THE EFFECTIVENESS OF THE REHABILITATION AND RECONSTRUCTION PROGRAM FOR POST-EARTHQUAKE COMMUNITY HOUSES IN NORTH LOMBOK REGENCY IN 2018

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Abstract

Data published by the Government of Nusa Tenggara Barat Province in 2021, the progress of earthquake-resistant house construction in North Lombok Regency until July 9th, 2022, has completed 41,750 heavily damaged houses, 1,029 moderately damaged houses and 298 lightly damaged. From the data, there are still 9,040 houses whose physical progress is still in the implementation stage. This research aims to determine the effectiveness of rehabilitating and reconstructing the community houses post-Lombok Earthquake in 2018. The research method used in this research is a descriptive quantitative method with a purposive sampling technique. The research variables were taken from Perka BNPB No. 11 Tahun 2008 and adjusted with existing research objectives. The variables were Program Readiness, Program Planning, Program Implementation, and Program Monitoring and Evaluation. The sample in this research was 100 respondents from the earthquakeaffected Lombok 2018 community who received earthquake-resistant house assistance and facilitators who assisted in the housing construction. Data collection in this research was conducted in North Lombok Regency through questionnaires, observations, and interviews. The data analysis used in this research was using the Likert scale. The research results show that the Post Disaster Community House Rehabilitation and Reconstruction Program in North Lombok Regency 2018 has run quite effectively. The average analysis of effectiveness using the Likert scale yields 66.83% for program readiness, 71.60% for program planning, 71.4% for program implementation, and 69.53% for program monitoring and evaluation. The average effectiveness rate produced in this research was 69.84%.

Keywords: North Lombok Regency, Rehabilitation, Reconstruction, Earthquake, Effectiveness

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Introduction

Indonesia is located in an area prone to natural disasters such as earthquakes, tsunamis, landslides, hurricanes, tornadoes, and forest fires that occur annually throughout the country. These disasters property, loss of life, environmental damage (Olshansky et al., 2009). The Lombok earthquake on Sunday, August 5, 2018, with a magnitude of 7.0 on the Richter scale, injured tens of thousands and displaced hundreds of thousands. The earthquake also destroyed many buildings and infrastructure and caused widespread damage (BPBD NTB, 2021). Seeing the impact caused by the disaster that occurred, in this case, the disaster is an incident that, to a special degree, can make social systems vulnerable or disrupted (Kreps & Drabek, 1996). Furthermore, this vulnerability is caused by a combination of risk (natural or technological) and social vulnerability. Neeraj et al. (2020) indicate that the need for a comprehensive economic recovery plan, transition strategies, and local psychological and social support can be considered shortcomings in the recovery effort, which could have been improved for further resilience building. In the emergency response phase, a rapid assessment of the situation and needs is needed after a disaster. This is because the initial emergency is still being determined about what happened. The objectives of the rapid assessment include (Kementrian Pekerjaan Umum dan Perumahan, 2017):

- 1. Identify the impact of the disaster on the community, infrastructure, and the community's capacity to recover.
- 2. Identify the most vulnerable groups in the community.
- 3. Identify the local government's response and internal capacity to lead emergency response and recovery.
- 4. Identify the level of response needed locally, nationally, and internationally (if needed).
- 5. Identify the most urgent needs for assistance and how to meet them effectively.

- 6. Make recommendations to determine the priorities for action and resources needed for immediate response.
- 7. Provide an overview of the specific issues about the development of the situation.
- 8. Request attention to geographical areas or sectors that require in-depth assessment.

The above conditions justify the postdisaster recovery as a useful phase in restoring people's lives after a disaster (Olshansky et al., 2009). Hidayati (2008) argues that population participation is useful in disaster management. Residents from all elements affected and unaffected and authorized parties must be subjects or actors participating in post-disaster recovery. One form of participation at a very small scope is the preparedness of themselves and their respective families, while in a broader context,t it includes involvement in recovery with communities and population groups. According to Suherman (2007), institutions during emergency responses have not been able to work optimally and have not been able to foster community participation in disaster management. Referring to the provisions of Bakornas, the pattern of action is expected to be able to play a role immediately, precisely, and planned, but still far from the goal. Platt (2018) stated that the speed and quality of recovery from a disaster are largely determined by the decisions made by government officials, recovery planners, and local communities. Research suggests that the quality of these decisions is more important than the size of the disaster or the pre-existing economic and demographic conditions of the affected area. If this finding is supported by further research, it would significantly advance our understanding of resilience and post-disaster recovery.

