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**Research Paper** 



# Ranking Analysis of Immovable Cultural Heritage Buildings in Sumbawa Regency, Indonesia

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**ABSTRACT:** The diversity of Indonesian culture is present in the form of cultural heritage. The ranking of cultural assets is required by law, which specifies that local governments can categorize cultural heritage depending on its value at the national, province, and district/city levels. The current study aimed to establish the architectural ranking of five cultural heritage buildings in Sumbawa that have distinguishing features and have the potential to become national, provincial, and district/city cultural heritage. The cultural heritage buildings include (1) Istana Kesultanan Sumbawa, (2) Istana Dalam Loka, (3) Bala Datu Ranga, (4) Istana Bala Kuning, and (5) the former Dutch East Indies Controller's Office. Each of the five cultural heritage buildings has their unique architectural style that is tailored to their time. This study's ranking analysis employed a historical approach, as well as literary research, to examine the building architectural structure and government regulatory compliance. Technically, the ranking analysis was performed by identifying the factor and response variables to create the ordinal and interval scales. The results of the calculation and ranking analysis of the five cultural heritage buildings in Sumbawa Regency showed that (1) Istana Dalam Loka possessed a ranking score of 72.6% which was converted to a cultural heritage ranking ratio scale of 66%-100% in the National ranking; (2) Bala Datu Ranga obtained a ranking score of 62% with a ratio scale of 33%-66% in the Provincial ranking; (3) Istana Bala Kuning achieved a ranking score of 61.3% (provincial ranking category); (4) The Palace of Sultan Muhammad Kaharuddin III obtained a score of 69% and was included in the National ranking; (5) the former Dutch East Indies controller's office possessed a ranking score of 59.6% (provincial ranking category). The findings of these calculations provide insights to the local government, allowing them to follow up and collaborate with the province to safeguard cultural treasures in accordance with government policy. It is also believed that the preservation of cultural assets in Sumbawa Regency will increase income and promote tourism on a global scale, thereby supporting sustainable development in the area.

KEYWORDS: Ranking, Architecture, Cagar Budaya, Cultural Heritage, Sumbawa Regency

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# I. INTRODUCTION

The diversity of Indonesian culture is present in the form of physical (tangible) and non-physical (intangible) cultural heritage. Cultural heritage is closely related to the identity of a nation. Cultural heritage is an important and valuable national resource. Law of the Republic of Indonesia No. 11 of 2010 has mandated the separation of cultural heritage management by the central, district, and city governments. Cultural heritage including national and international assets is the responsibility and authority of the state. The authority to manage provincial or district/city cultural heritage is delegated to the respective regions.

The basis for ranking cultural heritage is regulated in article 41 which states "the central and local governments can classify cultural heritage into national, provincial, district/city rankings based on their interests". To determine the ranking of cultural heritage, a cultural heritage expert team (TACB) are selected by the minister, governor, regent/mayor of the respective area. Therefore, the results of this study will be proposed to the cultural heritage expert team to be submitted to the Regency/Provincial/National government. Law Number 11 of 2010 is one form of protection, preservation and utilization of cultural heritage to advance culture in

Indonesia. This is in line with Law Number 28 of 2002 concerning Cultural Heritage Buildings, which states that buildings and their surroundings that are designated as cultural heritage must be protected and preserved. Preservation of Cultural Heritage Buildings should meet technical requirements, preservation requirements, and building management regulations. The law is strengthened by Law Number 28 of 2002 concerning cultural heritage buildings and the regulation of the Indonesian Minister of Public Works and Public Housing No. 1 of 2015 concerning cultural heritage buildings that must be preserved.

A study relevant to cultural heritage preservation has been published in Eduvest– Journal of Universal Studies by [1]. The study explains the general description of the cultural heritage of Sumbawa Besar City and reports that Heritage is a relic of the past that has historical value, contains the quality of thought, and plays a very important role in the social dimension of human life. Therefore, cultural heritage has a strong influence on the unique architectural style of a city. Heritage City can be interpreted as a city in which there are cultural heritage areas and/or cultural heritage buildings that hold an important value for the city's community. Heritage City places the implementation of heritage planning and preservation activities as the main strategy for city development. The parameters used in compiling the delineation of heritage cities consist of three, namely the city heritage assets or buildings, socio-economic status and their relationship/interaction patterns.

Sumbawa Regency has received a competency certificate from the National Professional Certification Agency (BNSP) and a Decree (SK) from the Regent of Sumbawa as the legality for the cultural heritage expert team (TACB). The ranking of cultural heritage requires a set of instruments that can distinguish cultural heritage as local, regional, or national cultural heritage. The ranking system is supported by the *Detasering* Scheme Field Research on the ranking of Cultural Heritage objects. The main task of the TACB is to create guidelines for cultural heritage ranking, in this case limited to immovable cultural heritage in Sumbawa Regency. These guidelines are used as a reference in scoring cultural heritage based on its existing conditions. The phenomenon being studied must first be defined to be able to study and understand the phenomenon, which is determining the variables and how to measure them.

