



# EVALUATION AND IMPLEMENTATION STRATEGY OF SLUM HANDLING CASE STUDY LOMBOK DISTRICT EAST NUSA TENGGARA BARAT

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## ABSTRACT

The RTLH (Uninhabitable Houses Program) is a DPR RI (House of Representatives of the Republic of Indonesia) Commission VIII program in partnership with the Ministry of Social Affairs. The RTLH processing that used to be carried out in 2021 should be divided into five sub-districts in East Lombok Regency of Sakra, East Sakra, West Sakra, Keruak, and Jerowaru. However, due to the budget constraints, especially the Covid 19 outbreak in 2021, the proposal could not be completed, so it was rescheduled in 2022 to complete the RTLH in East Lombok Regency which is in several of the similar sub-districts. The purpose of this research is to determine the priorities for the construction of infrastructure for uninhabitable housing and to determine the weight of the criteria that influence decisions in determining where assistance is prioritized. Evaluation of the management of the 2021 RTLH in several districts of city was carried out on the development process of both from the inhibiting factors and the supporting factors. The evaluation of the RTLH includes determining the target beneficiaries, the process of implementing the program, evaluating the reporting of the results of the implementation of the program. The results indicated that the inhibiting factor for the implementation of the RTLH program is the lack of competent staffs to prepare reports, internally. While externally there is a shortage of construction workers. The mutual cooperation among residences and stake holder is needed. Therefore, East Lombok Regency requires special treatment in rehabilitation of uninhabitable houses to overcome the problem of slum settlements.

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## 1. INTRODUCTION

East Lombok Regency is regency in West Nusa Tenggara with an approximately area of 2,679.88 km<sup>2</sup>. The area consist of 1,605.55 km<sup>2</sup> (59.91 percent) of land and 1,074.33 km<sup>2</sup> (40.09 percent) of East Lombok sea area. East Lombok has problems for the poor residences. Based on the information from the Housing and Settlements Office, there are 38,353 houses have been handled by the Housing and Settlements Office of East Lombok Regency [1].

Through the Decree of the Minister of Social Affairs of the Republic of Indonesia No. 20 of 2017 concerning Social Rehabilitation of Uninhabitable Houses and Environmental Infrastructure based on Law no. 13 of 2011 in order for handling the poors states that the poor have the right to accommodation and to obtain a healthy living environment [2]. It is necessary to provide social assistance to the poor through social reintegration to maintain the right of the poor to proper housing and a healthy environment from home and uninhabitable environment. Infrastructure, based on the aspects above, is necessary to provide guidance on the social rehabilitation of uninhabitable houses and environmental infrastructure through the Minister of Social Regulation. RTLH and

environmental care social rehabilitation aims to restore social functioning and improve the quality of the poor residences through improving the condition of the house and environmental infrastructure as the whole using the spirit of togetherness, mutual cooperation, and the value of loyalty to the social community. Based on data from East Lombok Regency uninhabitable houses that have not been handled until 2022 as many as 31,237. Through the Ministry of Social Affairs Program, East Lombok Regency received rehabilitation support of 100 uninhabitable houses in 2021 and 111 houses in 2022. The support distributed in several sub-districts such as Sakra, East Sakra, West Sakra, Keruak and Jerowaru which were given directly in the form of grants to the community.

## 2. LITERATURE REVIEW

Study of supplier selection instruments using the Analytical Hierarchy Process (AHP) in self-help assistance activities has been conducted with supplier selection using six main criteria. The criteria consist of capital funding, business license, price, quality of goods, mode of transportation, and store distance. The results of the assessment carried out showed that the capital funding with a value of 86.8% was the highest ranking criterion [3].

Another research of analysis of the level of damage and priority of repair to Elementary School Buildings in Central Lombok Regency has been done with the AHP Method. The research found that the damage level of elementary school buildings in the Central Lombok Regency area was classified into two categories namely moderate damage and severe damage. Moderate damage with > 30% - 45% damage levels was found in SDN 1 Marong with percentage of damage 44.23%. Schools building that were heavily damaged with a level of damage > 45% - 65% was found in SDN 2 Pejangik with percentage of 63.21% [4].

