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| RESEARCH ARTICLE

Zoning Control Directives Fort Somba Opu Cultural Heritage Site Gowa Regency, South Sulawesi Province

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| ABSTRACT
The purpose of this research was to formulate zoning control directives on the cultural heritage site of Fort Somba Opu by identifying the factors that influence it. The research location is in the Benteng Somba Opu Village, Barombong District, Gowa Regency. This research was conducted through a quantitative and qualitative approach, where primary data was first collected, and later the primary data obtained was processed into analysis through calculation so that the output obtained would be in the form of definite numerical data. The intended primary data is obtained through the process of observation and interviews through questionnaires to the people of the Benteng Somba Opu Village, and the calculation analysis is carried out through path analysis (path analysis) so that the resulting output is translated using a qualitative descriptive analysis method. From the results of path analysis, it is known that from the five independent variables studied, there are three variables that influence indirectly or directly the decline in cultural heritage identity and one intervening variable that has a direct effect on the decline in cultural heritage identity. The independent variable that has an indirect effect on the decline in cultural heritage identity is livelihoods through changes in land use. Whereas the independent variables that directly affect the decline in cultural heritage identity are human and institutional resources, and the intervening variables that are intended to directly affect the decline in cultural heritage identity are changes in land use. Variables that linearly have a significant effect on the decline in the identity of the cultural heritage then become the basis for determining the direction of zoning control of the cultural heritage site of Fort Somba Opu. Where based on this variable, the reference for the formulation of control directives is mixed by reviewing several journals and government regulations that are in line with these significant variables so that the formulation of directives for controlling the Somba Opu Fort cultural heritage site is issued.

| KEYWORDS

Cultural Conservation; Zoning Control Directives

| ARTICLE INFORMATION

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1. Introduction

In one of the theories of development economics, it is said that as time increases, the graph of the population increases, and automatically the level of necessities of life, such as clothing, food and shelter, increases. Meanwhile, on the other hand, the volume of the area or space in a fixed or static state does not increase. Of course, this is the forerunner in which the direction of development, especially development in urban areas, is more towards development with an orientation towards accelerating the fulfillment of life's needs (Djojohadikusumo, 1994: 1-2).

On the other hand, spatial planning is not only focused on development planning with the orientation of the necessities of life alone but also on cultural heritage planning. Basically, planning in Indonesia is divided into two, namely in cultivation areas and in protected areas, one of which is in cultural heritage (UU no. 26 of 2007)

Indonesia is a country that is rich in Cultural Conservation in the form of Cultural Conservation Objects (BCB), Cultural Conservation Buildings, Cultural Conservation Structures, Cultural Conservation Sites, and Cultural Conservation Areas, both located on land and water. The increasing needs of life and the density of cities make cultural heritage in Indonesia vulnerable to declining functions and even being displaced by high demand-oriented development. Law no. 11 of 2010 has also explained the importance of preserving cultural heritage because cultural heritage is a nation's cultural wealth which is allegedly a form of thought and behavior in human life which is important for the understanding and development of history, science, and culture in the life of society, nation,

South Sulawesi, which is one of the provinces in Indonesia, also has a wealth of cultural heritage. In research conducted by Nurfatimah (2020), it is said that one of the areas that have a cultural and historical heritage of high value in South Sulawesi Province is Gowa Regency, with the term "historic Gowa". Historical sites and cultural heritage, such as Balla Lompoa, the Tomb of Sultan Hasanuddin, the Katangka Old Mosque, and one of them is the Somba Opu Fort site [Nurfatimah, 2020].

In historical records, Fort Somba Opu is one of the historical areas in South Sulawesi, which is a former legacy of the kingdom of Gowa. In the 16th century, this fort was once a trading center and a spice port which was crowded with foreign traders from Asia and Europe. According to the map stored in the Makassar Museum, the shape of the Somba Opu Fort is rectangular. In fact, today, the Fort is more accurately described as a ruin with the remains of some of the walls still standing. There are some parts of the bottom of the remains of this fort that has not been excavated. This can be seen from the presence of concrete stakes in several parts. According to history, the Dutch destroyed this fort after they succeeded in defeating the troops of the Kingdom of Gowa led by Sultan Hasanuddin. For hundreds of years,

The many cultural values and historical values contained in this fort have made it designated as one of the cultural heritages in the Province of South Sulawesi and have been stipulated in the Regional Regulation of Gowa Regency Number 09 of 2014. However, nowadays, the Somba Opu fort site is in danger of being neglected as a historic area because of the dynamic growth of the city, which always requires land for expansive physical development. The city's growth has become undirected due to poor supervision and the government's lack of understanding of the importance of cultural heritage. Fort Somba Opu, as a site rich in historical relics, is threatened with losing its identity, which can be seen from several land use functions which have begun to shift towards dominant settlements (Nurfatimah: 2020)

Ichwan in Antariksa (2010) reveals that urban development is manifested in an increase in the need for city residents for new activities, especially commercial ones. According to Ichwan in Antariksa (2010), the growth of these activities changed the designation, building facades, and demolition of buildings and areas, as well as turning old areas into new areas. This can be seen from the land use in the Somba Opu fort site area, which is dominated by living activities and several service trade facilities. Living activities and the existence of several service trade facilities are indeed not prohibited, but their development which is considered to be increasing year by year, has caused concern over the existence of cultural heritage, which is very prone to change.

The magnitude of the influence that has arisen due to the development of settlements and the existence of several service trade facilities in the Fort Somba Opu area should be a concern for the Gowa Regency government to take related actions in terms of efforts to protect this historic site. One of the efforts that can be made in protecting cultural heritage sites is to carry out directives to control the use of the area. This directive is later expected to be able to control as well as direct what uses should be allowed and which should not be allowed in each zone in the cultural reserve of the Somba Opu fort site. Thus, to achieve this directive.

2. Research methods

2.1 Research sites

This research was carried out at the Somba Opu Fort site, Somba Opu Fort Village, Barombong District, Gowa Regency. Administratively, the area of Barombong District is 20.67 km2. The area of the Fort Somba Opu Village is 2.02 km2.