The progress of earthquake-resistant housing construction until July 9, 2022, completed in North Lombok Regency, is 41,750 severely damaged houses, 1,029 moderately damaged houses, and 298 lightly damaged houses (BPS NTB, 2021). There are 2,229 houses whose physical progress is still

in the implementation stage. The recovery mechanism after a disaster is a stage that serves to make the population's lifestyle after the disaster return again. Monday (2005) stated that the build back better principle should be implemented in this process because it can recreate people's lives by minimizing awareness and optimizing community capacity to avoid future disaster threats.

Hijah and Komarudin (2019) explain that the implementation time and realization of community house construction had minimal achievements. This happens because:

- 1. The occurrence of double names in the Regent/Mayor Decree issued by each local government.
- 2. Inaccurate assessment of the level of damage at the assessment stage, resulting in repeated verification and validation.
- 3. Due to bureaucratic complexities, Communities are reluctant to form POKMAS and tend to receive directly in cash without going through POKMAS.
- 4. Verification and validation were re-done by BRI bank to the beneficiaries, so the time needed was quite long.
- 5. Too many RTG options are recommended by the Government, making it difficult for the community to choose.

Delays in work performance and disbursement of assistance were caused by the complex bureaucracy set by the government as a condition for issuance of service and the verification and validation process from several agencies that tended to be repetitive, coupled with the community's lack of understanding of the large number of RTGs offered by the government. In contrast to the research results by Aryani et al. (2022), the community has sufficient knowledge of the technical standards for earthquake-resistant house buildings, can plan and apply the technical standards for earthquake-resistant house buildings, and can form community groups to facilitate supervision monitoring and implementation of earthquake-resistant house buildings. Rejeki (2022) indicates that the causes of delays in a construction project are several factors, including Uncertain weather, cash flow from the owner who is late/not on time, and the number of workers who are not fixed (every day some workers do not come in). Ihsan (2023) reveals that delayed project completion time on the unit of the Ministry of Public Works and Public Housing is caused by indirect costs such as (1) environmental factors, (2) claims policy factors and government regulations, (3) organizational factors and (4) project factors.

Bothara et al. (2016) signify that the formal construction industry's lack of knowledge and attitude towards traditional materials, technologies, and processes has resulted in very limited research work in this sector. Jailani et. (2020) stated that stakeholders followed the Petunjuk Lapangan (Juklak) regulated in Peraturan Gubernur No.356-12/2019 concerning Earthquake Technical Guidelines Resistant House Stimulant Assistance in the rehab process of implementing reconstruction in Mataram City. Suryani (2021) indicates that implementing phase I RTG construction in Nusa Tenggara Barat Province can be categorized as untimely because the RTG construction process was carried out during the emergency response and transition period. Lestari (2021) revealed the policies that the Regional Government has carried out through BPBD North Lombok Regency, namely facilitating the community in completing administration with a certificate; the APBD is used to help operational stimulants and honorariums for implementers and diverting the rehabilitation and reconstruction program into the RTLH program to accelerate the process of implementing RTG construction.

The progress and realization of RTG construction in North Lombok Regency in phase I and II can be seen in Table 1 below.

Table 1. Plan and realization of earthquake resistant houses in North Lombok Regency Phase I and Phase II (BPS NTB, 2021)

| Degree of | Plan | Realization |
|------------------|--------|-------------|
| Damage | | |
| Phase I | | |
| Severely Damaged | 42,964 | 41,274 |
| Moderate Damage | 1,624 | 975 |
| Light Damage | 365 | 219 |
| Phase II | | |
| Severely Damaged | 6,472 | 476 |
| Moderate Damage | 493 | 54 |
| Light Damage | 199 | 79 |