### Definition of House Unfit For Living (RTLH)

Unfit for habitation is also defined as a house which physical and mental aspects do not meet the requirements. To support the function of the house as a good place to live, the physical requirements must be met, namely being safe as a place of refuge and mentally fulfilling a sense of comfort. The degree of feasibility of a residential house can be measured from two aspects of physical quality of the house and the quality of the housing facilities. The physical quality of a residential house is measured by three variables of the widest type of roof, the widest type of walls and the widest type of floor. While, the quality of housing facilities is measured by three variables of floor area per capita, sources of lighting, and availability of toilet facilities [5].

### Definition of project activities and construction projects

#### 1) Project activities

Series of activities can be divided into two types, namely routine activities and project activities. Routine activity is an ongoing activity that is repeated and lasts a long time. While project activity is a series of activities carried out only once and generally takes place in a short period of time.

#### 2) Construction projects

Construction project is a series of project activities related to the field of construction (development) which has a limited time dimension with an allocation of certain funding sources, in order to realize an idea and obtain certain goals, after the idea is feasible to implement. To complete a construction project, must adhere to the constraints of three constraints (*triple constrain*).

#### 3) Organizational structure in construction projects

The simplest definition of organization is the unification of the activities of two or more individuals under coordination whose function is to bring together one goal.

#### 4) Project delays

The definition of delay is an implementation time that is not utilized in accordance with the activity plan, causing one or several activities to follow to be delayed or not completed exactly according to the planned schedule. Construction projects involve various parties from the construction stage to completion. Project delays can be caused by the contractor or by the owner. Delays can also occur but are not caused by both parties. Delay in a construction project means an increase in the implementation time for project completion that has been planned and stated in the contract documents. Completion of work that is not done on time is a deficiency in the level of productivity and of course all of this will result in a waste of financing. The deficiency of productivity can occur in the form of direct financing spent on government projects, as well as in the form of swelling investment and losses on private projects.

#### 5) Causes of project delays

In this section, several expert opinions regarding the causes of delay will be explained. The causes of delays in a project can be categorized into three parts of excusable non compensable delays, excusable compensable delays, and non excusable delays.



6) Overcoming project delays

During the construction process there are always symptoms of periodic scarcity of the materials being treated, in the form of basic materials or finished goods both local and foreign. Providing good management to maintain the symptoms properly would overcome the project delays [6].

#### Data analysis method using SWOT

SWOT is an acronym from the initial letters of S (strength), W (weakness), O (opportunity) and T (Threat). The SWOT analysis method is usually considered the most basic method of analysis, which is useful for looking at a problem from four different sides. The results of the analysis are usually directions/recommendations to maintain strengths and increase the advantages of existing opportunities, while reducing deficiencies and avoiding threats. If used correctly, SWOT analysis will help us to see the sides that have been forgotten or not seen so far.

This analysis is descriptive in nature and sometimes very subjective, because it is possible that two people who analyze an organization will perceive these four parts differently. SWOT analysis is a method planning strategic used to evaluate the strength, weakness, opportunity or chance, and threats in a project or a business speculation. SWOT analysis can be used as guidance to identify positives and negatives in the organization.

Therefore, SWOT analysis is an analysis of the strengths and weaknesses as internal environment of a company or organization as well opportunities and threats in its external environment. This analysis involves determination the objectives of the business venture or project and identify good and profitable internal and external factors to achieve these goals [7].

#### Evaluation of House Unfit For Living (RTLH)

The term evaluation refers to a process to determine the value of a particular activity. Evaluation means determining how far something is valuable, quality, or worth. Evaluation according to the Big Indonesian Dictionary is an effort to evaluate technically and economically of a mineral deposit for the possibility of mining it. The term of evaluation can be equated with assessment of appraisal, numeration of rating, and assessment of valuation.