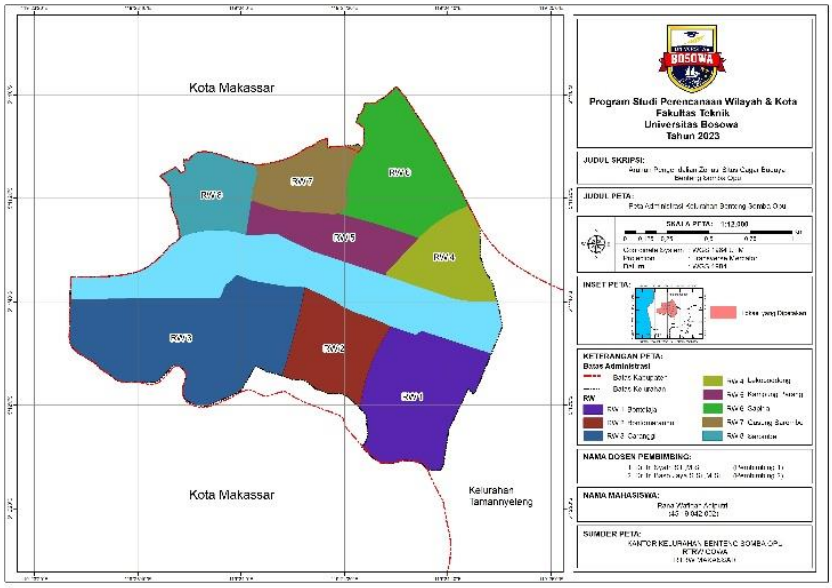

Figure 1. Administrative Map of Research Locations

2.2 Population and Sample

The population in this study is the people of the Benteng Somba Opu Village, with a population of 6,490 people and 1,298 families. The determination of the research sample was carried out using the slovin formula as follows:

$$n = \frac{N}{1+N\,(e)^2}$$

$$n = \frac{1.298}{1+1.298\,(0,1)^2}$$

$$n = \frac{1.298}{13.98}$$

$$n = 92.84$$

Where :

n = Number of samples taken
N=number of households in the research location
E = Error rate (10%).

2.3 Research variable

The variables used in this study use theory according to Branch (1995), namely the factors that influence spatial changes in urban areas are land mutations that occur due to population, technological developments, habits and traditions, education and culture, income and expenditure, tastes and goals, as well as changes in attitudes and values caused by age development [8]. In addition, the rapid change in usage in urban areas is influenced by four factors, namely: (i) population concentration with all its activities; (ii) accessibility to activity centers and city centers; (iii) road networks and transportation facilities, and orbits. This is in line with the theory of Zuziak and Zielenbech (1993), where it is said that the decline in the vitality of a historic area is caused by a decrease in the physical condition of the area where the decline in the physical condition of this area occurs due to several factors, namely: (i) changes in demographic structure, (ii) the decline in the vitality of the area socially and culturally so that it eliminates the uniqueness of the historic area, (iii) the loss of the role/action of the government, (iv) the decline in the economic condition of the area, and (v) the awareness of the indigenous people of the area decreases. The variables used in this study can be seen in the following table: (ii) the decline in the vitality of the area in socio-cultural terms, thereby eliminating the uniqueness of the historic area, (iii) the loss of the role/action of the government, (iv) the decline in the economic condition of the area, and (v) the awareness of the indigenous people of the area. The variables used in this study can be seen in the following table: (ii) the decline in the vitality of the area in socio-cultural terms, thereby eliminating the uniqueness of the historic area, (iii) the loss of the role/action of the government, (iv) the decline in the economic condition of the area, and (v) the awareness of the indigenous people of the area. The variables used in this study can be seen in the following table:

Table 1. Research Variables

No	Target	Variable	Indicator	Operational definition
1.	Identify land suitability in the Somba Opu fort site	Land Use	Land use of the Somba Opu fort site, 2012-2022	Whether or not land use is appropriate for the Somba Opu fort site
2.	Analyze the factors that influence the decline in the identity of the Somba Opu fort site	X1= Accessibility	The location has strategic value and easy accessibility	The location has a high land value, and easy accessibility causes easy land use changes resulting in a decrease in area identity
		X2 = Human Resources (HR)	Knowledge and counseling	•The level of public knowledge of the history of the area and cultural heritage sites in the research location •Lack of counseling and guidance from the government regarding the history of the area and cultural heritage sites
		X3 = Institutional	Monitoring and reporting	Lack of supervision from the government on changes in land use zoning of the Somba Opu Fort cultural heritage site, causing a decline in regional identity.
		X4 = Community Social Value	Demographic structure and community habits	•The influence of the number of people in the research location, both natives and migrants and population migration on changes in areas or cultural heritage sites •Whether or not there are cultural values embedded in the community at the research location that causes a decrease in the identity of the regional site
		X5 = livelihood	Community economic activity	Many economic activities are carried out around the area that is not in accordance with the land use designation, causing the function of the area to be disrupted.
3.	Formulate zoning control directives on the Somba Opu fort site	Input from target 2 (the result of target 2 analysis)	-	Matrix of zoning control directives based on Law No. 26 of 2007 concerning spatial planning and Law No. 10 of 2011 concerning cultural heritage

2.4 Data collection technique

Data collection in this study was carried out through (1) interviews to determine community behavior towards land use and utilization on cultural heritage sites using questionnaires and (2) field surveys to obtain more detailed, actual and direct data to obtain primary data from research objects [Sani, 2013].

2.5 Data analysis technique

Several data analysis techniques were used in this study, namely (1) how the form of land use in the Benteng Somba Opu Village was analyzed using spatial methods. This analysis is a tool to find out the basic physical condition of the development planning area by overlaying it so that land use can be seen within a specified period of time, (2) What factors significantly influence the decline in the identity of the cultural heritage of the Somba Opu fortress were analyzed using the path analysis method (path analysis) to determine causal relationships, with the aim of explaining the direct or indirect influence between exogenous variables

and endogenous variables (3) Formulation of directives for zoning control of the cultural heritage site Fort Somba Opu is carried out by qualitative descriptive analysis,

3. Results and Discussion

3.1 Identification of forms of land use in the Benteng Somba Opu Village in 2012 and 2022

The results of the superimpose analysis using the overlay technique are formed through the overlapping use of a map that represents each important environmental/land factor. This overlay technique can also see land use activities where there is a change in the function of space in an area. The overlay technique is information in graphical form which is formed by combining various individual maps (having specific information/databases) from a collection of these individual maps or commonly called composite maps, capable of providing broader and varied information.