Theoretically, measurement is the basis of scientific investigation. The analysis carried out begins with the measurement of the object to be studied. Measurement is the assignment of numbers or codes to an object. There are four types of measurement scales, namely nominal, ordinal, interval, and ratio. The lowest scale is nominal and the highest is the ratio scale. A higher measurement scale will have the characteristics of the measurement scale below it. For example, a ratio scale will have nominal, interval, and ordinal characteristics [2]. When visiting immovable cultural heritage, it turns out that there are immovable cultural heritages with unique designs and there are immovable cultural heritages with simple designs. The question is, why are there immovable cultural heritages with unique designs and there are immovable cultural heritages with simple designs. Based on information and literature, immovable cultural heritages with unique designs are national cultural heritages. Immovable cultural heritages with unique designs are national sites, but not all immovable cultural heritages with unique designs are national sites, but not all immovable cultural heritages with unique designs are national cultural heritages.

Based on the description above, to trace and determine the differences in ranking of five immovable cultural heritage buildings in Sumbawa Regency, including the Istana Dalam Loka built in 1885, Bala Datu Ranga built in 1886, the Palace of Sultan Muhammad Kaharuddin III built in 1931 and Bala Kuning built in 1942, and the former Dutch Controller 1905.

# Literature Review

The basic concept of cultural heritage in this study refers to Law Number 11 of 2010 Article 1 which states that cultural heritage is a cultural heritage in the form of cultural heritage objects, cultural heritage structures, cultural heritage sites and cultural heritage areas. [3] in his book entitled "around cultural heritage" states that cultural heritage both on land and at sea is very important to preserve its existence because it has important value for history, science, education, religion, and culture through a determination. The diversity of cultural heritage is a reflection and identity of a nation [2]. According to Achmadi Cultural heritage in Indonesia is very much but its identity and ranking are not yet known with certainty, this is because the cultural heritage ranking instrument is not yet fully available. This is relevant to the fact that in several regions in Indonesia there are still cultural heritage that have not been determined and given a ranking with assessment standards, both at the Regency, Provincial and National levels.

Research studies that are relevant to the ranking of cultural heritage in Sumbawa Regency have been conducted by [4]who highlighted several fundamental problems regarding the ranking of cultural heritage, namely the lack of accurate methodology that is recognized and widely accepted by the world for cultural heritage assessments and the difficulty of comparing the results of economic assessments and cultural value assessments. The results of the study focused on methods of identifying, articulating, and building culture significantly. In addition, considerations regarding the assessment of a site should refer to historians, archaeologists, artists and so on, as well as other values brought by stakeholders, especially those related to important social and economic values as a reference in assessing a cultural heritage.

Another study on the preservation of intangible cultural heritage using digital technology conducted by [5] from Sultan Idris Education University, Perak Malaysia. According to him, Cultural Heritage is a symbol of the spiritual and intellectual wealth of a civilization while intangible cultural heritage is associated with traditions and expressions of life. Ironically, a potential strategy in preserving cultural heritage lies in the advancement of current digital technology. The research study highlights the main problems and challenges in preserving intangible cultural heritage through technology.

Research on Cultural Heritage and Nation Branding; Marketing Drivers for Sustainable Development. Has been conducted by [6] who stated that until now the importance of branding is exclusively used throughout the world in the promotion of cultural heritage. The conclusion obtained in his research is that cultural heritage represents a determining factor in a country's branding, as well as competitiveness and tourism. Other research was also conducted by [7] on Cultural Heritage and Growth. The results of the study found, first, a strong positive impact of cultural heritage on cultural growth. Second, the impact of cultural heritage on growth is smaller in countries that have high levels of political instability or have a high rule of law.

Other relevant research related to the method of ranking and designation of cultural heritage has been conducted by [8] from Lithuania who studied the hybrid criteria evaluation method in ranking cultural heritage structures for renovation projects. The conclusion of the study shows that the preservation of cultural heritage objects is one of the strategic objectives of the national security policy. The objects to be renovated must be selected objectively and carefully. A hybrid multi-criteria evaluation model has been created to solve the problems related to the strategic management of these objects. A set of criteria for evaluating projects regarding the renovation of cultural heritage objects has been established.

Other relevant research is research by [9] that the Sumbawa Sultanate was one of the three great Islamic kingdoms on Sumbawa Island. Its existence in 1974-1958 with the center of government in Sumbawa Besar City. The transformation of traditional to modern architecture in colonial heritage buildings in Sumbawa Regency is marked by the existence of the Sumbawa Sultanate Palace during the pre-independence period of the Sumbawa Kingdom, the Era of the Reign of Sultan Muhammad Kaharuddin III in 1931.

# II. METHOD

This study aims to rank five cultural heritage objects in Sumbawa Regency including the Dalam Loka Palace, Bala Datu Ranga, Sultan Muhammad Kaharuddin III Palace, Bala Kuning Palace and the Former Dutch Controller's Office. This analysis was conducted because each palace building has unique architectural characteristics that have the potential to become a cultural heritage at the district/city, provincial and national levels. Furthermore, the results of the cultural heritage assessment according to its level can produce recommendations at the national and regional levels, especially for the Sumbawa Regency government. The expected target in this study is to be able to determine the ranking of cultural heritage objects by conducting indepth research on 5 cultural heritage buildings. Based on the results of this research, the Sumbawa Regency Cultural Heritage Expert Team (TACB) will recommend according to the ranking results of the five cultural heritage objects registered in Sumbawa Regency.

The method used in this study is using the historical method (historical research), literature study and application of government regulations of the Republic of Indonesia based on Law No. 5 of 2017 concerning Cultural Advancement and Law No. 11 of 2010 concerning Cultural Heritage [10]. Technically, this research was carried out after determining the factor variables and response variables, the next step is to determine how to measure them in measuring the ranking of immovable cultural heritage. As a measurement step, an ordinal scale and an interval scale will be determined in determining the ranking of cultural heritage. In addition, recommendations from the Cultural Heritage Expert Team (TACB), if the results have a lower value, then it becomes a follow-up to the next registration stage.