#### Evaluation Approach

In carrying out the evaluation, there are three approaches which can be distinguished based on the characteristics of the system values. The three approach can be explained as pseudo evaluation (PE), formal evaluation (FE) and decisions theoretic evaluation (DTE). The evaluation used in this study is an evaluation at the program level, using a formal evaluation approach and is carried out after the program has been completed within a certain period of time. The use of a formal evaluation approach is carried out with the assumption that the evaluation assessment is based on that the objectives and implementation are formally announced as the appropriate measure for assessing the program.

#### Evaluation Benefits

Specific purpose of program evaluation can be divided into six object as follows:

- 1) Provide input for program planning;
- 2) Provide input for decision makers relating to the follow-up, expansion or termination of the program;
- 3) Provide input for decision makers regarding program modifications or improvements.
- 4) Provide input regarding the supporting and inhibiting factors of the program.
- 5) Providing input for motivational and coaching activities (supervision, supervision and montoring) for program administrators, managers and implementers;
- 6) Presenting data on the scientific basis for evaluating out-of-school education programs.

#### Types of Evaluation Implementation

In general the implementation of assesment is divided into three types of evaluation such as evaluation at the planning stage (*From Before*), evaluation at the implementation stage (*On-Going*), and evaluation at the post implementation stage (*Post Stage*).

#### Evaluation Criteria

In order to assess the success of policy or program, it is necessary to have indicators of criteria. In carrying out an evaluation there are several criteria used as an assessment These criteria are effectiveness, efficiency, adequacy, responsiveness and determination.

### 3. METHODS

#### 3.1. Research Location

The research location used as a case study is shown in Figure 1. Determining the location of uninhabitable houses (RTLH) as a sample with the consideration that each sub-district is represented by at least 1 (one) uninhabitable house (RTLH).



Figure 1. Research location

#### 3.2. Research Methods

The data needed in this study are primary data and secondary data. The collection of the required data can be done with the following techniques:

- 1) Field survey/direct observation
- 2) Live interview
- 3) Questionnaire
  - Data Primer
  - Data on the construction of uninhabitable houses (RTLH) in East Lombok Regency

#### 3.3. Research Stages

The stages of this research are:

- 1) Preparation Stage
- 2) Level of Data Collection
- 3) Data Analysis Phase
- 4) Testing Stage
- 5) Conclusion and Suggestion Stage

#### 3.4. Research Instruments

In this case, the research instruments used are the main instruments and supporting instruments.

- 1) Main Instruments

The main instrument in this research is the researcher himself. In this case the researcher who is the main instrument observes directly where the researcher participates to observe the situation and condition that occurs in the field.

- 2) Supporting Instruments

In helping to collect research data, supporting instruments can observe the complementary data and compare the data obtained through the process of observation and interviews.

#### 3.5. Data collection method, population and research sample

- 1) Data collection methods

In this study the authors used the interview method in data collection techniques, namely interviews were conducted by conducting question and answer to related parties who could provide an explanation regarding the selection of respondents regarding uninhabitable houses.

- 2) Population and research sample

In this study several samples were taken by method of interviews. The sample represents people from beneficiary communities of East Lombok District.



### 3.6. Data analysis method

After filling out the questionnaire, expert perceptions of existing internal and external factors will be obtained. Table 1 presents the factor indicator used in SWOT obtained from assessment of internal and external factors. From the assessment of internal and external factors, the next step is to identify the elements that are categorized as strengths, weakness, opportunity, and threats owned in the activities of assistance for uninhabitable houses.

**Table 1. Factor Indicators in SWOT**

| Assessment of Internal and External Factors Indicators    |   |
|---|---|
| Internal factors<br>Factor 1<br>Factor 2<br>Factor 3, etc | External factors<br>Factor 1<br>Factor 2<br>Factor 3, etc |

- 1) After the internal factors have been grouped into strengths and weaknesses, and the external factors have been grouped into opportunities and threats, the next step is to do the IFAS–EFAS weighting of the SWOT elements;
- 2) The adjusted value is an absolute value;
- 3) Determination of the weight of each SWOT element for each factor by taking the weight of each factor = 100%. Total weight of each SWOT element describes total value of the average adjustment to the total value of each factor;
- 4) The weighting used as priority assessment material is the weighted weight obtained by multiplying the x weights rating. The rating is obtained from the value of the urgency of handling/priority scale of importance.