The pattern of land conversion in the Benteng Somba Opu Village can be seen in the following data:

Table 2. Land Use Change 2012–2022

no	Land Use	2012		2022		Change	
		Ha	%	Ha	%	Ha	%
1.	Building	52	16	84	26	-32	-9,8
2.	Ricefield	112	34	73	22	39	11,9
3.	Farm/Tegal	69	21	72	22	-3	-0.9
4.	Garden	21	6	25	8	-4	-1,2
5.	River (body of water)	72	22	72	22	0	0
	total	326	100	326	100		

Source: 2023 Analysis Results

Diagram 1. Changes in Land Use in 2012 to Existing Conditions in 2022

Source: 2023 Analysis Results

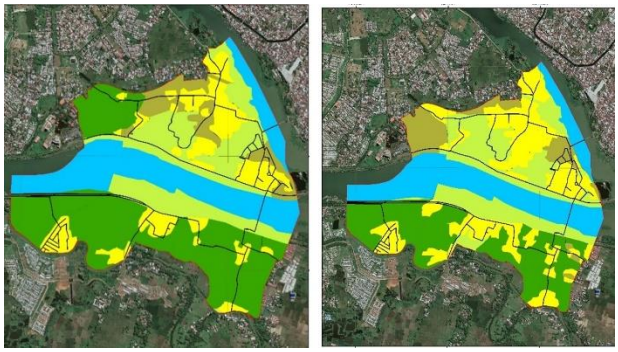

Figure 2. Land Use of Fort Somba Opu Village in 2012 and 2022

Based on the tables and maps of land use in 2012 and 2022, it can be seen that there have been changes in several land uses within the scope of the research, where the categories of buildings, fields/fields, and gardens have increased in extent in the area

in the last 10 years, while on the other hand, the paddy field category has decreased. Thus, the decrease in the area of paddy fields was due to the conversion to commercial buildings as well as several tel/fields and gardens. Based on Law No. 10 of 2011 regarding utilization zones in cultural heritage areas, especially in the core and buffer zones, the addition of permanent buildings should not be allowed. Of course, there is no harmonious synchronization between regulations/expectations with the reality of existing land use.

3.2 Analyze the factors that influence the occurrence of land conversion

1. Data Instrument Test

a) Data Validity and Reliability Test

A question is declared valid if the calculated r-value, which is the corrected item-total correlation value, is greater than the r-table. A valid questionnaire means that the questionnaire is really able to measure what should be measured. Instrument items are considered valid if the correlation coefficient (r count) > r table/r critical (0.30) (Sugiyono and Wibowo: 2004).

For this study, the value of df is calculated as follows (df = n-2) or 100-2 = 98, with a significance level of 0.05, so the r table is 0.1966. If r count > from r table, then the questionnaire is said to be valid. The indicators in this study are valid, which can be seen in the SPSS processing results for the total statistics item in the corrected item-total correlation column for each statement item as follows:

Table 3. Test the validity of research instruments

1. Accessibility				
No.	Statement	r count	P value	Ket.
1.	The location of the place to live is considered very strategic, where it is easy to reach public facilities	0.442	0.000	Valid
2.	It is very important to have a strategic living location	0.242	0.000	Valid
2. Human Resources (HR)				
No.	Statement	r count	P value	Ket.
1.	I and the people of the Fort Somba Opu Village know about the cultural heritage area and the regulations that have been regulated within the cultural heritage, especially in the Somba Opu Fort area	0.426	0.000	Valid
2.	I have inherited land, so I am free to build buildings on the cultural heritage land of Fort Somba Opu	0.646	0.000	Valid
3.	It is important to understand the regulations regarding the Somba Opu Fort cultural heritage site	0.412	0.000	Valid
3. Institutional				
No.	Statement	r count	P value	Ket.
1.	Lack of guidance or counseling from the local government regarding the suitability of land use, especially land use regulations on cultural heritage in the Benteng Somba Opu Village	0.303	0.002	Valid
2.	When I want to build a building on my land (in a cultural heritage area), I don't have to make a report to the local government	0.640	0.002	Valid
3.	Lack of supervision from the government regarding land use in the Somba Opu Fort cultural heritage site	0.300	0.002	Valid
4. Community Social				
No.	Statement	r count	P value	Ket.

1.	In managing the land that I own, I tend to follow trends so that I change the land that I own or change frequently	0.641	0.000	Valid
2.	There are relatives or family that I often invite to live in this area	0.671	0.000	Valid
3.	I have met many new neighbors in this area in under 5 years	0.665	0.000	Valid
5. Livelihood				
No.	Statement	r count	P value	Ket.
1.	I have a workplace that is adjacent to Fort Somba Opu	0.385	0.000	Valid
2.	Various sectors of work are scattered not far from the location of the Somba Opu Fort	0.401	0.000	Valid
3.	It is very important to have economic activities close to where you live	0.585	0.000	Valid

Source: 2023 Analysis Results

Based on the data above, it can be seen that all statement items are declared valid because the value of r count seen from the Pearson correlation is greater than r table. Therefore, all statement items can be used as a reference in research.

The next step is to conduct a reliability test. The reliability test was used to find out whether the data collection tool used showed the level of precision, accuracy, stability and consistency of the tool in expressing certain symptoms from a group of individuals, even though it was carried out at different times. In general, reliability in the range above 0.60 to 0.80 can be said to be good, and in the range above 0.80 to 1.00, it is considered very good (Supriyanto and Masyuri, 2010: 250). As for determining the reliability of variable statement items, testing was carried out with the SPSS program using Cronbach's Alpha formula. The results of the test analysis can be seen in the following table.

Table 4. Variable Reliability Test

Variable	Cronbach's Alpha	Information
Accessibility	0.609	Reliable
Human Resources	0.639	Reliable
Institutional	0.600	Reliable
Community Social	0.642	Reliable
Livelihood	0.645	Reliable

Source: 2023 Analysis Results

Based on the data above, it can be seen that all variables and dimensions and the number of items have r counts greater than Cronbach's alpha (0.60), so it can be said that the level of reliability for all question items is very good. Therefore, it can be concluded that the validity test and reliability test on variables and research dimensions are appropriate to be used as data collection instruments.