# III. RESULTS AND DISCUSSION

The results of the analysis of the ranking and architectural conditions of five immovable cultural heritage building objects in Sumbawa Regency are as follows.

#### Istana Dalam Loka Building

In general, the existing condition of the Istana Dalam Loka Building has been preserved based on independent variables and dependent variables. The Istana Dalam Loka Building reviewed from the independent variable (ownership) associated with the dependent variable can be categorized in the dependent variable (State) because its management has been handed over to the Sumbawa Regency government through the Sumbawa Regency Education and Culture Office, but there is no evidence of authenticity owned by the state and the ownership status is Sultan Muhammad Kaharuddin IV as the heir of Sultan Muhammad Djalaluddin III, then the weight of the independent variable (ownership) is given a weight of less than 10%, namely a weight of 9%.

This palace building is seen from the independent variable (Zoning) associated with the dependent variable is in the dependent variable zone (Core), but the certainty of the core zone with its boundaries has not been legally determined, so the weight of the independent variable (Zoning) in this case is given a weight below 10%, namely with a weight of 8%. The Istana Dalam Loka building based on the weight of the independent variable (Security) associated with the dependent variable (Jupel/Polsus) is given a value of 3, meaning that there are personnel assigned by the local government to always monitor and secure all forms of destruction, but people who sometimes come to the Istana Dalam Loka tourist attraction have not been able to maintain cleanliness or maintain other facilities so that the security weight is less than 5%, namely 4%.

The building of the Istana Dalam Loka has been restored, but the evidence of the authenticity of the building is not authentic, so the restoration weight is less than 5%, which is 4%. Supervision appears that the state involves the community, but the role of the community/even tends to be destructive, so the supervision weight is less than 5%, which is with a weight of 4%. The independent variable (method of acquisition) in this palace is associated with the dependent variable (Search) given a weight of 3. The main reason is because this palace building was built in the past which was carried out by mutual cooperation by the people in the Sumbawa kingdom and was arranged in turns by bringing in craftsmen from all corners of the small kingdom in the Sumbawa region and the construction work of the craftsmen was coordinated by Imam H. Hasyim, but it has not been fully successful so that it is less than 10%, which is with a weight of 9%.

Based on the weight of the independent variable (registration), the status submission is still in the recommendation stage from the Sumbawa Regency TACB team, then from the rescue weight side it is in the Insitu weight that there has been a history of research and preservation, namely in 2012 BPCB had conducted a technical study related to preservation efforts carried out in maintaining the existence of the Sumbawa Dalam Loka Palace building so that the registration weight is less than 10% or with a weight of 9%. Based on the weight of the independent variable (age) which is connected to the dependent variable, it is included in the dependent variable (absolute) getting a value of 3 that the Dalam Loka Palace building is a stilt house building with a traditional Sumbawa architectural style, built in 1885 (age has reached 138 years) during the reign of Sultan Muhammad Djalaluddin III, the XVI Sultan of Sumbawa from the Dewa Dalam Bawa Dynasty, functioning as a residence and center of government of the Sumbawa Sultanate, so that the weight of 9%.

The weight of the independent variable (Maintenance) is associated with the dependent variable belonging to the dependent variable (Maintenance) that the condition of the building is in good condition and well maintained, however, in some of the main pillar structures in the middle of the wooden stilt house building, there is a slope to the south. While the windows on the east, north, and west sides of the building are also damaged. In addition to the main building, there are additional supporting facilities at the back or/north of the building, namely, a permanent toilet measuring 7x15m, besides the permanent toilet there is a water tower, the weighting for the independent variable from the maintenance side is given a value of 4% and for the dependent variable (maintenance) is given a value of 3.

Based on the weight of the independent variable (Security) is included in the dependent variable (public participation) so that it is given a weight of 1 in the sense that it always involves the community to secure historical cultural heritage buildings in Sumbawa Regency. Then based on the weight of Development, it is included in the category of ideology, namely ideologically that the building of the Istana Dalam Loka Sumbawa has been used as a miniature of the history education of the West Nusa Tenggara Province in Taman Mini Indonesia Indah (TMII), Jakarta so that for the independent variable (development) it is given a weight of less than 5% or with a weight of 4% with the value of the ideology variable as the dependent variable with a value of 3.

The independent variable (Restoration) is associated with the dependent variable included in the dependent variable category (Restoration) meaning that there has been an addition of electrical panels on the east, north and west sides of the Istana Dalam Loka Sumbawa building. On the open ground called lenang lunyuk there is an additional nameplate in the form of writing made of concrete (permanent). Istana Dalam Loka currently functions as a place for holding Sumbawa traditional and cultural activities given a weight of less than 5% or with a weight of 4% with the value of the variable (Restoration) as a dependent variable with a value of 3.