### 3.7. Strategy formulating

To get priorities and interrelationships between strategies, based on the results of the SWOT questionnaire IFAS-EFAS weighting for each of these indicators, a combined strategy interaction was carried out which included an internal-external combination, which consisted of:

- 1) Strategy *Strength-Opportunity* (SO); SO strategy combination interaction: namely a strategy that uses strengths to take advantage of opportunities;
- 2) Strategy *Strength-Threat* (ST); ST strategy combination interactions: namely a strategy that uses strength to overcome threats;
- 3) Strategy *Weakness-Opportunity* (WO); WO strategy combination interaction: namely a strategy that minimizes weaknesses to take advantage of opportunities;
- 4) Strategy *Weakness-Threat* (WT) Interaction combination of WT strategies: namely a strategy that minimizes weaknesses to overcome threats.

**Table 2. Matrix Faktor Internal and External**

|                    |                     | EXTERNAL FACTORS       |                   |
|--------------------|---------------------|------------------------|-------------------|
|                    |                     | <i>OPPORTUNITY</i> (O) | <i>THREAT</i> (T) |
|                    |                     |                        |                   |
| FACTOR<br>INTERNAL | <i>STRENGTH</i> (S) | SO strategy            | ST Strategy       |
|                    | <i>WEAKNESS</i> (W) | WO strategy            | WT Strategy       |

Then from the interaction of these strategies a SWOT–IFAS–EFAS Matrix will be obtained as described in Table 3.

**Table 3. SWOT Matrix–IFAS–EFAS Interaction**

|                 | Strength (S)  | Weakness (W)   |
|-----------------|---|--|
| Opportunity (O) | <u>SO strategy</u><br>a. Strategy that maximizes strengths to leverage available opportunities;<br>b. Aggressive strategy;<br>c. Comparative advantage. | <u>WO strategy</u><br>a. Strategies that minimize weaknesses to take advantage of opportunities;<br>b. U-turn orientation strategy;<br>c. Investment/divestment. |
| Threat (T)      | <u>ST Strategy</u><br>a. Strategy that maximizes strengths to overcome threats;<br>b. Diversification strategy;<br>c. Mobilization.                     | <u>WT Strategy</u><br>a. Strategies that minimize weaknesses to overcome threats;<br>b. Defensive strategy;<br>c. Damage control/risk strategy.                  |

#### 4. RESULTS AND DISCUSSION

##### 4.1. Determination of criteria and sub criteria.

Based on the results of the interviews and questionnaires that have been conducted, it is obtained the criteria that will determine the priority with AHP. These criteria and their respective percentages presented in Table 4.

**Table 4. Resume Selection Criteria**

| No | Criteria   | Percentage |
|----|--|------------|
| 1  | Poor Households  | 100%       |
| 2  | Owens a house on own land  | 100%       |
| 3  | The area of the house is less than 8 m <sup>2</sup>                | 100%       |
| 4  | The roof of the house is made of materials that are easily damaged | 85%        |
| 5  | The walls of the house are in damaged condition.                   | 70%        |
| 6  | Dirt, plank, bamboo, cement floors were in disrepair.              | 60%        |
| 7  | There is no place for bathing, washing, toilet                     | 40%        |
| 8  | Have KTP / Identity and KK   | 25%        |
| 9  | Never received RTLH assistance                                     | 25%        |
| 10 | Easy Clean Water Access  | 20%        |
| 11 | Good Environment Drainage Channel                                  | 10%        |

Based on Table 4, the criteria used are criteria with a percentage of > 50%. The criteria include:

- 1) Poor households,
- 2) Have a house on their own land,



- 3) The area of the house is less than 8 m<sup>2</sup>,
- 4) The roof of the house is made of materials that are easily damaged (thatch, zinc, thatch, palm fiber, tile),
- 5) The walls of the house from the booths, bamboo boards, bark are in a damaged condition.
- 6) Dirt floor, papa, bamboo. Cement is in bad condition.