2. Classic assumption test

a) Normality test

The Normality Test is a test of the normality of the data distribution. The normality test is carried out as a condition for regression analysis, useful for seeing whether the data that has been collected has a normal distribution or not. A good regression analysis is a normally distributed regression model (Latan and Temalagi 2013: 56). Normality test can be done using graphical analysis and statistical analysis [12]. As for this study, the normality test was carried out using the One-Sample Kolmogorov Smirnov Test statistical test by looking at the results of graphical analysis, namely in the form of a histogram graph.

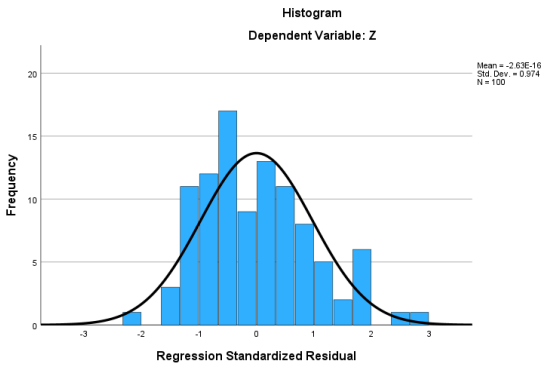

Figure 3. Sub Structural Normality Test I

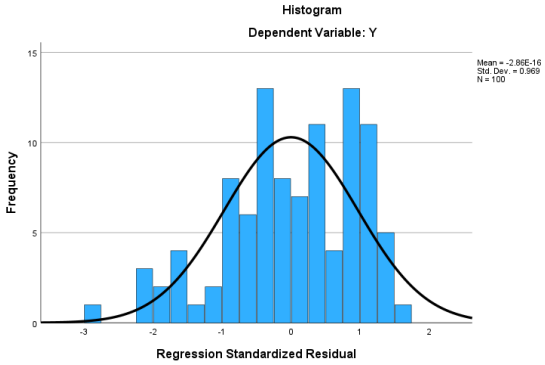

Figure 4. Sub Structural Normality Test II

The image above is a histogram graph of normality test results on sub-structural I and sub-structural II. A histogram graph is said to be normal if the data distribution is bell-shaped, not skewed to the left or skewed to the right (Latan and Temalagi 2013: 57). The histogram graphs above for sub-structural I and sub-structural II form a bell and are not skewed to the right or left so that the histogram graphs are declared normal.

b) Multicollinearity Test

The multicollinearity test on research data is intended to find out whether there is a relationship between the independent variables and other independent variables. If this happens or is found in the model, then the model has a multicollinearity problem. A good regression model should not have a correlation between the independent variables. Symptoms of multicollinearity among the independent variables in the regression model can be detected by looking at the Variance Inflation Factor (VIF) value of the model. VIF values that show numbers less than 10 indicate no signs of multicollinearity in the regression model.

Table 5. Test Results for Sub Structural Multicollinearity I

Variable	VIF value	Information
Accessibility (X1)	1.143	There is no multicollinearity
Human Resources (X2)	1,451	There is no multicollinearity
Institutional (X3)	1830	There is no multicollinearity
Community Social (X4)	1,212	There is no multicollinearity
Livelihoods (X5)	1,365	There is no multicollinearity

Source: 2023 Analysis Results

Table 6. Test Results for Sub Structural Multicollinearity II

Variable	VIF value	Information
Accessibility (X1)	1.166	There is no multicollinearity
Human Resources (X2)	1,495	There is no multicollinearity
Institutional (X3)	1830	There is no multicollinearity
Community Social (X4)	1,223	There is no multicollinearity
Livelihoods (X5)	1,484	There is no multicollinearity
Land Use Change (Z)	1.217	There is no multicollinearity

Source: 2023 Analysis Results

Based on the test results, it can be concluded that the variables in the regression model used in this research model do not have symptoms of multicollinearity. This is because the VIF value of all independent variables in the study is still below 10.

c) Heteroscedasticity test

The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance from one residual observation to another. If the variance from the residual from one observation to another observation remains, it is called homoscedasticity, and if it is different, it is called heteroscedasticity. A good regression model is a model that does not have heteroscedasticity.

Heteroscedasticity can be explained through the results of graphical analysis, namely the scatterplot graph, where the points formed must spread randomly, spread both above and below the number 0 on the Y axis. If these conditions are met, heteroscedasticity does not occur, and the regression model is suitable for use:

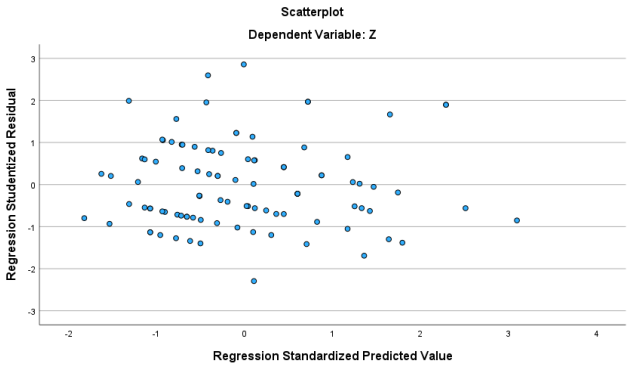

Figure 5. Sub Structural Heteroscedasticity Test I

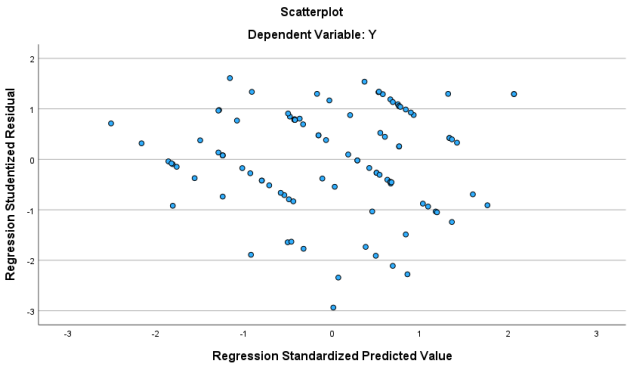

Figure 6. Sub Structural Heteroscedasticity Test II

By looking at the scatterplot graph above, it can be seen that the dots spread randomly and are spread both above and below the number 0 (zero) on the Y axis. It can be concluded that there are no symptoms of heteroscedasticity in the sub-structural model I or the sub-structural model II.