Judging from the independent variable (Revitalization) associated with the dependent variable, it is in the dependent variable category (fixed space function) given a value of 2 in the sense that there is no additional space used for the expansion of the Istana Dalam Loka building. Based on the weight of the independent variable (Adaptation) associated with the dependent variable, it can be categorized with the dependent variable (Adding facilities) in the sense that based on the study conducted by the Bali BPCB, the Istana Dalam Loka building was built based on two conceptions, namely the building conception and the ornamental conception, given a weight of less than 5% or with a weight of 4% with the value of the dependent variable (fixed space function) as a dependent variable with a value of 3. Based on the independent variable (utilization) associated with the dependent variable, it can be categorized in the dependent variable (documentation) because conceptually the Istana Dalam Loka building needs to be built as beautifully as possible and equipped with various attributes, therefore the ornaments are carved on important parts of the building both as decoration (luxury) because this building will be important documentation as a Cultural Heritage asset of Sumbawa Regency which is ranked Nationally, so it is given a weight of less than 5% or with a weight of 4% with the value of the documentation variable as a dependent variable with a value of 3.

The independent variable (funding) is associated with the dependent variable and can be categorized into the dependent variable (APBN/APBD), meaning that the management of the Istana Dalam Loka Sumbawa building has been handed over to the Sumbawa Regency Government through the Sumbawa Regency Education and Culture Office so that the costs arising in the context of the maintenance of the Istana Dalam Loka building are financed through the Sumbawa Regency APBD so that it is given a weight of less than 5% or with a weight of 4% with the value of the dependent variable (APBN/APBD) as the dependent variable with a value of 3. The independent variable (Supervision) is associated with the dependent variable and can be categorized into the dependent variable (Coordination), because in terms of supervision of the Istana Dalam Loka Building in Sumbawa Regency, it is carried out by cooperating between the community and the Sumbawa Regency government so that it is given a weight of less than 5% or with a value of 3.

Overall, based on the results of the calculation and analysis of the ranking of the building of the Palace in Loka, Sumbawa Regency, it was obtained that the ranking value of the building of the Palace in Loka Sumbawa was 72.6%. After being converted into an assessment category, namely that based on the scale of the cultural heritage ranking ratio at  $\geq 66\% - 100\%$  it is in the National Ranking.

# Bala Datu Ranga Building

The independent variable (Ownership) of the Bala Datu Ranga Palace building is associated with the dependent variable (Individual) that this palace is owned by Sultan Muhammad Kaharuddin IV as the heir of Sultan Muhammad Djalaluddin III and its management is handed over to the Sumbawa Regency Government through the Sumbawa Regency Education and Culture Office. So the weight for the independent variable of ownership is less than 10% or with a weight of 9% and the value of the dependent variable (Individual) is 1.

Furthermore, the independent variable (Method of Acquisition) is associated with the dependent variable in the category (Search), this palace building was built in the past which was carried out by mutual cooperation by the people in the Sumbawa kingdom and arranged in turns. The value of the independent variable (Method of Acquisition) is less than 10% or with a weight of 9% and the value of the dependent variable (Search) is worth 3. The independent variable (Registration) is associated with the dependent variable in the category (Recommendation) meaning that the status submission is still in the recommendation stage from the Sumbawa Regency TACB team, the independent variable (Registration) is less than 10% or with a weight of 9% and the value of the dependent variable (Recommendation) is worth 2.

The independent variable (Rescue) is associated with the dependent variable in the category (Insitu) meaning that there has been a history of research and preservation, namely that in 2012 BPCB conducted a technical study, the independent variable (Rescue) is less than 10% or with a weight of 9% and the value of the dependent variable (Insitu) is 3. The independent variable (Zoning) is associated with the dependent variable in the category (Development) meaning that the Bala Datu Ranga Palace building is the mainstay of the cultural heritage site in Sumbawa Regency. The independent variable (Zoning) is less than 10% or with a weight of 9% and the value of the dependent variable (Development) is 3. The independent variable (Zoning) is less than 10% or with a weight of 9% and the value of the dependent variable (Development) is 3. The independent variable (Age) is associated with the dependent variable in the category (Absolute) is a large wooden stilt house building with a traditional Sumbawa architectural style. This palace building was born in 1886 with the main building material being wood. The main structure of the building is supported by 25 round teak wood pillars with a diameter of 40 cm. The walls, floors, and building ornaments are all made of wood. The roof style of the building is saddle-shaped using galvalume zinc material (result of restoration in 2016). The independent variable (Age) is less than 5% or with a weight of 4% and the value of the dependent variable (Absolute) is 3.

The independent variable (Maintenance) is associated with the dependent variable in the category (Maintenance) is that the Bala Datu Ranga Palace building has a good and well-maintained building condition, however, in some of the main pillar structures in the middle of the wooden stilt house building, it is tilted to the south. While the windows on the east, north, and west sides of the building are also damaged. In addition to the main building, there are additional supporting facilities at the back or/north of the building, namely, a permanent toilet measuring 7x15 m, next to the permanent toilet there is a water tower. The independent variable (Maintenance) is less than 5% or with a weight of 4% and the value of the dependent variable (Maintenance) is 3.

The independent variable (Security) is associated with the dependent variable in the category (Jupel/Polsus), meaning that there are personnel assigned by the local government to always monitor and secure all forms of destruction, but the community who sometimes come to the tourist attraction of the Bala Datu Ranga Palace building have not been able to maintain cleanliness or maintain other facilities in the palace complex so that the security weight is less than 5%, namely with a weight of 4%.