Implementation of rehabilitation and reconstruction after the Lombok earthquake provided a positive assessment with the involvement of all affected communities by joining community groups (POKMAS) to carry out development. Settlement development will be managed with a community-based self-management scheme community designed using organizing strategies and relying on community initiatives by not leaving local wisdom and cooperation in building earthquake-resistantbased houses; there are several options by the government offered to community, such as Risha (rumah instan sederhana sehat), Rika (rumah instan kayu) and Riko (rumah instan konvensional) (Bakti & Nurmandi, 2020). Ramadan stated that to improve coordination partnerships between community groups, the business world, related institutions, and the government need to be made to cut the length of bureaucracy, unify perceptions so that the implementation of rehabilitation and reconstruction activities can be carried out accountably, effectively, integrated efficiently. Direct coordination is needed to form one voice and one command. Adistana et al. (2022) reveal that Government procurement activities are critical to improving public services and developing the national and regional economy. Prihantini et al. (2022) summarized that preparedness actions influence community participation in disaster emergency response and that prevailing conditions within each group of people in the community determine the extent of their vulnerability or resilience to loss or damage. According to Smith et al. (2018), states can improve their disaster recovery capabilities by collecting and sharing information about past disasters within and across other states. This information can be used to develop better disaster plans and to ensure that lessons learned from past disasters are remembered. By collecting and sharing information about past disasters, states can improve their ability to respond to future disasters. This can help save lives, reduce property damage, and speed recovery. Muttalib & Mashur (2019) stated that postearthquake recovery strategies in North Lombok Regency can be carried out in the following ways:

- 1. Assisting in the disaster
- 2. Development of Human Resources (HR)
- 3. Development of ability in capital
- 4. Development of people's economics institutions

Giovinazzi (2016) explains that effective communication with the local community is essential for a smooth and speedy recovery process. This includes informing the community about upcoming inconveniences caused by the rebuilding work and providing general information about the infrastructure recovery plan. The extent of community involvement in post-disaster recovery is determined by the level of government input and the availability of non-government organizations.

Implementing rehabilitation and reconstruction of post-disaster community houses is effective and efficient if it can fulfill the Peraturan Kepala BNPB No 11 Tahun 2008 indicators.

Research Methodology

This research was conducted in North Lombok Regency. North Lombok Regency is part of Nusa Tenggara Barat Province, formed in 2008.

Disaster information needs to be gathered, processed, and analyzed. Reports are then created and distributed. This

information includes the disaster and the actions taken by various parties before and after the disaster. By the duties and functions that have been regulated in Peraturan BNPB No. 4 Tahun 2019 and then amended by Peraturan BNPB No. 8 Tahun 2020, which is summarized in the Pedoman Renkon 4.0 BNPB Tahun 2019, the information and disaster management system is implemented by PUSDALOPS (Pusat Pengendalian Operasi) BNPB. The physical progress of rehabilitation and reconstruction shows that North Lombok Regency has not yet reached 100% progress (PUSDALOPS PB BPBD NTB, 2021). On July 21, 2021, 52,765 homes were repaired and constructed due to the 2018 Earthquake in North Lombok Regency (BPS NTB, 2021). The houses repaired and built have several types of damage: heavily, moderately, and lightly damaged. The budget distribution procedure is carried out in stages to date.

This research uses primary data directly taken from the field with an objective assessment in the form of filling out questionnaire sheets and questionnaire forms distributed offline at the location and online. In response to each instrument item that uses the Likert Scale, there are levels from very positive to negative. To measure the above factors, a Likert Scale of 5 classes is used as follows: 1) strongly agree (SS); 2) agree (S); 3) neutral (N); 4) disagree (TS); and 5) strongly disagree (STS).

This is used to determine the assessment given and then draw conclusions. The assessment score on the Likert Scale according to the positive and negative statements. The distribution of this questionnaire was carried out in September – October 2021. Determination of the sample in this study using the Purposive Sampling technique. The following are the sample characteristics sample needed in this study.

People in Pemenang, Tanjung, Gangga, Bayan, and Kayangan sub-districts in North Lombok Regency who rehabilitated and reconstructed houses after the 2018 Lombok Earthquake.

Facilitators in Pemenang, Tanjung, Gangga, Bayan, and Kayangan sub-districts

in North Lombok Regency who rehabilitated and reconstructed houses after the 2018 Lombok Earthquake.