3. Hypothesis Test Results Through Path Analysis (Path Analysis)

The stages in path analysis are divided into three stages, namely the coefficient of determination (R2), F test, and t test; Where later, these four stages will be carried out in two sub-structural models and the stages before trimming as well as after trimming. Trimming itself is a method used to remove the X variable, which has no effect on the Z variable or the Y variable [Ridwan, 2013].

a) Sub Structural I

1) Before Trimming

- Coefficient of Determination (R2)

The coefficient of determination (R2) is a coefficient used to see how much the independent variable can explain the intervening variable. According to Chin (1998), the R-Square value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. The recapitulation of the test results for the coefficient of determination can be seen in the following table:

Table 7. Test Results for the Coefficient of Determination (R2) of Sub Structural I Before Trimming

Summary modelb				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.422a	.178	.135	1.81253

a. Predictors: (Constant), X5, X1, X4, X2, X3

b. Dependent Variable: Z

Source: 2023 Analysis Results

Based on the table above, it is known that the R value is 0.422. This means that the correlation between variable X and variable Z is 0.422. This means that there is a moderate relationship between the X variable and the Z variable because the value is close to 1. Meanwhile, it is known that the Adjusted R Square value is 0.135. This shows that together the variables of accessibility, human resources, institutions, social communities, and livelihoods have a significant influence on changes in land use, which is equal to 13.5%. While the remaining 86.5% is influenced by other variables that are not examined in this study.

- Simultaneous Test (Test F)

This test is conducted to find out whether the independent variables together explain the intervening variable. The F test analysis was carried out by looking at the Alpha value, where the alpha value used in this study was 0.05. This means that the significance value (sig) must be smaller than the alpha value so that it can be said to be significant. The results of the F test can be seen in the following table:

Table 8. Sub Structural F Test Results I Before Trimming

ANOVAa						
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	66,975	5	13,395	4,077	.002b
	residual	308,815	94	3,285		
	Total	375,790	99			

a. Dependent Variable: Z

b. Predictors: (Constant), X5, X1, X4, X2, X3

Source: 2023 Analysis Results

From the table above, it is known that the Sig value is 0.002 <0.05, which means that this indicates that the variables of accessibility, human resources, institutions, social communities, and livelihoods together have a significant effect on changes in land use.

- Partial Test (t test)

The t test basically shows how far the influence of an independent variable individually on the dependent variable, namely the decline in the identity of cultural heritage through changes in land use. The statistical test on the multiple linear regression equation models in this study is the t test which is an individual (partial) test. The t test is carried out by comparing the p value smaller than α (0.05), meaning that partially the independent variable (X) influences the dependent variable (Y) through the mediator variable Z. The results of the t test can be seen in the following table:

Table 9. Sub Structural t Test Results I Before Trimming

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	7,375	1,382		5,336	<.001
	X1	-.167	.122	-.137	-1,367	.175
	X2	.183	.109	.189	1682	096
	X3	-.008	092	-.011	-.085	.933
	X4	081	.090	093	.905	.368
	X5	.335	.117	.313	2,868	.004

Source: 2023 Analysis Results

In the table above, it can be seen that the value in the significance column (sig.) for X1 (accessibility), X2 (HR), X3 (Institutional), and X4 (Social Community) is more than 0.05 and only X5 (livelihoods) is a significance (sig) below 0.05, namely 0.004. To test whether or not the independent variable has an influence on the intervening variable, the t test is used; the decision-making criteria in this test are:

- If the sig value <0.05, then there is an influence of the independent variable on the intervening variable.
- If the sig value > 0.05, then there is no effect of the independent variable on the intervening variable.
  Based on these criteria, it can be seen that only variable X5 (livelihoods) has a significance of less than 0.05, namely 0.004, so it can be concluded that there is influence and significant livelihoods on changes in land use.

2) After Trimming

- Coefficient of Determination (R2)

The coefficient of determination (R2) is a coefficient used to see how much the independent variable can explain the intervening variable. According to Chin (1998), the R-Square value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. The recapitulation of the test results for the coefficient of determination can be seen in the following table:

Table 10. Test Results for the Coefficient of Determination (R2) for Sub Structural I After Trimming

Summary modelb

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.359a	.129	.120	1.82733

a. Predictors: (Constant), X5

b. Dependent Variable: Z

Source: 2023 Analysis Results

Based on the table above, it is known that the R value at X5 is 0.359. This means that the correlation between the X5 variable (livelihood) and the Z variable is 0.359. This means that there is a moderate relationship between the X5 variable and the Z variable

because the value is close to 1. Meanwhile, it is known that the Adjusted R Square value is 0.120. This shows that the livelihood variable has a significant influence on changes in land use, namely 12%. While the remaining 88% is influenced by other variables that are not examined in this study.

- Simultaneous Test (Test F)

This test was conducted to find out whether the independent variable, in this case, X5 (livelihoods), can explain the intervening variable. The F test analysis was carried out by looking at the Alpha value, where the alpha value used in this study was 0.05. This means that the significance value (sig) must be smaller than the alpha value so that it can be said to be significant. The results of the F test can be seen in the following table:

Table 11. Simultaneous Test Results (F test) Sub Structural I After Trimming

ANOVAa

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	48,554	1	48,554	14,541	<.001b
	residual	327,236	98	3,339		
	Total	375,790	99			

a. Dependent Variable: Z

b. Predictors: (Constant), X5

Source: 2023 Analysis Results

From the table above, it is known that the Sig value is 0.001 <0.05, which means this indicates that the livelihood variable has a significant effect on changes in land use.

- Partial Test (t test)

The t-test is carried out by comparing the p-value smaller than α (0.05), meaning that partially the independent variable (X), in this case, X5 (livelihoods), influences the dependent variable (Y) through the mediator variable Z. The results of the t-test after trimming can be seen in the following table:

Table 12. Partial Test Results (t test) Sub Structural I After Trimming

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	7,734	.848		9.125	<.001
	X5	.384	.101	.359	3,813	<.001

Source: 2023 Analysis Results

In the table above, it can be seen that the significance value (sig.) for X5 (livelihoods) is 0.001. To test whether or not the independent variable has an influence, in this case, X5, on the intervening variable, the t test is used, with the decision-making criteria in this test being:

- If the sig value <0.05, then there is an influence of the independent variable on the intervening variable.
- If the sig value > 0.05, then there is no effect of the independent variable on the intervening variable.