#### 4.2. Data processing

Data processed with AHP were obtained from questionnaires given to 20 respondents. Respondents are scattered throughout stakeholder and parties that are the scope of the research. In the questionnaire results a comparison is made between one criterion and another. The criteria include:

- 1) Poor households,
- 2) Have a house on their own land,
- 3) The area of the house is less than 8 m<sup>2</sup>,
- 4) The roof of the house is made of materials that are easily damaged (thatch, zinc, thatch, palm fiber, tile),
- 5) The walls of the house from the booths, bamboo boards, bark are in a damaged condition.
- 6) Dirt floor, papa, bamboo. Cement is in bad condition.

**Table 5. Comparison among criterion**

| Criteria    | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Criterion 6 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Criterion 1 | 1.00        | 1.48        | 2.80        | 2.10        | 2.38        | 2.60        |
| Criterion 2 | 0.43        | 1.00        | 2.13        | 1.15        | 2.50        | 0.70        |
| Criterion 3 | 0.50        | 0.58        | 1.00        | 0.50        | 2.70        | 1.70        |
| Criterion 4 | 0.46        | 0.90        | 1.98        | 1.00        | 1.95        | 2.05        |
| Criterion 5 | 0.73        | 0.50        | 2.85        | 0.30        | 1.00        | 0.50        |
| Criterion 6 | 2.30        | 0.50        | 0.50        | 3.00        | 0.50        | 1.00        |
| Amount      | 5.41        | 4.95        | 11.25       | 7.95        | 11.03       | 8.55        |

**Table 6. Eigenvectors and criteria priority vectors**

| Criteria    | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Criterion 6 | Weight |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|
| Criterion 1 | 1.00        | 1.48        | 2.80        | 2.10        | 2.38        | 2.60        | 0.428  |
| Criterion 2 | 0.43        | 1.00        | 2.13        | 1.15        | 2.50        | 0.70        | 0.311  |
| Criterion 3 | 0.50        | 0.58        | 1.00        | 0.50        | 2.70        | 1.70        | 0.051  |
| Criterion 4 | 0.46        | 0.90        | 1.98        | 1.00        | 1.95        | 2.05        | 0.019  |
| Criterion 5 | 0.73        | 0.50        | 2.85        | 0.30        | 1.00        | 0.50        | 0.001  |
| Criterion 6 | 2.30        | 0.50        | 0.50        | 3.00        | 0.50        | 1.00        | 0.19   |
| Amount      | 5.41        | 4.95        | 11.25       | 7.95        | 11.03       | 8.55        | 1.00   |

In the first stage of the questionnaire, a comparison was made between the criteria distributed to 20 respondents. The resume results from the comparison stage from the 20 respondents are presented in the Table 5. Based on the results of the comparison of these criteria, the values of the Eigen Vectors and Priority Vectors are determined from the results of these comparisons which are presented in Table 6.

Furthermore, based on the value of the eigenvector and the priority vector, the value is determined *index consistency* (CR), it is required that the CR value is <10%. Prior to that, the maximum  $\lambda$  value had to be determined by multiplying the priority vector value for each criterion by the total weight of the comparison value for each criterion. The following is the calculation for the max.  $\lambda$  value.

$$\begin{aligned}\lambda_{\max} &= (Vp1 \times \text{sum } 1) + (Vp2 \times \text{sum } 2) + (Vp3 \times \text{Sum } 3) + (Vp4 \times \text{Sum } 4) + (Vp5 \times \text{Sum } 5) + (Vp6 \times \text{Sum } 6). \\ &= (0.428 \times 5.41) + (0.311 \times 4.95) + (0.051 \times 11.25) + (0.019 \times 7.95) + (0.001 \times 11.03) + (0.19 \times 8.55) \\ &= 7.85\end{aligned}$$

Then determined the value of CI as follows,

$$CI = \frac{\lambda_{\max}}{n-1}$$

Where n is the number of criteria, in this case it is 7.85.