The questionnaire was administered in Bahasa Indonesia to the community and facilitators involved in the community house rehabilitation and reconstruction program in North Lombok Regency. Data on the level of house damage can be seen in Table 2 below.

Table 2. Data on house damage levels in North Lombok Regency (BPBD NTB, 2018)

| No | Degree of Damage | Number of Damages |
|----|---------------------|-------------------|
| 1 | Severely Damaged | 43,811 |
| 2 | Moderate Damage | 8,096 |
| 3 | Light Damage | 858 |

From this data, calculations were then carried out to determine the number of samples from the population using the Slovin formula with an accuracy level of 90% or sig 0.1 and the desired error rate of 10%, namely:

$$n = \frac{n}{n + (d)^2 + 1} = \frac{52.765}{52.765 (0,1)^2 + 1}$$
Where, n is 99.81084 ~ 100 samples

This research uses 2 (two) variables, namely the independent variable X, which means influence/cause, while the dependent variable is Y, which means the variable influenced/effect. The independent variables used are Program Planning (X1), Program Implementation (X2), and Program Monitoring and Evaluation (X3).Furthermore, the dependent variable is Program Readiness (Y). Details of the variable criteria used in this study can be seen in Table 3 below.

Table 3. Program Variables (Perka BNPB No. 11 Tahun 2008)

| Variables | Sub Variables | | | |
|-----------|---------------|----------------------|--|--|
| Program | 1. | Socialization and | | |
| Readiness | | Coordination | | |
| | 2. | Inventory and Damage | | |
| | | Identification | | |

| Variables | | Sub Variables |
|------------------------|----|-----------------------|
| Program Planning | 1. | Government |
| | 2. | Community |
| | 3. | Synchronization of |
| | | Plans and Programs |
| • | 4. | Resource Mobilization |
| Program Implementation | 1. | Infrastructure Setup |
| | 2. | Distribution of |
| | | Assistance |
| | 3. | Material Market and |
| | | Supply Control |
| | 4. | Physical |
| | | Implementation by the |
| | | Community |
| Monitoring and | 1. | Periodic Monitoring |
| Evaluation of | 2. | Periodic Evaluation |
| Programs | | |

Research Results and Discussion

Respondent Data

From the analysis, the frequency distribution and distribution curve of regional frequency values and roles in the program can be seen in Figure 1.



Figure 1. Respondent data based on handling area

Respondents' answers to the assessment of the effectiveness of the rehabilitation and reconstruction program in the North Lombok district can be seen in the following table.

Table 4. Results of respondents' assessment of the rehabilitation and reconstruction program in North Lombok Regency

| NI. | Program Indicator - | Handling Area | | | | |
|-----|---|---------------|--------|----------|----------|---------|
| No. | | Bayan | Gangga | Kayangan | Pemenang | Tanjung |
| | (Y1) Program Readiness | | | | | |
| 1 | What is the level of coordination that has been carried out between governments (Province, District, Sub-district, Village) | 76.84% | 63.48% | 76.52% | 68.57% | 68.57% |
| 2 | What is the level of program socialization that has been carried out in disaster-affected communities | 71.58% | 67.83% | 71.30% | 66.67% | 77.14% |
| 3 | What is the level of cross-sector coordination, international cooperation, and non-governmental organizations (NGOs) that have been carried out | 56.84% | 55.65% | 66.09% | 62.86% | 67.14% |
| 4 | How the house damage survey process has been carried out | 72.63% | 58.26% | 64.35% | 71.43% | 74.29% |
| 5 | What is the process of damage and loss assessment of houses that has been carried out | 72.63% | 61.74% | 66.09% | 62.86% | 74.29% |