The independent variable (Development) associated with the dependent variable is in the category (Ideology) is that the construction of the Bala Datu Ranga Palace building consists of one floor divided into five rooms, an attic (bao alang), and a house under the house (tebongan). In the past, all rooms had their respective functions, both used as an office space for a Ranga (Prime Minister) of the Sumbawa Sultanate, a living/meeting room, a central/family room, a master bedroom, a child's bedroom, a relative's bedroom, a kitchen, and a bathroom. The Bala Datu Ranga attic (bao alang) is used as a place for women's activities, namely for weaving cloth, embroidering, and sewing. While the house under the house (tebongan) is used for pounding rice, carpentry activities, or temporary activities involving many people (communal) for example during family celebrations it is used for cooking or making decorations, The independent variable (Development) is less than 5% or with a weight of 4% and the value of the dependent variable (Ideology) is 3.

The independent variable (Restoration) is associated with the dependent variable being in the category (Restoration) is that the walls, floors, and building ornaments of the Bala Datu Ranga Palace are all made of wood. The roof style of Bala Datu Ranga is saddle-shaped using galvalume zinc material (result of restoration in 2016). The independent variable (Restoration) is less than 5% or with a weight of 4% and the value of the dependent variable (Restoration) is 3. The independent variable (Revitalization) is associated with the dependent variable being in the category (Strong Information) is that there is no additional space used for building expansion. The independent variable (Revitalization) is less than 5% or with a weight of 4% and the value of the dependent variable (Strong Information) is 3.

Based on the independent variable (Utilization) associated with the dependent variable, it can be categorized into the dependent variable (Change of function) because of the building conception and ornamental conception. Therefore, ornaments are carved on important parts of the building either as decoration (luxury), so that it is given a weight of less than 5% or with a weight of 4% with the value of the dependent variable (Change of function) as a dependent variable with a value of 2. The independent variable (Funding) associated with the dependent variable can be categorized into the dependent variable (Other sources) meaning that the Bala Datu Ranga Palace building of Sumbawa is personally managed by Sultan Sultan Muhammad Kaharuddin IV so that the costs arising in the context of maintaining the Bala Datu Ranga Palace building are financed through the Sultan's personal funds so that it is given a weight of less than 5% or with a value of 1.

Finally, the independent variable (Supervision) associated with the dependent variable can be categorized in the dependent variable (Coordination), because in terms of supervision of the Bala Datu Ranga Palace Building, Sumbawa Regency, it is carried out by cooperating between the community and the Sumbawa Regency government so that it is given a weight of less than 5% or with a weight of 4% with the value of the coordination variable as a dependent variable with a value of 3. Based on the results of the calculation and analysis of the ranking of the Bala Datu Ranga Palace building, Sumbawa Regency, it was obtained that the ranking value of the Bala Datu Ranga Palace building, Sumbawa, was 62%. After being converted into an assessment category, namely that based on the cultural heritage ranking ratio scale at  $\geq 33\%$  - 66% it is in the Provincial Ranking.

# The building of the Palace of Sultan Muhammad Kaharuddin III

The existing condition of the Sultan Muhammad Kaharuddin III Palace building has been subject to preservation efforts. In general, the current condition of the palace reviewed from the independent variable (ownership) which is associated with the dependent variable can be categorized in the dependent variable (State) because its management has been handed over to the Sumbawa Regency government through the Sumbawa Regency Education and Culture Office, but there is no evidence of authenticity of state ownership and the ownership status is Sultan Muhammad Kaharuddin IV as the heir of Sultan Muhammad Djalaluddin III, so the weight of the independent variable (ownership) is given a weight of less than 10%, namely a weight of 9%.

The Palace of Sultan Muhammad Kaharuddin III seen from the weight of the independent variable (Zoning) associated with the dependent variable is in the dependent variable zone (Core), but the certainty of the core zone with its boundaries has not been legally determined, so the weight of the independent variable (Zoning) in this case is given a weight of 8%. The Palace of Sultan Muhammad Kaharuddin III based on the weight of the independent variable (Security) associated with the dependent variable (Jupel/Polsus) is given a value of 3, meaning that there are personnel assigned by the local government to always monitor and secure all forms of destruction, but the community who sometimes come to the tourist attraction of the Palace of Sultan Muhammad Kaharuddin III have not been able to guard other facilities, so the security weight is 4%. The Palace

of Sultan Muhammad Kaharuddin III has been restored, but the evidence of the authenticity of the building is not authentic, so the restoration weight is less than 5%, namely 4%. The Palace of Sultan Muhammad Kaharuddin III in terms of the weight of supervision, it appears that the state involves the community. However, the role of the community/even tends to be destructive, so the weight of supervision is less than 5%, namely with a weight of 4%.

he building of the Sultan Muhammad Kaharuddin III Palace is reviewed from the side of the independent variable (method of acquisition), then the Palace of Sultan Muhammad Kaharuddin III is associated with the dependent variable (Search) so that it is given for the weight of the method of acquisition because it is done by the search method, it can be given a weight of 3. The main reason is because this Palace building was built in the past which was done by mutual cooperation by bringing in craftsmen from all corners of the small kingdom in the Sumbawa region and in the completion of the building work, the craftsmen were coordinated by Imam H. Hasyim, but it has not been completely successful so that the search weight is less than 10%, namely with a weight of 9%.

Based on the weight of the independent variable (registration) that the status submission is still in the recommendation stage from the Sumbawa Regency TACB team, then from the rescue weight side it is in the Insitu weight, there has been a history of research and preservation, namely it was carried out to maintain the existence of the Palace building, namely in 2012. BPCB has conducted a technical study, meaning that there have been preservation efforts made to maintain the existence of the Sultan Muhammad Kaharuddin III Palace so that the registration weight is less than 10% or with a weight of 9%.