Based on these criteria, it can be seen that the X5 variable (livelihoods) has a significance of less than 0.05, namely 0.001, so it can be concluded that there is a significant influence and livelihoods on changes in land use.

b) Sub Structural II

1) Before Trimming

- Coefficient of Determination (R2)

The coefficient of determination (R2) is a coefficient used to see how much the independent variable can explain the intervening variable. According to Chin (1998), the R-Square value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. The recapitulation of the test results for the coefficient of determination can be seen in the following table:

Table 13. Test Results for the Coefficient of Determination (R2) for Sub Structural II Before Trimming

Summary modelb

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.750a	.563	.534	1.26336

a. Predictors: (Constant), Z, X1, X4, X2, X5, X3

b. Dependent Variable: Y

Source: 2023 Analysis Results

Based on the table above, it is known that the R value is 0.750. This means that the correlation between variable X and variable Y is 0.750. This means that there is a strong relationship between the X variable and the Y variable because the value is close to 1. Meanwhile, it is known that the Adjusted R Square value is 0.534. This shows that together the variables of accessibility, human resources, institutions, social community, and livelihoods have a significant influence on the decline in the identity of cultural heritage, which is equal to 53.4%. While the remaining 46.6% is influenced by other variables that are not examined in this study.

- Simultaneous Test (Test F)

This test is conducted to find out whether the independent variables together explain the intervening variable. The F test analysis was carried out by looking at the Alpha value, where the alpha value used in this study was 0.05. Which means that the significance value (sig) must be smaller than the alpha value so that it can be said to be significant. The results of the F test can be seen in the following table:

Table 14. Simultaneous Test Results (F test) Sub Structural II Before Trimming

ANOVAa

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	190,875	6	31,813	19,932	<.001b
	residual	148,435	93	1,596		
	Total	339,310	99			

a. Dependent Variable: Y

b. Predictors: (Constant), Z, X1, X4, X2, X5, X3

Source: 2023 Analysis Results

From the table above, it is known that the Sig value is 0.001 <0.05, which means that this indicates that the variables of accessibility, human resources, institutions, social communities, and livelihoods together have a significant effect on the decline in cultural heritage identity.

- Partial Test (t test)

The t test basically shows how far the influence of an independent variable individually on the dependent variable, namely the decline in cultural heritage identity. The statistical test on the multiple linear regression equation models in this study is the t test which is an individual (partial) test. The t test is carried out by comparing the p value smaller than α (0.05), which means that partially the independent variable (X) affects the dependent variable (Y). The results of the t test can be seen in the following table:

Table 15. Sub Structural t Test Results II Before Trimming

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	-.362	1,100		-.329	.743
	X1	.692	086	-.011	8035	.887
	X2	.299	077	.325	3,879	<.001
	X3	-.116	.064	.228	-1,820	003
	X4	.189	063	-.169	3,002	072
	X5	.119	085	.117	1,401	.165
	Z	-.010	072	.595	-.142	<.001

a. Dependent Variable: Y

Source: 2023 Analysis Results

In the table above, it can be seen that the value in the significance column (sig.) for X1 (accessibility), X4 (Social Community), and X5 (livelihoods) is more than 0.05 and at X2 (HR), X3 (institutional) and Z (change in land use) has a significance (sig) below 0.05. To test whether or not the independent variable has an influence on the intervening variable, the t test is used; the decision-making criteria in this test are:

- If the sig value <0.05, then there is an influence of the independent variable on the intervening variable.
- If the sig value > 0.05, then there is no effect of the independent variable on the intervening variable.

Based on these criteria, it can be seen that the variables X2 (HR), X3 (institutional), and Z (change in land use) have a significance of less than 0.05, so it can be concluded that HR, institutions, and changes in land use have a significant effect on identity decline cultural heritage.

2) After Trimming

- Coefficient of Determination (R2)

The coefficient of determination (R2) is a coefficient used to see how much the independent variable can explain the intervening variable. According to Chin (1998), the R-Square value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33 but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33. The recapitulation of the test results for the coefficient of determination can be seen in the following table:

Table 16. Test Results for the Coefficient of Determination (R2) for Sub Structural II After Trimming

Summary modelb				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.737a	.543	.529	1.27065

a. Predictors: (Constant), X3, X2, Z

b. Dependent Variable: Y

Source: 2023 Analysis Results

Based on the table above, it is known that the R value is 0.737. This means that the correlation between variable X which has a significant effect on variable Y, is 0.737. This means that there is a strong relationship between the X variable and the Y variable because the value is close to 1. Meanwhile, it is known that the Adjusted R Square value is 0.529. This shows that together the variables of human resources, institutions, and changes in land use have a significant influence on the decline in the identity of cultural heritage, which is equal to 52.9%. While the remaining 47.1% is influenced by other variables that are not examined in this study.

- Simultaneous Test (Test F)

This test was conducted to find out whether the independent variables, in this case, the independent variables that have a significant effect, can explain the dependent variable. The F test analysis was carried out by looking at the Alpha value, where the alpha value used in this study was 0.05. Which means that the significance value (sig) must be smaller than the alpha value so that it can be said to be significant. The results of the F test can be seen in the following table:

Table 17. Simultaneous Test Results (F test) Sub Structural II After Trimming

ANOVAa

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	184,314	3	61,438	38,053	<.001b
	residual	154,996	96	1615		
	Total	339,310	99			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X2, Z

Source: 2023 Analysis Results

From the table above, it is known that the Sig value is 0.001 <0.05, which means this indicates that the variables of human resources, institutions, and changes in land use together have a significant effect on the decline in the identity of cultural heritage.