| Nic | D | Handling Area | | | | | |
|-----|---|---------------|--------|----------|----------|---------|--|
| No. | Program Indicator - | Bayan | Gangga | Kayangan | Pemenang | Tanjung | |
| 6 | What is the level of exposure of the results of the survey of the assessment of damage and loss of housing that has been carried out with the community | 75.79% | 55.65% | 62.61% | 63.81% | 70.00% | |
| 7 | What is the process of assessing the need for repair and handling of damage and loss of houses that has been carried out | 77.89% | 62.61% | 66.09% | 64.76% | 74.29% | |
| 8 | What is the process of reverifying the results of damage surveys that have been carried out if there are objections from the community regarding additional damage due to subsequent disasters? | 70.53% | 53.04% | 62.61% | 61.90% | 75.71% | |
| 9 | What is the level of determination of the results of damage surveys that have been carried out with the community to be used as the basis for the next steps (rehabilitation and reconstruction planning) and other needs | 71.58% | 57.39% | 68.70% | 62.86% | 71.43% | |
| | Average Respondent Score | 71.81% | 59.52% | 67.15% | 65.08% | 72.54% | |
| | (X1) Program Planning | | | | | | |
| 1 | How the needs analysis process has been carried out based on community and location | 70.53% | 70.43% | 68.70% | 61.90% | 74.29% | |
| 2 | How is determining the type and amount of assistance carried out based on the degree/intensity of damage? | 75.79% | 74.78% | 70.43% | 60.95% | 78.57% | |
| 3 | What is the process of calculating the needs of supporting resources (community assistance, instruments, materials) that have been carried out | 67.37% | 73.04% | 73.04% | 68.57% | 80.00% | |
| 4 | What is the process of preparing aid schemes and distribution methods that have been carried out | 72.63% | 69.57% | 73.04% | 65.71% | 81.43% | |
| 5 | How the process of organizing and forming self-help groups has been carried out | 80.00% | 87.83% | 82.61% | 72.38% | 78.57% | |
| 6 | What is the process of identifying priority beneficiaries that has been implemented | 74.74% | 75.65% | 71.30% | 65.71% | 72.86% | |
| 7 | How has the participatory planning process (self-survey of rehabilitation and reconstruction needs as part of preparing rehabilitation and reconstruction plans for houses and neighborhoods) been implemented? | 75.79% | 75.65% | 73.91% | 71.43% | 77.14% | |

| NI. | D | Handling Area | | | | | |
|-----|--|---------------|--------|----------|----------|---------|--|
| No. | Program Indicator | Bayan | Gangga | Kayangan | Pemenang | Tanjung | |
| 8 | How has the process of synchronizing government and community planning been carried out? | 74.74% | 69.57% | 70.43% | 67.62% | 71.43% | |
| 9 | What is the process of synchronizing housing repair assistance and other aspects of rehabilitation and reconstruction (across sectors) that have been carried out | 65.26% | 60.00% | 61.74% | 60.95% | 72.86% | |
| 10 | How is the process of synchronizing rehabilitation and reconstruction programs carried out? | 72.63% | 70.43% | 76.52% | 66.67% | 75.71% | |
| 11 | How have synchronized cross- regional rehabilitation and reconstruction plans been carried out? | 74.74% | 66.96% | 78.26% | 67.62% | 77.14% | |
| 12 | What is the process of mobilizing the recruitment of accompanying experts (technical consultants) as well as technological and social facilitators, and the training that has been carried out | 78.95% | 64.35% | 66.96% | 61.90% | 81.43% | |
| 13 | How the equipment preparation mobilization process has been implemented | 73.68% | 69.57% | 71.30% | 58.10% | 80.00% | |
| 14 | How the material procurement mobilization process (manufactured, local, and natural) has been implemented | 74.74% | 75.65% | 68.70% | 55.24% | 77.35% | |
| | Average Respondent Score | 73.68% | 71.68% | 71.93% | 64.63% | 77.14% | |
| | (X2) Program | | | | | | |
| 1 | Implementation What is the preparation process for human, social, and economic capacity building that has been carried out | 70.53% | 65.22% | 69.57% | 65.71% | 77.14% | |
| 2 | How the preparation process for the establishment of the organization, regulations, and legal basis of the program has been carried out | 77.89% | 71.30% | 72.17% | 70.48% | 72.86% | |
| 3 | How the Physical infrastructure preparation process (assistance scheme, work method, work plan) has been carried out | 73.68% | 75.65% | 75.65% | 64.76% | 74.29% | |
| 4 | How is the process of distributing repair funds that has been implemented | 80.00% | 71.30% | 80.87% | 52.38% | 71.43% | |
| 5 | How the distribution process of building components and materials has been implemented | 74.74% | 72.17% | 78.26% | 58.10% | 67.14% | |
| 6 | How the process of distributing building equipment has been implemented | 74.74% | 74.78% | 68.70% | 57.14% | 72.86% | |