Based on the weight of the independent variable (age) the Palace of Sultan Muhammad Kaharuddin III is associated with the dependent variable is included in the dependent variable (absolute) gets a value of 3, namely that the Palace of Sultan Muhammad Kaharuddin III is a stilt house building with a traditional Sumbawa architectural style, built in 1885 (age has reached 138 years) during the reign of Sultan Muhammad Djalaluddin III, the XVI Sultan of Sumbawa from the Dewa Dalam Bawa Dynasty, functioning as a residence and center of government of the Sumbawa Sultanate, so the weight of the independent variable age is less than 10% with a weight of 9%.

The weight of the independent variable (Maintenance) when associated with the dependent variable is included in the dependent variable (Maintenance) namely that the Palace of Sultan Muhammad Kaharuddin III has a good and well-maintained building condition, however, in some of the main pillar structures in the middle of the wooden stilt house building, it is tilted to the south. While the windows on the east, north, and west sides of the building are also damaged. In addition to the main building, there are additional supporting facilities at the back or/north of the building, namely, a permanent toilet measuring 7 x 15 m, besides the permanent toilet there is a water tower so that from the weighting for the independent variable from the maintenance side, it is given a weight value of 4% and for the dependent variable (maintenance) it is given a value of 3.

Based on the weight of the independent variable (Security) is included in the dependent variable (public participation) so that it is given a weight of 1 in the sense that it always involves the community to secure historical cultural heritage buildings in Sumbawa Regency. Then based on the weight of Development is included in the category of ideology, namely ideologically that the Palace of Sultan Muhammad Kaharuddin III Sumbawa has been used as a miniature of the history education of the Province of West Nusa Tenggara in Taman Mini Indonesia Indah (TMII), Jakarta so that for the independent variable (development) is given a weight of less than 5% or with a weight of 4% with the value of the ideology variable as a dependent variable with a value of 3.

The independent variable (Restoration) is associated with the dependent variable included in the dependent variable category (Restoration) meaning that there has been an addition of electrical panels on the east, north and west sides of the Palace of Sultan Muhammad Kaharuddin III. On the open ground called lenang lunyuk there is an additional nameplate in the form of writing made of concrete (permanent). The Palace of Sultan Muhammad Kaharuddin III currently functions as a place for holding Sumbawa traditional and cultural activities, given a weight of 4% with a restoration value of 3.

Viewed from the independent variable (Revitalization) associated with the dependent variable, it is in the dependent variable category (fixed space function) given a value of 2 in the sense that there is no additional space used for the expansion of the Sultan Muhammad Kaharuddin Palace III. Based on the weight of the independent variable (Adaptation) associated with the dependent variable, it can be categorized with the dependent variable (Adding facilities) in the sense that based on the study conducted by the Bali BPCB, the Sultan Muhammad Kaharuddin III Palace was built based on two conceptions, namely the building conception and the ornamental conception, given a weight of less than 5% or with a weight of 4% with the value of the dependent variable (fixed space function) as the dependent variable with a value of 3.

Based on the independent variable (Utilization) associated with the dependent variable, it can be categorized in the dependent variable (Documentation) because conceptually the Palace of Sultan Muhammad Kaharuddin III needs to be built as beautifully as possible and equipped with various attributes, therefore

ornaments are carved on important parts of the building both as decoration (luxury) because this building will be important documentation as a Cultural Heritage asset of Sumbawa Regency which is ranked Nationally, so it is given a weight of less than 5% or with a weight of 4% with the value of the documentation variable as a dependent variable with a value of 3.

Finally, the independent variable (Supervision) associated with the dependent variable can be categorized in the dependent variable (Coordination), because in terms of supervision of the Palace of Sultan Muhammad Kaharuddin III, Sumbawa Regency, it is carried out by cooperating between the community and the Sumbawa Regency government so that it is given a weight of less than 5% or with a weight of 4% with the value of the coordination variable as a dependent variable with a value of 3. Based on the results of the calculation and analysis of the ranking of this Palace, it was obtained that the ranking value of the Palace of Sultan Muhammad Kaharuddin III, Sumbawa was 69%. After being converted into an assessment category, namely that based on the ratio scale of the ranking of cultural heritage at  $\geq 66\%$  - 100% it is in the National Ranking.

# Istana Bala Kuning Building

The independent variable (Ownership) is associated with the dependent variable can be categorized in the dependent variable (Individual) is owned by PYM. Dewa Masmawa Sultan Muhammad Kaharuddin III. With a certificate in the name of. Siti Khadijah who is the consort of Sultan Muhammad Kaharuddin III. Legal Status: Regent's Decree Number 117 of 2010 Concerning the Determination of Cultural Heritage Objects/Sites in the Sumbawa Regency Area. The independent variable (Ownership) is less than 10% or with a weight of 9% and the value of the dependent variable (Individual) is 1. The independent variable (Method of Acquisition) is associated with the dependent variable can be categorized in the dependent variable (Search) namely the submission of status is still in the recommendation stage from the Sumbawa Regency TACB team. The independent variable (Search) is 3. Then the independent variable (Rescue) is associated with the dependent variable (Search) is 3. Then the independent variable (Rescue) is associated with the dependent variable (Insitu), is because based on the history of research and preservation carried out in 2012 BPCB conducted a technical study and in 2022 BPCB Bali carried out preservation activities. The independent variable (Rescue) is less than 10% or with a weight of 9% and the value of the dependent variable (Insitu), is 3.

