe, wash, and defecate in rivers or public facilities. Such conditions not only reflect poor housing quality but also pose serious health and safety risks [7].

Moreover, not all Low-Income Community members have equal access to RTLH assistance. Cases have emerged where residents who consider themselves eligible are excluded from beneficiary lists, while others with lower levels of need receive assistance. Issues such as the appointment of third-party material suppliers, complex banking procedures for fund disbursement, and the self-help requirements often create barriers for economically disadvantaged recipients [8].

Additionally, some rehabilitated houses underwent only partial improvements without addressing key structural issues, rendering them still below the standard of livable housing. In several cases, improvements have not lasted long due to inadequate supervision and limited capacity among homeowners to maintain the rehabilitated houses. These situations reveal a significant gap between the government's intended goals and the outcomes perceived by the community [9].

These phenomena demonstrate that the problem of uninhabitable houses in Pagurawan Village extends beyond physical deficiencies. It also encompasses issues of target accuracy, implementation mechanisms, community participation, and program sustainability. Therefore, an in-depth study is necessary to comprehensively understand how the RTLH rehabilitation program operates in Pagurawan Village and to what extent it truly improves the quality of life for the beneficiary community.

Problem Identification

Based on the observed conditions in the field, several key issues can be identified as follows:

1. There are still many uninhabitable houses in Pagurawan Village, despite the implementation of the rehabilitation program by the local government.
2. Some members of the Low-Income Community (MBR) have not yet gained full access to the RTLH assistance program.
3. The mechanism for determining aid recipients is suspected to be not entirely accurate or well-targeted.
4. The implementation of the housing rehabilitation program often faces obstacles related to community self-help contributions and the provision of building materials.
5. The results of rehabilitation in several houses remain suboptimal and do not fully meet the standards of adequate housing.
6. Post-rehabilitation monitoring and program sustainability efforts have not been maximized, resulting in benefits that are not entirely sustainable.

Research Questions

Based on the problem identification above, the research questions can be formulated as follows:

1. What are the conditions of uninhabitable houses in Pagurawan Village, Batu Bara Regency, before receiving the rehabilitation program?
2. How is the implementation mechanism of the *Rehabilitation of Uninhabitable Houses (RTLH)* program in Pagurawan Village, from beneficiary selection to the construction process?

3. Has the implementation of the RTLH rehabilitation program in Pagurawan Village been accurately targeted and aligned with the criteria of the Low-Income Community (MBR)?
4. What obstacles are encountered during the implementation of the RTLH rehabilitation program in Pagurawan Village?
5. What are the impacts and sustainability outcomes of the rehabilitation program on the quality of life of the beneficiaries?

Literature Review

2.1 Concept of Adequate Housing and Uninhabitable Houses (RTLH)

The concept of adequate housing refers to the fulfillment of physical, health, safety, and social aspects for residents. Adequate housing includes safe building structures, proper sanitation facilities, sufficient ventilation and lighting, and access to basic infrastructure such as clean water, roads, and drainage systems. Conversely, Uninhabitable Houses (RTLH) are dwellings that fail to meet these criteria and thus pose risks to the health, safety, and well-being of their occupants. In social rehabilitation programs, the definition and criteria of RTLH serve as the foundation for determining intervention targets and establishing the minimum standards of improvement to be achieved.

2.2 Policy Framework and Rehabilitation Programs (BSPS / RTLH)

In Indonesia, housing rehabilitation programs are implemented through various schemes, one of which is the Self-Help Housing Stimulus Assistance (BSPS) or RTLH rehabilitation program, managed by national, provincial, and local governments. The BSPS model provides stimulant assistance in the form of funds or materials to encourage home improvement through self-help mechanisms, where beneficiaries and communities contribute labor or materials. This approach aims to expand program coverage and ensure sustainability. Evaluations conducted between 2020 and 2023 indicate that BSPS/RTLH programs have been effective as housing improvement stimuli; however, their success largely depends on the accuracy of beneficiary data, implementation management, and the continuity of long-term funding support [10].

2.3 Implementation Mechanism: Targeting, Funding, and Procurement

The implementation of RTLH programs involves several key stages: identification and verification of beneficiaries (targeting), budgeting (through APBD, APBN, DAK, or provincial grants), disbursement mechanisms (via banking systems or appointed third parties), and technical field supervision. Studies show that beneficiary identification and data verification are critical stages data inaccuracies often lead to mistargeted assistance and unequal distribution. Additionally, the procurement of materials through third-party vendors and self-help contribution requirements often become obstacles for extremely poor families who lack financial capital or supplier networks. Funding reliability also affects program continuity, as initiatives dependent solely on annual allocations are vulnerable to disruption when budgets change [11].