- Partial Test (t test)

The t test basically shows how far the influence of an independent variable individually on the dependent variable, namely the decline in cultural heritage identity. The statistical test on the multiple linear regression equation model in this study is the t test which is an individual (partial) test. The t test is carried out by comparing the p value smaller than α (0.05), which means that partially the independent variable (X) affects the dependent variable (Y). The results of the t test can be seen in the following table:

Table 18. Results of Sub Structural t Test II After Trimming

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	-.697	.908		-.768	.444
	X3	.664	081	.571	8.155	<.001
	X2	.249	.064	.272	3,885	<.001
	Z	.238	057	.287	4,149	<.001

Source: 2023 Analysis Results

In the table above, it can be seen that the values in the significance column (sig.) for X2 (HR), X3 (institutional) and Z (land use change) have a significance (sig) below 0.05. To test whether or not the independent variable has an influence on the intervening variable, the t test is used; the decision-making criteria in this test are:

- If the sig value <0.05, then there is an influence of the independent variable on the intervening variable.
- If the sig value > 0.05, then there is no effect of the independent variable on the intervening variable.

Based on these criteria, it can be seen that the variables X2 (HR), X3 (institutional), and Z (change in land use) have a significance of less than 0.05, so it can be concluded that HR, institutions, and changes in land use have a significant effect on identity decline cultural heritage.

4. Discussion of Hypothesis Results

Based on the results of the statistical tests that have been carried out, the results of the hypothesis can be seen as follows:

a) The Effect of Independent Variables on Intervening Variables (XZ)
   1) Effect of Accessibility on Changes in Land Use (X1Z)

Based on the statistical test results, the significance value of accessibility to land use change is 0.175, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between accessibility to land use change.

2) Effect of Human Resources on Land Use Change (X2Z)
Based on the results of statistical tests, the significance value of Human Resources for land use change is 0.096, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between Human Resources on land use change.

3) Institutional Influence on Land Use Change (X3Z)
Based on the statistical test results, the institutional significance value for land use change is 0.933, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between institutions on land use change.

4) Community Social Influence on Land Use Change (X4Z)
Based on the statistical test results, the community's social significance value for land use change is 0.368, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between social community and land use change.

5) Effect of Livelihoods on Land Use Change (X5Z)
Based on the results of statistical tests, the significance value of livelihoods to changes in land use is 0.004, which is less than 0.05, so it can be said that H0 is rejected and Ha is accepted, which means that there is a significant linear relationship between livelihoods and changes in land use.

b) Effect of Independent Variables on Dependent Variables (XY)

1) Effect of Accessibility on Decreasing Cultural Heritage Identity (X1Y)
Based on the statistical test results, the significance value of accessibility to the decline in cultural heritage identity is 0.887, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between accessibility and the decline in cultural heritage identity.

2) The Influence of Human Resources on Decreasing Cultural Heritage Identity (X2Y)
Based on the statistical test results, the significance value of human resources for the decline in cultural heritage identity is 0.001, which is less than 0.05, so it can be said that H0 is rejected and Ha is accepted, which means that there is a significant linear relationship between human resources on the decline in cultural heritage identity.

3) Institutional Influence on Decreasing Cultural Heritage Identity (X3Y)
Based on the statistical test results, the institutional significance value for the decline in cultural heritage identity is 0.003, which is less than 0.05, so it can be said that H0 is rejected and Ha is accepted, which means that there is a significant linear relationship between institutions on the decline in cultural heritage identity.

4) Community Social Influence on Decreasing Cultural Heritage Identity (X4Y)
Based on the statistical test results, the social significance value of the community on the decline in cultural heritage identity is 0.072, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between social community and cultural heritage identity decline.

5) Effect of Livelihoods on Decreasing Cultural Heritage Identity (X5Y)
Based on the statistical test results, the significance value of livelihoods on the decline in cultural heritage identity is 0.165, which is greater than 0.05, so it can be said that H0 is accepted and Ha is rejected, which means that there is no significant linear relationship between livelihoods on the decline in cultural heritage identity.

6) Effect of Changes in Land Use on Decreasing Cultural Heritage Identity (ZY)
Based on the results of statistical tests, the significance value of changes in land use on the decline in cultural heritage identity is 0.001, which is less than 0.05, so it can be said that H0 is rejected and Ha is accepted, which means that there is a significant linear relationship between changes in land use and decreased cultural heritage identity.

Based on the results of the hypothesis, then the model for path analysis is as follows:

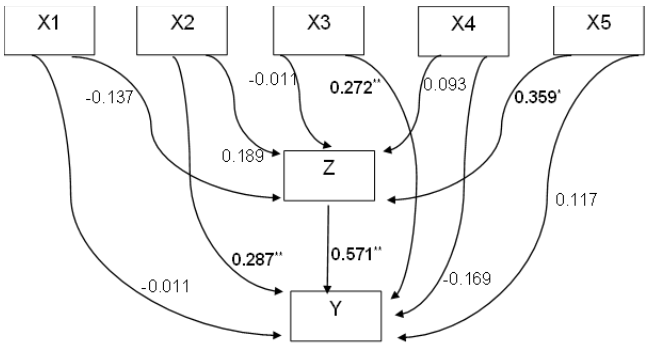

Figure 7. Path Analysis Model

a Formulate Directions for Zoning Control of the Somba Opu Fort Cultural Heritage
The results of the path analysis (path analysis) show that there are two variables that have a significant direct effect on the decline in cultural heritage identity, namely human resource variables and institutional variables. The results of the path analysis (path analysis) also show that there are independent variables that have an indirect effect on the decline in cultural heritage identity through changes in land use, namely the livelihood variable. Based on this, the control directives that are deemed effective to be applied to the Fort Somba Opu sub-district, which is the location of the Fort Somba Opu cultural heritage site, are as follows.