| No. | Dan onema I - di - t | Handling Area | | | | |
|-----|---|---------------|--------|----------|----------|---------|
| No. | Program Indicator | Bayan | Gangga | Kayangan | Pemenang | Tanjung |
| 7 | How has the process of distributing assistance (experts/technical consultants, facilitators, labor) been implemented? | 77.89% | 67.83% | 68.70% | 63.81% | 78.57% |
| 8 | What is the process of planning and monitoring needs that have been carried out | 78.95% | 67.83% | 62.61% | 65.71% | 72.86% |
| 9 | What is the process of cooperation with producers and suppliers that has been carried out | 75.79% | 80.00% | 72.17% | 67.62% | 78.57% |
| 10 | What is the process of implementation of cooperation by the community that has been carried out | 82.11% | 65.22% | 79.13% | 70.48% | 72.86% |
| 11 | How the implementation process through the wholesale method (self-control) has been carried out | 75.79% | 65.22% | 73.91% | 65.71% | 74.29% |
| 12 | How the direct appointment (self-control) process has been carried out | 75.79% | 72.17% | 69.57% | 70.48% | 72.86% |
| | Average Respondent Score | 76.49% | 70.94% | 72.61% | 64.37% | 73.81% |
| | (X3) Program Monitoring and Evaluation | | | | | |
| 1 | What is the periodic monitoring process that has been implemented | 73.68% | 65.22% | 62.61% | 60.95% | 71.43% |
| 2 | How is the evaluation process after the program is completed that has been done | 70.53% | 59.13% | 60.87% | 63.81% | 78.57% |
| 3 | How the initial report (rehabilitation and reconstruction implementation plan report) has been carried out | 80.00% | 72.17% | 73.91% | 65.71% | 72.86% |
| 4 | How to work on the progress report of the implementation of the rehabilitation and reconstruction process that has been carried out | 82.11% | 68.70% | 76.52% | 62.86% | 75.71% |
| 5 | How to work on the final report (monitoring and evaluation results) that has been carried out | 85.26% | 68.70% | 75.65% | 64.76% | 80.00% |
| | Average Respondent Score | 78.32% | 66.78% | 69.91% | 63.62% | 75.71% |

Very Poor: 0%-20%, Poor: 21%-40%, Neutral: 41%-60%, Good: 61%-80%, Very Good: 81%-100%

Interpretive Analysis of the Effectiveness of the Rehabilitation and Reconstruction Program for Community Houses after the Lombok Earthquake in 2018

The rehabilitation and reconstruction of community houses, starting at the socialization and communication, planning,

implementation, monitoring, and evaluation stages, must be studied to find the obstacles that occur so that this program can run well in the future.

Interpretation Analysis of Program Readiness

Riza (2019) indicates that the performance effectiveness measurement

system within the Nusa Tenggara Barat BPBD organization is aligned with the existing phases so that it does not only focus on program outputs. The performance measurement system has been established to be updated by integrating performance measurement systems and the organization's strategic orientation and not just the embodiment of work programs.

The Rehabilitation and Reconstruction Program for Community Houses after the Lombok Earthquake in 2018 needs to be further studied in the form of program effectiveness with the suitability of regulations, functions, plans, and program principles so that technical and non-technical guidelines obtain the results of the level of effectiveness of the Program to accelerate the rehabilitation and reconstruction program for community houses in Lombok Utara Regency.

The average percentage of program readiness variables with a percentage result of 66.83%. This shows that the program readiness variable is quite effective in the rehabilitation and reconstruction program for community houses in Lombok Utara Regency.