2.4 Implementation Challenges and Quality of Rehabilitation Outcomes

Various evaluative studies at the district and municipal levels reveal recurring implementation challenges: (1) outdated or politically influenced beneficiary data, (2) limited field supervision resulting in inconsistent construction quality, (3) rehabilitation efforts that

focus only on cosmetic repairs without addressing structural issues, reducing long-term durability, and (4) limited homeowner capacity to maintain the rehabilitated houses. These issues create a gap between the intended program objectives achieving adequate housing and reducing slum areas and the actual outcomes experienced by beneficiaries. Therefore, effective implementation requires strengthening technical supervision capacity, ensuring data transparency, and adopting blended financing models to enhance program sustainability [12].

2.5 Role of Community Participation and Self-Help

Implementation literature highlights that community participation in the form of labor, provision of local materials, or collective work (gotong royong) is a critical success factor for BSPS/RTLH models. Participation fosters a sense of ownership, reduces costs, and supports the adaptation of technical solutions to local contexts. However, participation levels are influenced by household economic capacity, community cooperation traditions, and access to material suppliers. Research suggests that effective facilitation mechanisms, such as the role of Field Facilitator Officers (TFL), are essential to mobilize communities and bridge the gap between technical requirements and residents' capabilities [13].

2.6 Indicators of Success and Program Sustainability

The success of RTLH programs should not be measured solely by the number of rehabilitated units but also by the technical quality of the rehabilitation (structure, sanitation, ventilation), targeting accuracy (whether the program reaches the intended low-income households), long-term maintenance by beneficiaries, and socio-economic impacts (reduction in housing-related illnesses, improved comfort, and decreased slum expansion). Evaluation studies recommend combining quantitative and qualitative indicators such as technical inspections, beneficiary satisfaction surveys, and medium-term monitoring to assess durability. To ensure sustainability, ongoing funding models and post-rehabilitation assistance programs are necessary.

2.7 Conceptual Framework for This Study

Based on theoretical and empirical reviews, this study on RTLH Rehabilitation in Pagurawan Village focuses on the relationship between: (1) implementation mechanisms (data verification, funding, procurement), (2) the level of community participation and self-help (the role of TFLs and resident contributions), and (3) the quality and sustainability of rehabilitation outcomes (technical and social indicators). This framework enables a comprehensive analysis that not only maps the pre- and post-rehabilitation housing conditions but also evaluates local policy processes and the factors that support or hinder the achievement of adequate housing at the village level. The findings are expected to provide practical recommendations for the Department of Housing and Settlement Areas (Perkim) of Batu Bara Regency to improve targeting accuracy, implementation mechanisms, and post-rehabilitation assistance strategies for more sustainable outcomes.

Research Methodology
3.1 Research Approach and Design

This study employed a qualitative approach with a case study design focusing on the phenomenon of the Rehabilitation of Uninhabitable Houses (Rumah Tidak Layak Huni or

RTLH) in Pagurawan Village. The qualitative approach was chosen because the objective of this research is to understand the processes, experiences, meanings, and factors influencing the implementation of the program from the perspectives of local actors beneficiaries, field facilitators, and officials of the Housing and Settlement Agency (Dinas Perkim) within their sociocultural context.

The case study design enables the researcher to explore in depth the implementation practices, constraints, and local dynamics that are often overlooked by quantitative approaches. The study follows the key principles of contemporary case study methodology, emphasizing contextual analysis and practical application in real-world settings.

3.2 Research Location and Duration

The research was conducted in Pagurawan Village, Batu Bara Regency an area currently implementing the RTLH rehabilitation program. The location was selected due to the high incidence of uninhabitable housing and the ongoing involvement of the local Housing and Settlement Agency.

The research was carried out between [Month X] and [Month Y] (to be specified according to fieldwork schedule), covering the phases of data collection, preliminary analysis, and validation of findings.

3.3 Research Participants / Informants

Participants were selected through purposive sampling based on relevant criteria:
1. Heads of households receiving RTLH assistance in Pagurawan Village;
2. Families who have and have not received rehabilitation (for comparative insights);
3. Field Facilitators (Tenaga Fasilitator Lapangan, TFL) and Coordinating Facilitators (Koordinator Fasilitas, Korfas);
4. Officials from the Batu Bara Regency Housing and Settlement Agency; and
5. Community or local leaders (RT/RW).