The matrix order value is 6 so that the RI value = 1.24. to further determine the value of  $CR = \frac{CI}{RI}$

$$\begin{aligned}CR &= \frac{0.044}{1.24} \\ &= 0.035\end{aligned}$$

With a CR value of 3.5% <10%, it can be said that the results of the questionnaire for 20 respondent can be used. In the same way a comparison is made between the objectives that will be an alternative solution to the problem in this study.

The ranking for each criterion and its weight is arranged based on the priority vector values in Table 6. The following is the ranking of each criterion:

- 1) Criterion 1 = 42.8 %
- 2) Criterion 2 = 31.1 %
- 3) Criterion 3 = 5.1 %
- 4) Criterion 4 = 1.9 %
- 5) Criterion 5 = 0.1 %
- 6) Criterion 6 = 19%

From the ranking results it can be seen that "poor households" is an absolute criterion that must be owned by beneficiaries in Uninhabitable Housing assistance activities. With the results of ranking interviews and *brainstroming* that has been done, then an instrument for the election *Public Recipient* can be made.

In this study, the AHP process was only carried out at level 1. The decision making process is not carried out, but as a process for determining the weight and ranking of the criteria that will be used as selection parameters *Recipient Society* in RTLH assistance activities.

Because the weight of "poor households" has an absolute influence on the results of this study, the weights in making the instrument still refer to the existing rankings.

### 4.3. SWOT analysis

#### 4.3.1. Internal factor

Identification of internal factors was carried out to determine the strengths and weaknesses contained in the Uninhabitable Houses (RTLH) assistance program in East Lombok Regency. The strength and weakness in the house program is shown in Tabel 7.



**Table 7. Internal Factors (Strengths and Weaknesses) in the House Program**

| <b>Internal Strategic Factors</b>  |   |
|--|---|
| <b>Strength</b>  | <b>Weakness</b>   |
| 1. Legal and certified houses<br>2. Attention from the subdistrict head for the arrangement of dense residential areas.<br>3. Availability of quite complete facilities and infrastructure.<br>4. Most of the existing facilities and infrastructure are in good condition.<br>5. There is a home industry.<br>6. The existence of multi-business cooperatives.<br>7. Most people are of productive age.<br>8. There is an allocation of DPK assistance for cooperative capital, training activities and capital for small-medium enterprises. | 1. There are uninhabitable houses.<br>2. High building density<br>3. There are buildings with narrow spacing, even close together and not arranged.<br>4. Fulfillment of housing needs is lacking.<br>5. There is a narrowing and blockage by the wallet in the secondary drainage channel.<br>6. There is an overload of garbage at the TPS.<br>7. There is a narrow alley way.<br>8. There is damage to environmental roads.<br>9. Lack of RTH<br>10. Inadequate sources of clean water (dug/dug wells).<br>11. There is no suggestion of cultural performances yet.<br>12. There are still people with low income levels (less than IDR 500,000)<br>13. There are no SMEs to accommodate small and medium scale local economic enterprises<br>14. Lack of guidance and training for the community in improving the existing local economy (home industry and trade and services) |

#### 4.3.2. External Factors

Identification of external factors was carried out to find out the opportunities and threats faced in the Uninhabitable Houses (RTLH) assistance program in East Lombok Regency. To know opportunities and threats faced in the Uninhabitable Houses (RTLH) assistance program in East Lombok Regency can be seen in Table 8.