The program's Socialization Coordination sub-variable produced an effectiveness level of 67.53% greater than the Inventory and Identification/Building Damage Assessment sub-variable. shows that stakeholders in the preparation of program implementation have been quite effective in carrying out the stages listed in Perka BNPB No. 11 Tahun 2008 About Guidelines for Post-Disaster Rehabilitation and Reconstruction. Relevant stakeholders have prepared the program, including coordination, socialization, building togetherness, solidarity, and volunteerism.

Interpreation Analysis on Program Planning

Good program planning will certainly produce programs that are right on target and effectively and efficiently use funds. Suryani (2021) signifies that the implementation of the physical restoration and improvement of Phase I RTGs affected by the disaster in NTB was not properly planned because it

was carried out in an emergency and rapid response, which resulted in differences in the number of RTG units and the category of damage not as planned. The average percentage of program planning variables with a percentage result of 71.60%. This shows that the program planning variable is quite effective in the rehabilitation and reconstruction program for community houses in North Lombok Regency. The subvariable of planning at the community level resulted in the highest level of effectiveness at 75.73%. This shows that community involvement in the program has been running quite effectively. Oswaronto et al. (2020) reveal the success of the innovation in handling the acceleration of post-earthquake rehabilitation and reconstruction involving the community in the implementation of development in Sumbawa Barat Regency can be seen from several indicators, namely faster processing time, a large quantity of work and wide coverage, effective and efficient use of funds, and no protests/demonstrations from community related to the earthquake. The next variable with a low effectiveness score is the synchronization of plans and programs variable, with an assessment result of 69.70%. Program synchronization is very important that population data related administration does not cause errors. Errors in administrative data will later cause delays in executing assistance in the field, such as issuing a decree on determining beneficiaries, disbursement of aid funds, and rebuilding disaster-affected houses. Constraints during the validation of data on earthquake recipients, the lack of raw materials for house construction, the difficulty of distributing homework materials, and the limited number of work implementers such as technical facilitators, applicators, and builders made process of rehabilitation reconstruction of community housing after the Lombok earthquake in 2018 more complex (Amin, 2021).

Interpretation Analysis on Program Implementation

Rehabilitation and reconstruction activities that are carried out in a planned,

coordinated, integrated, and constrained manner result in programs completed at the right time, the quality produced is by the plan, the costs required are budget, within Program targets are appropriate and useful for the community. Taquidin et al. (2021) stated that for the RTG project to run well, the community must understand program's purpose so that they can actively participate in the program. The aim is for them to provide constructive feedback and help identify areas for improvement. The Rehabilitation and Reconstruction Program carried out in the implementation phase has an average percentage of 71.4%. This can be interpreted as the program being quite effective in the implementation phase. The sub-variable of physical implementation by the community accompanied by facilitators and technical teams received the highest percentage value of 73.27%. This shows community participation implementing earthquake-resistant house construction activities accompanied by facilitators and technical teams. Sub-variables of infrastructure preparation related to the development of human resource capacity building, social and economic, organizational formation, regulations and legal basis, and physical infrastructure (assistance schemes, work methods, work plans) received an average percentage value of 71.53%. This shows that the program has been running quite effectively. Meanwhile, at the stage of distributing assistance and controlling the market and material supply, the lowest average percentage was 70.4%. This shows that the efforts to spread the service and control the market and material supply are quite effective.

Interpretation Analysis on Monitoring and Evaluation

Continuous monitoring of the rehabilitation and reconstruction program is necessary to ensure that the resulting program can ensure that the community has better resilience in future disasters. In addition, in the implementation of the rehabilitation and reconstruction program, it

is necessary to carry out a mentoring process, which aims to reduce data anomalies that have an impact on the number of beneficiaries, data by name by address (BNBA), and maintaining da accountability as part of public accountability for users of BNPB ready-to-use funds (DSP) (Hakim & Ridha, 2022). Disaster resilience includes individual communicators. local communities, society, and government. The average percentage of monitoring and evaluation variables is 69.53%. This shows that the program implemented in the monitoring and evaluation phase has run quite effectively. The sub-variable reporting the results of work and supervision received an average percentage value of 73.27%. The most commonly used way to know the actual work done in a construction project is to carry out an overall project progress report and update the schedule every month (Chin & Hamid, 2015). This shows that the process of completing reports by POKMAS and Facilitators has run quite effectively. The monitoring and evaluation sub-variable received the lowest average percentage of 65.8%. This shows that monitoring in the work implementation stage or evaluation is quite effective when the work is completed.