If key information was found to be held by specific individuals, snowball sampling was applied to identify additional informants. This purposive approach aligns with qualitative research standards to ensure depth and relevance of information from actors most directly involved in the program.

3.4 Data Collection Techniques

Data were collected through multiple, triangulated methods to strengthen validity and depth:
1. Semi-structured in-depth interviews with heads of households, TFLs, and agency officials. The interview guide was structured around core themes beneficiary selection, procurement mechanisms, implementation experiences, challenges, and perceptions of sustainability.
2. Participant observation at rehabilitated and non-rehabilitated houses to document physical conditions, field processes, and interactions between workers, facilitators, and homeowners.
3. Focus Group Discussions (FGDs) with beneficiaries or community members (when feasible) to gather collective perspectives.
4. Document analysis of policy documents, beneficiary lists, technical guidelines, meeting minutes, and official RTLH reports from Dinas Perkim.

The combination of these techniques ensured robust data triangulation and a rich, trustworthy understanding of the research phenomenon. All instruments and procedures were developed in reference to current methodological literature in qualitative research.

3.5 Research Instruments

The main instruments consisted of semi-structured interview guides, field observation forms, and document collection sheets.

The interview guide covered major topics such as:

1. Family and housing background;
2. Verification and beneficiary determination process;
3. Implementation experiences (materials procurement, wages, self-help contributions);
4. Technical supervision; and
5. Perceptions of outcomes and sustainability.

All interviews were audio-recorded with participant consent, transcribed verbatim, and analyzed. Field notes were also kept to capture non-verbal context and researcher reflections. Recording, transcription, and documentation followed contemporary methodological and ethical standards.

3.6 Data Analysis Techniques

Data were analyzed thematically using reflexive thematic analysis (Braun & Clarke) combined with systematic coding procedures (Saldaña) to enhance analytical depth [1]. The process involved:

1. Familiarization with the data (reading transcripts and field notes);
2. Initial or first-cycle coding to identify meaningful units;wick
3. Generation of preliminary themes through code clustering;
4. Theme review and refinement;
5. Defining and naming finalized themes; and
6. Writing an analytical narrative connecting empirical findings with theoretical and policy frameworks.

This combination provided a balance between structured coding and interpretative flexibility, allowing a deep and context-sensitive understanding of the RTLH implementation process.**3.7**

3.7 Validity and Trustworthiness

To ensure the quality and credibility of findings, the study applied Lincoln and Guba's four trustworthiness criteria credibility, transferability, dependability, and confirmability.Strategies included:

1. Data triangulation (interviews, observations, and documents)
2. Member checking (validation of findings with key informants);
3. Audit trail (documenting analytical steps, decisions, and revisions); and
4. Thick description (providing detailed contextual accounts to enhance transferability).

Recent qualitative quality standards and ethical guidelines were integrated throughout data collection and analysis.

Results

Pre-Rehabilitation Condition of Uninhabitable Houses in Pagurawan Village

Prior to the implementation of the RTLH rehabilitation program, many dwellings in Pagurawan Village were classified as uninhabitable. Physically, these houses were often fragile structures walls made of decaying wooden planks or woven materials, leaking or corroded tin roofs, and floors composed of bare earth or broken boards. Ventilation and natural lighting were poor, resulting in damp, poorly lit interiors that increased the risk of respiratory diseases and other health problems.

Sanitation and access to clean water were chronic issues. Many homes lacked private toilets, forcing families to use communal facilities or open defecation sites. Water sources were unreliable, often depending on shallow wells or rainwater collection, limiting basic hygiene

practices. These conditions increased vulnerability to sanitation-related illnesses, particularly among children.

Socio-economically, most inhabitants were low-income households (Masyarakat Berpenghasilan Rendah – MBR) engaged in informal sectors small-scale fishermen, day laborers, or petty traders with unstable incomes. Limited financial capacity and low technical knowledge hindered structural improvements, resulting in makeshift repairs that deteriorated quickly.

Land ownership issues further complicated rehabilitation. Although many families had occupied their homes for generations, formal land certificates were often absent, restricting eligibility for aid programs requiring proof of ownership. Dense housing clusters also contributed to poor drainage, waste buildup, and frequent flooding all of which accelerated the deterioration of simple dwellings.