The independent variable (Zoning) is associated with the dependent variable and can be categorized in the dependent variable (Core) that in 2022 BPCB Bali carried out the Zoning activity of the Istana Bala Kuning Palace. The independent variable (Zoning) is less than 10% or with a weight of 9% and the value of the dependent variable (Core) is 1. The independent variable (Age) is associated with the dependent variable and can be categorized in the dependent variable (Absolute) is that the Istana Bala Kuning building was built in 1941-1942. Initially, the land where this building was built was a rice field, which was located next to his private house, Bala Batu Ode (now the PM Complex). The Istana Bala Kuning as a cultural heritage site began as a rice field and pond with a fairly large area. The independent variable (Age) is less than 10% or with a weight of 9% and the value of the dependent variable (Absolute) is 3.

The independent variable (Registration) is associated with the dependent variable can be categorized in the dependent variable (Determination) is that the submission of legal status has entered the determination stage of the Sumbawa Regency TACB team. The independent variable (Registration) is less than 10% or with a weight of 8% and the value of the dependent variable (Determination) is worth 3. The independent variable (Rescue) is associated with the dependent variable can be categorized in the dependent variable (Insitu) is that there is a history of research and preservation, namely that in 2012 BPCB had conducted a technical study. The independent variable (Rescue) is less than 10% or with a weight of 8% and the value of the dependent variable (Insitu) is worth 3.

The independent variable (Zoning) is associated with the dependent variable can be categorized in the dependent variable (Development) is that it is the mainstay of cultural heritage sites in Sumbawa Regency. The independent variable (Zoning) is less than 10% or with a weight of 8% and the value of the dependent variable (Development) is worth 3. The independent variable (Age) is associated with the dependent variable can be categorized in the dependent variable (Absolute) is that the building of the Sultan Muhammad Kaharuddin III Palace is a stilt house building with a traditional Sumbawa architectural style, built in 1885 (age has reached 138 years) during the reign of Sultan Muhammad Djalaluddin III, the XVI Sultan of Sumbawa from the Dewa Dalam Bawa Dynasty, functioning as a residence and center of government of the Sumbawa Sultanate. The independent variable (Age) is less than 5% or with a weight of 4% and the value of the dependent variable (Absolute) is worth 3.

The independent variable (Maintenance) is associated with the dependent variable which can be categorized in the dependent variable (Maintenance) consisting of the Bala Batu Ode building which was later borrowed and used as a dormitory by CPM Sumbawa while the land behind the Bala Kuning palace (western

part) was given to the government to be used as a government official residence, the BKIA office which was developed into a Seketeng Village health center. In the main site area there are several buildings including the main palace building, the princess building, pavilions, wells, and bale belo (warehouse), public toilets, and an old kitchen that has been demolished.

The rear of the Bala Kuning Palace site has been built a baruga (gazebo). The Bala Kuning Palace is a Palace or residence of the Sultan with permanent brick walls, the Bala Kuning Palace is so named because of the dominant yellow color on the walls of the Palace, both on the outside and inside of the building. This building is a non-story building that has a mixed style of Modern Colonial architecture in 1915-1940 and Colonial Art Deco architecture which was popular since 1920-1970. Maintenance History In 2007 by the family To strengthen the walls, the walls were covered with tiles, especially on the front of the Palace building which was starting to peel off. In 2013 by the family, the pavilion building was renovated and in 2020 by the family, a new building was built at the Bale Belo building position. The independent variable (Maintenance) is less than 5% or with a weight of 4% and the value of the dependent variable (Maintenance) is 3. Security Public participation: Always involve the community to secure historical sites in Sumbawa Regency. The independent variable (Maintenance) is 3.

The independent variable (Security) is associated with the dependent variable can be categorized in the dependent variable (Protective Facilities) is that the building of the Sultan Muhammad Kaharuddin III Palace always involves the community to secure historical sites in Sumbawa Regency. The independent variable (Security) is less than 5% or with a weight of 4% and the value of the dependent variable (Protective Facilities) is worth 3. The independent variable (Development) is associated with the dependent variable can be categorized in the dependent variable (Academy) is that the Datu Raja Muda Policy building since the death of his father in 1975, Bala Kuning has been opened to the public for guests who want to visit. This is because the Sultanate's Heirlooms in the form of Parewa Kamutar (Main Regalia), Parewa Tokal Adat Ode (Supporting Regalia), as well as Grand Clothing and Other Heirlooms are stored in Bala Kuning. So that the Greatness of History can be accessed by government guests, the community and tourists. The independent variable (Development) is less than 5% or with a weight of 4% and the value of the dependent variable (Academy) is worth 3.

Independent variables (Restoration) associated with dependent variables can be categorized in the dependent variable (Restoration) is the Bala Kuning Palace as a cultural heritage site starting from rice fields and ponds with a fairly large area. Consisting of the Bala Batu Ode building which was later borrowed and used as a dormitory by CPM Sumbawa while the land behind the Bala Kuning Palace (western part) was given to the government to be used as a government official residence for the BKIA office which was developed into a Seketeng Village health center. The Bala Kuning Palace is a Palace or residence of the Sultan with permanent brick walls, the Bala Kuning Palace is so named because of the dominance of yellow on the walls of the Palace, both on the outside and inside of the building. This building is a non-story building that has a mixed style of Modern Colonial architecture in 1915-1940 and Colonial Art Deco architecture which was popular since 1920-1970.