**Table 8. External Factors (O and T) of Uninhabitable Housing (RTLH) Program in East Lombok District**

| <b>External Strategic Factors</b>  |  |
|--|--|
| <b>Opportunity</b>   | <b>Threat</b>  |
| 1. There is a policy to build a thousand housing by the Ministry of Social Affairs<br>2. There is a concept of RTLH development.<br>3. There is a development program with community empowerment (PNPM).<br>4. Has a strategic location close to the commercial center. 5. Passed by collector and local roads that are crowded. | 1. There is no policy related to housing and settlements in East Lombok Regency.<br>2. Disposal of garbage from residents to other sub-districts to TPS. |

#### 4.3.3. Weights and ratings

The internal and external factors that have been identified are then evaluated using the Internal Factor Evaluation (IFE) matrix and the External Factor Evaluation (EFE) matrix.

##### 4.3.3.1. Matrix IFE

The internal factor evaluation (IFE) matrix is used as an evaluation of the strengths and weaknesses of the

Uninhabitable Houses (RTLH) assistance program in East Lombok Regency. In this analysis can be seen in Table 9.

**Tabel 9. Matriks Internal Factor Evaluation – IFE**

| No              | Internal Factors  | Weight | Rating | Score       |
|-----------------|---|--------|--------|-------------|
| <b>Strength</b> |   |        |        |             |
| 1               | Legal and Certified Home  | 0,20   | 4      | 0.78        |
| 2               | Attention from leurahan for the arrangement of dense residential environments   | 0,23   | 4      | 0.92        |
| 3               | Availability of adequate facilities and infrastructure                          | 0,22   | 4      | 0,88        |
| 4               | Most of the existing facilities and infrastructure are in good condition.       | 0,35   | 4      | 1.40        |
|                 | Total   | 1.00   |        | <b>4,00</b> |
| <b>Weakness</b> |   |        |        |             |
| 1               | There are Uninhabitable Houses  | 0,21   | 3      | 0.62        |
| 2               | High Building Density   | 0,23   | 4      | 0.92        |
| 3               | The existence of buildings with narrow spacing even coincide and not arranged.  | 0,23   | 3      | 0.68        |
| 4               | Fulfillment of housing needs experienced a shortage.                            | 0,18   | 4      | 0.70        |
| 5               | There is narrowing and blockage by the wallet in the secondary drainage channel | 0,17   | 4      | 0.70        |
|                 | Total   | 1.00   |        | <b>3.57</b> |

#### 4.3.3.2. Matriks EFE

The external factor evaluation (EFE) matrix is used as an evaluation of the opportunities and threats that are related to the Uninhabitable Houses (RTLH) assistance program, which can be seen in Table 10.

**Tabel 10. Matriks External Factor Evaluation – EFE**

| No                 | External factors  | Weight | Rating | Score |
|--------------------|---|--------|--------|-------|
| <b>Opportunity</b> |   |        |        |       |
| 1                  | There is a policy to build a thousand housing by the Ministry of Social Affairs | 0,25   | 4      | 0.98  |
| 2                  | There is a concept of RTLH development  | 0,25   | 4      | 1.00  |
| 3                  | There is a development program with community empowerment (PNPM)                | 0,16   | 4      | 0.66  |



|                |   |      |   |             |
|----------------|---|------|---|-------------|
| 4              | Has a strategic location close to the shopping center.                        | 0,13 | 4 | 0.52        |
| 5              | Passed by a crowded street of collectors and locals.                          | 0,21 | 3 | 0.63        |
|                | Total   |      |   | <b>3,79</b> |
| <b>Threats</b> |   |      |   |             |
| 1              | There is no policy related to housing and settlements in East Lombok Regency. | 0,22 | 3 | 0.66        |
| 2              | Disposal of garbage from residents  | 0,26 | 3 | 0.77        |
|                | Total   |      |   | <b>2,74</b> |

The total external factor score for opportunity is 3.79 which indicate that the uninhabitable housing program in East Lombok Regency is in a strong position (3.00 – 4.00) in responding to opportunities and minimizing the negative effects of external threats. This is in accordance with the opinion of researcher [7], that the total score of the EFE matrix (*external factor evaluation*) from a score of 3.00 to 4.00 indicates a strong position.