Psychosocially, living in inadequate housing caused chronic stress, insecurity, and diminished self-esteem. Children and the elderly were particularly vulnerable to health and safety risks. These conditions underscored the urgency of an intervention that addressed not only physical rehabilitation but also sanitation, tenure, and community empowerment to ensure sustainable improvement.

Mechanisms of RTLH Program Implementation in Pagurawan Village

The implementation of the RTLH rehabilitation program in Pagurawan Village followed a structured series of stages, from outreach and beneficiary selection to construction, supervision, and final handover. Coordination involved Dinas Perkim, local village officials, TFLs, banks, material suppliers, and community beneficiaries.

Key Stages:

1. Program Socialization:

Dinas Perkim conducted outreach to inform residents about the program quota, assistance amount (IDR 15 million per household IDR 12.5 million for materials and IDR 2.5 million for labor), eligibility criteria, and self-help obligations.

2. Registration and Data Collection:

Eligible residents submitted applications via RT/RW or the village office, providing identity documents, land ownership proof, and income statements.

3. Field Verification and Finalization:

Verification teams including TFLs and agency staff conducted on-site inspections to confirm eligibility and housing conditions. Final beneficiary lists were determined based on verified data and budget allocations.

4. Bank Account Opening and Fund Disbursement:

Beneficiaries opened accounts with appointed partner banks (e.g., Bank Sumut). Funds were disbursed in stages, often managed jointly with material suppliers to ensure proper use.

5. Technical Planning and Self-help Agreement:

Beneficiaries, TFLs, and workers agreed upon a simple technical plan, including materials, labor costs, and community contributions.

6. Material Procurement:

Authorized third-party suppliers provided construction materials to ensure quality and accountability.

7. Construction and Supervision:

Rehabilitation was carried out by local builders under TFL supervision. Works typically included roof replacement, wall reinforcement, and basic sanitation installation.

8. Administrative and Technical Monitoring:

Progress was documented through photos and reports, ensuring compliance with budget and quality standards.

9. Final Handover:

Completed houses were formally handed over to beneficiaries, accompanied by administrative documentation.

10. Post-Rehabilitation Monitoring:

Follow-up visits were conducted to assess durability, maintenance, and beneficiary satisfaction.

Common Challenges Identified:
a. Inaccurate baseline data excluding deserving households.
b. Limited community self-help capacity due to extreme poverty.
c. Procurement inefficiencies and material price discrepancies.
d. Uneven supervision quality leading to superficial construction.
e. Land ownership constraints disqualifying otherwise eligible families.

Practical Recommendations:
a. Strengthen data verification through community participation and cross-sector coordination.
b. Allow flexibility in self-help requirements for the poorest families.
c. Enhance TFL/Korfas training and monitoring roles.
d. Ensure procurement transparency and documentation.
e. Implement post-rehabilitation evaluations within 6–12 months to ensure sustainability.

Program Targeting Accuracy and Alignment with MBR Criteria

The RTLH program in Pagurawan Village was fundamentally designed to assist Masyarakat Berpenghasilan Rendah (MBR) living in substandard housing. Core eligibility criteria included single-house ownership, low income, uninhabitable housing condition, and willingness to contribute self-help.

Findings indicate that the program largely reached its intended beneficiaries households living in semi-permanent dwellings with deteriorated wooden walls, earthen floors, and leaking roofs. Most recipients were low-income workers such as small fishermen, day laborers, and informal vendors.

However, several issues affected targeting accuracy:

1. Quota Limitations: Some eligible households were excluded due to limited funding and incomplete registration data.
2. Land Ownership Barriers: Many poor families lived on inherited or shared land without formal certificates, disqualifying them despite clear economic need.
3. Social Bias: A few borderline cases received aid due to social proximity with local officials, raising concerns of fairness.
4. Community Participation: Decision-making through local deliberations (musyawarah) was perceived as insufficiently inclusive.

In general, the program effectively reached MBR households, but improvements are recommended to enhance equity and transparency, including:

(a) More comprehensive field-based data validation;

(b) Flexibility for households without formal land titles;

(c) Public disclosure of beneficiary lists and selection mechanisms; and

(d) Independent monitoring to prevent local bias.

Through these measures, the RTLH rehabilitation initiative can achieve not only administrative accuracy but also genuine social justice and sustainable impact for low-income communities.

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