The independent variable (Restoration) is less than 5% or with a weight of 4% and the value of the dependent variable (Restoration) is 3. The independent variable (Revitalization) is associated with the dependent variable and can be categorized in the dependent variable (Fixed space function) is that the Bala Kuning Palace building has no additional space used for building expansion. The independent variable (Revitalization) is 2. Based on the independent variable (Utilization) associated with the dependent variable (Fixed space function) is 2. Based on the independent variable (Utilization) because the modern colonial architectural style has a characteristic of a varied and asymmetrical plan, while the typical Art Deco style can be seen from the addition of an oval-shaped front room at the Bala Kuning Palace, so it is given a weight of 4% with the value of the dependent variable (Documentation) as a dependent variable with a value of 2.

# Eks Kontrolir Belanda Building

Overall, based on the results of the calculation and analysis of the ranking of the Former Dutch Controller of Sumbawa Regency, it was obtained that the ranking value of the Former Dutch Controller of Sumbawa was 59.66%. After being converted into an assessment category, namely that based on the ratio scale of the ranking of cultural heritage at  $\geq 33\%$  - 66% it is in the Provincial Ranking.

To clarify the results of the analysis, the following is a summary of the results of the ranking analysis of five immovable cultural heritage buildings in Sumbawa Regency, which were reviewed from all aspects of the assessment in carrying out the ranking.

Objects				
No	Name of Cultural Heritage	Calculation Results (%)	Ranking	
1	Istana Kesultanan Sumbawa	72.60	National	
2	Bala Datu Ranga	62.00	Province	
3	Istana Sultan Kaharuddin III	69.00	National	
4	Istana Bala Kuning	61.30	Province	
5	Eks Kontroler Belanda	59.66	Province	

Table 1. Summary of the Results of the Analysis of the Ranking of Five Cultural Heritage Building
Ohiosta

Based on the results of the analysis in table 1, it shows that there are two cultural heritage buildings that are ranked nationally, namely the Sumbawa Sultanate Palace and the Kaharuddin III Sultanate Palace. Meanwhile, the provincial rankings are Bala Datu Ranga, Bala Kuning Palace and the Former Dutch Controller.

Another critical study relevant to the research topic of cultural heritage ranking in Sumbawa Regency is the book on cultural statistics, fourth edition in [11] with the theme of population and social conditions of the European Union, presenting a selection of cultural indicators related to cultural work, cultural efforts, cultural participation and use of the internet for cultural purposes, as well as financing of cultural heritage houses funded by the government. Europe is characterized by the richness and diversity of its cultural heritage. Culture has the potential to play an important role in making the European Union (EU) stronger and more democratic, binding European citizens by providing a sense of identity, while contributing to individual well-being, social cohesion and inclusion.

Other findings that support this research are study on Cultural Heritage and Economic Development conducted by [12]. In a paper published by the University of Tarino, it has provided new insights into the importance of the relationship between cultural heritage preservation and economic, social and institutional factors that indicate the level of development of a country. Although investment in cultural heritage preservation is increasingly recognized as a strategy for development and poverty alleviation, little research has been conducted to understand the volarization of cultural resources. Bertacchini's research results show that poor countries can be affected by low levels of development, cultural promotion, while the failure to exploit social heritage can in turn hinder cultural-based development strategies. Therefore, the paper also emphasizes the importance of international policies that increase the representation of poor countries in UNISCO political institutions, to avoid marginalization in cultural promotion, increase empowerment, and stimulate sensitivity to the importance of culture as a development strategy.

Technically, the preservation of cultural heritage development in Sumbawa Regency has referred to the regulations of the Republic of Indonesia government which include Law no. 11 of 2010 concerning the protection, preservation and development of cultural heritage. In addition, the development of cultural heritage is also based on the Minister's [14] regulation on preserved cultural heritage buildings.

# IV. CONCLUSION

Based on the calculations and analysis carried out by the research team/expert team then in collaboration with representatives of the Cultural Heritage Data Collection Team (TPCB) and representatives of the Cultural Heritage Expert Team (TACB) of Sumbawa Regency, various conclusions were born regarding the ranking of non-moving Cultural Heritage (CB) in Sumbawa Regency as described in the following conclusions: (1). The results of the calculations and analysis of the ranking of the Palace Dalam Loka building in Sumbawa Regency obtained that the ranking value of the Palace Dalam Loka building in Sumbawa was 72.6%. After being converted into an assessment category, namely that based on the ratio scale of the ranking of cultural heritage at  $\geq 66\%$  - 100% it is in the National Ranking; (2) The results of the calculation and analysis of the ranking of the Bala Datu Ranga Palace building in Sumbawa Regency obtained that the ranking value of the Bala Datu Ranga Palace building in Sumbawa was 62%. After being converted into an assessment category, it is based on the cultural heritage ranking ratio scale at  $\geq 33\%$  -66% is in the Provincial Ranking; (3) The results of the calculation and analysis of the ranking of the Bala Kuning Palace building in Sumbawa Regency obtained that the ranking value of the Bala Kuning Palace building in Sumbawa was 61.3%. After being converted into an assessment category, namely that based on the cultural heritage ranking ratio scale at  $\geq 33\%$  - 66% it is in the Provincial Ranking; (4) The results of the calculations and analysis of the ranking of the Palace of Sultan Muhammad Kaharuddin III, Sumbawa Regency, obtained the ranking value of the Immovable Cultural Heritage Building in Sumbawa Regency, Indonesia.

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