Indicators of Success of the Rehabilitation and Reconstruction Program for Community Houses After the Lombok Earthquake in 2018

The implementation of the 2018 Lombok Earthquake Post-Disaster House Community Rehabilitation and several Reconstruction Program has achievement indicators that underlie effective performance guidelines for overcoming disasters after earthquakes. achievement indicators include (Riza, 2019):

- 1. Realization of disaster-resilient villages
- 2. Logistics needs
- 3. Monitoring and evaluation report
- 4. Disaster safe school
- 5. Optimization of information and communication
- 6. Infrastructure facilities

Efforts to accelerate the rehabilitation and reconstruction program for community houses began with an assessment of the impact of the earthquake and the recruitment of facilitators as assistants during the implementation of rehabilitation reconstruction. In addition, a performance plan for house repairs was prepared in conjunction with relevant stakeholders such as the Nusa Tenggara Barat Provincial Government, BPBD Nusa Tenggara Barat, PUPR Task Force, TNI. and other organizations involved to make the development process implementation conducive and stable. By the Inpres Nomor Tahun 2018, rehabilitation reconstruction in areas affected by the 2018 Lombok earthquake after the disaster in the form of educational, health, religious, and economic support facilities so that activities can function again are completed no later than the end of December 2018. Other facilities will be completed by December 2019. The program's implementation has several problems, such as stakeholder cooperation factors, channeling funds, coordination and communication between providers and recipients of assistance, material quality, regulations, budget clarity and regulations, and funding and material management. The interpretation analysis that has been carried out is by the weighting results of the criteria for the factors that most influence program implementation, where coordination and damage assessment have the lowest value, namely 66.83%. The percentage of factors affecting performance of the community house rehabilitation and reconstruction program in North Lombok Regency can be seen in Figure 2 below.



Figure 2. Factors affecting the implementation of the community

house rehab and reconstruction program in North Lombok Regency

Conclusion

The conclusions that can be drawn from this research are the results of the analysis and discussion as follows.

The average percentage of each variable is 69.84%. This shows that Rehabilitation implementing the Reconstruction Program for Community Houses after the 2018 Lombok Earthquake in North Lombok Regency has been running quite effectively and by the established rules and policies. The distribution of aid funds related to the construction of earthquakeresistant houses was hampered due to double data, resulting in the freezing of beneficiary accounts. This resulted in the construction implementation process being temporarily halted. In addition, re-verification by the facilitator team helped accelerate the opening of the aid fund account, which was then distributed to the parties or communities who received assistance for constructing earthquake-resistant houses due to damage from the 2018 Lombok Earthquake.

Stakeholder cooperation is the most influential factor in implementing rehabilitation community houses' and reconstruction program after the 2018 Lombok earthquake in North Lombok Regency. BNPB is an extension of the government in technical and non-technical processes such as setting rules, distributing assistance, and supervising implementation to comply with the objectives and achieve effective and efficient program quality.

The scheme of the rehabilitation and reconstruction program for community houses after the 2018 Lombok earthquake is that the rehabilitation and reconstruction of community houses after the 2018 Lombok earthquake, the people of Lombok not only enjoy the results but are also involved in every process. The government, which functions as the main control and coordinates the institutions under it. Police/TNI, Public Works Office, Education Office, Health Office, Bappeda, etc., plays an

active role as the implementer of the program.

Implementing the Rehabilitation and Reconstruction Program for Community Houses after the Lombok Earthquake 2018 has several problems. The most important greatly that problem affects implementation process is the cooperation of related stakeholders involved in the program implementation process. The participation of the government from the lowest level, namely RT / RW, greatly helped the verification process and the distribution of aid funds. Another problem in this rehab and recon program was the existence of a third party, namely the applicator, who carried out the construction. The applicator (contractor) role is very helpful for people who have difficulty finding labor and materials. However, this harms the beneficiaries because they cannot control the wages of delivery and the price of materials in the construction process. Perka BNPB No. 11 Tahun 2008 states that the government plays an important role in controlling the market and supply of materials.

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