#### 4.3.4. Level of analysis (Process)

Factor analysis is the use of internal and external factors in quantitative models of strategy formulation. The factor analysis uses the SWOT matrix model, internal-external (IE) matrix, space analysis matrix and grand strategy matrix. SWOT Matrix (*Strengths-Weakness-Opportunities-Threats*) used to formulate alternative strategies for the construction of the Dam Management Unit (UPB) building project in the province of West Nusa Tenggara by combining internal and external factors resulting from the input stage (IFE and EFE matrices) obtained in the following discussion.

##### 4.3.4.1. SO strategy

SO strategy is a strategy focused on how to use strengths to take advantage of opportunities. Several SO strategies that can be formulated are:

- 1) Increase access to coordination between the head of the Balai and the Dam Management Unit if they are in the same complex
- 2) Parking facilities will support the existence of a large parking area.
- 3) The comfort level of the work space increases so that the issue of a bad work environment can be minimized.

##### 4.3.4.2. WO strategy

WO strategy is a strategy that is focused on how to minimize weaknesses to take advantage of opportunities. Some of the WO strategies that can be formulated are:

- 1) Vehicle traffic will be easy with a smooth access road.
- 2) The efficiency of the workspace increases with the support of the leadership regarding infrastructure and supporting facilities in the building.
- 3) Arrangement of the parking area will be good with a large parking area.

##### 4.3.4.3. ST strategy

ST strategy is a strategy focused on how to minimize weaknesses to avoid threats. Several ST strategies that can be formulated is infrastructure quality improvement.

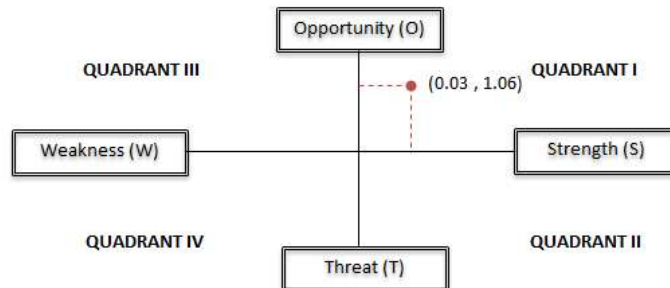
##### 4.3.4.4. WT strategy

WT strategy is a strategy that is focused on how to minimize weaknesses and avoid threats. Some WT strategies that can be formulated is maintain housing conditions in East Lombok Regency.

#### 4.3.5. Matrix grand strategy

Matrix grand strategy (Figure 2) aims to determine the focus of the study that must be implemented on matrix

grand strategy. The X-axis value is obtained by adding up the average rating of internal factors (strengths and weaknesses), while the Y-axis value is obtained by adding up the average rating of external factors (opportunities and threats) obtained in the matrix space analysis.



**Figure 2. Diagram Matrix Grand Strategy in the RTLH program**

$$\text{X-axis value} = S + (-W) = 4.00 + (-3.57) = 0.03$$

$$\text{Y-axis value} = O + (-T) = 3.79 + (-2.75) = 1.06$$

Figure 2 shows that the meeting of the X and Y in the Quadrant I of S-O Quadrant. This condition is a very profitable situation because it has more dominant opportunities and strengths.

## 5. CONCLUSION

Based on the results of the research obtained, several conclusions can be drawn as follows:

- 1) Inhibiting factor of the RTLH program is the lack of competent staff to prepare reports.
- 2) External factor of construction workers shortage is also the constraint of the program.
- 3) In order to overcome the problem, improving mutual cooperation among residences and stakeholders are needed.

## 6. SUGGESTION

Based on the research that has been done, there are several things that can be given as an effort to improve for further research as follows:

- 1) Research should be carried out in a larger scope so that it can be a study that does not only have an impact on a small area of scope.
- 2) It is necessary to apply it as a weight determination as a comparison in order to get better research results.

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