1. Human Resources
Based on the results of hypothesis testing on path analysis, it can be seen that Human Resources directly influence the decline in cultural heritage identity. The human resources that are meant to reduce the identity of cultural heritage are the level of knowledge of said cultural heritage. Therefore, it is felt that there is a need for proper control of this human resource variable. In several locations in Indonesia, to maintain the identity of cultural heritage as well as in order to preserve the cultural heritage, the government provides programs to the community in the form of:

a. Optimizing the role of the community in the utilization of Cultural Conservation.
b. Improving the quality of human resources in order to create human resources who have qualifications and competence in the field of information technology and cultural heritage preservation.
c. Creating internet-based applications that make it easier for the public to access information about cultural heritage and services.
d. Improving the quality of human resources by including them in education and training and encouraging the regeneration of human resources with special specifications.
Therefore the control directives that can be applied to improve the quality of human resources in terms of the level of knowledge in the Benteng Somba Opu sub-district according to their cultural characteristics are as follows:

a. Increase socialization regarding the preservation of cultural heritage, especially the Somba Opu Fort site, to the Somba Opu Fort sub-district community.
b. Improving the capacity and competence of native human resources in the Benteng Somba Opu sub-district with potential through formal education, education and training, apprenticeship, and technical guidance.
c. Carry out stakeholder partnership activities at the Somba Opu fortress site (community, agencies, communities and others).
d. Involve the people of the Benteng Somba Opu urban village in socializing cultural heritage through exhibitions, events, socialization, and community empowerment programs by utilizing information technology;
Increasing local community awareness and increasing public awareness and a sense of belonging and pride in the Somba Opu Fortress cultural heritage site.

2. Institutional
Based on the results of hypothesis testing on path analysis, it can be seen that institutions directly influence the decline in cultural heritage identity. The institution meant to reduce the identity of cultural heritage is in the form of supervision and control from the government. So it is felt that there is a need for proper control directions on this institutional variable. In several locations in Indonesia, to maintain the identity of cultural heritage as well as in order to preserve the cultural heritage, the government provides programs as well as regulations in the form of:

a. Increasing the synergy between the Provincial Cultural Heritage Preservation Center and the Regency/City Regional Government, the private sector, and the community as the main pillar of development in the preservation of Cultural Heritage.

b. Encouraging District/City Regional Governments to immediately form a Cultural Conservation Expert Team (TACB) and Regional Regulations to create harmonious and transparent cooperation.
c. Planning a Master Plan for the Preservation of Cultural Heritage, a Master Plan or proper zoning for cultural heritage with a national rating.
d. Strengthening institutions and encouraging legal certainty for cultural heritage.
e. Encouraging the Regional Government to increase the portion of the budget in the APBD in efforts to preserve cultural heritage.
f. Encourage the central government to make derivative regulations from Law Number 11 of 2010 concerning Cultural Conservation.
g. Encouraging Local Governments to make disaster mitigation plans for cultural heritage that are vulnerable to the effects of natural disasters for preservation purposes.
h. Encouraging the Regional Government to make a Regional Regulation on the Management and Preservation of Cultural Heritage as a regulation for the protection, development and utilization of cultural heritage.
i. Establish an institution that can help supervise and provide counseling to convey government regulations and laws, such as Law No. 26 of 2007 and Government Regulation No. 104 of 2015.
In addition, in Gowa Regency Regional Regulation Number 09 of 2014 concerning the Protection of Cultural Heritage, it has been regulated how the duties and authorities of the regional government are in providing protection for cultural heritage, such as:

a. Realizing, growing, developing, and increasing awareness and responsibility for the rights and obligations of the community in the Management of Cultural Conservation.
b. Develop and implement policies that can guarantee the protection and utilization of Cultural Conservation.
c. Facilitating everyone in carrying out the utilization and promotion of Cultural Conservation.
d. Supervise, monitor and evaluate the preservation of cultural heritage
Therefore the control directives that can be applied to improve institutional functions in the Benteng Somba Opu sub-district in accordance with their cultural characteristics are as follows:

a. The central government can enhance the synergy between the South Sulawesi Province Cultural Heritage Preservation Center and the Regional Government of Gowa Regency, the private sector, and the people of the Fort Somba Opu urban village as the main pillar of development in the preservation of the Fort Somba Opu Cultural Heritage site.
b. Encouraging the Regional Government of Gowa Regency to immediately form a Cultural Conservation Expert Team (TACB) and Regional Regulations in order to create harmonious, clear and transparent cooperation.
c. Establish an institution that can help supervise and provide counseling to convey government and regional regulations and laws, such as Law No. 26 of 2007, Government Regulation No. 104 of 2015, and Regional Regulation No. 09 of 2014.
d. The Regional Government of Gowa Regency plans a Master Plan for the Preservation of Cultural Heritage, a Master Plan, or appropriate zoning for cultural heritage with a national rating so that the Boundaries and regulations related to zoning of the Somba Opu fort site can be precise and effective.
e. Improving the institutional performance of the Gowa Regency government to avoid the possibility of illegal land conversion within the cultural heritage site area of the Somba Opu fortress so that it has an impact on the decline of the site's identity.

3. Livelihood
Based on the results of hypothesis testing on path analysis, it can be seen that livelihoods indirectly affect the decline in cultural heritage identity through changes in land use. Livelihoods intended to reduce the identity of cultural heritage are in the form of economic activities carried out, where according to the theory of land use in cities, is always associated with economic assessments so that land is prone to changing functions in a commercial direction. So that it is felt that there is a need for proper control directions on livelihood variables which indirectly affect the decline in the identity of cultural heritage through changes in this land use. In several locations in Indonesia, efforts to control land conversion caused by economic activities in,

a. Restrictions and prohibits the transfer of protection functions that cause damage to the quality of the cultural heritage environment.
b. Restrictions and prohibits direct use of land for commercial buildings in the core zone or buffer zone that have nothing to do with the preservation or management of cultural heritage.
c. Carrying out a policy of providing disincentives to commercial buildings that have functioned not in accordance with the District Spatial Plan/city RUTR.
Therefore the control guidelines that can be applied to be able to control commercial buildings caused by economic activity factors in the Benteng Somba Opu sub-district according to their cultural characteristics are as follows:

a. Make regulations and strictly implement them regarding restrictions and prohibitions on the conversion of cultural heritage land, which can cause damage to the quality of the cultural heritage environment as well as have an impact on reducing the identity of the Somba Opu Fort cultural heritage site.

b. Carrying out a policy of providing disincentives to commercial buildings in the cultural heritage site zone area of the Somba Opu Fort, which has been functioned not in accordance with the RTRW of Gowa Regency.

4. Land Use Change
   Changes in land use as an intervening variable, according to the results of hypothesis testing on path analysis (path analysis), actually have a significant linear relationship to the decline in the identity of cultural heritage. Therefore, it is also necessary to have directives for controlling this change in land use. In several cases in Indonesia, the government has taken several approaches to control the magnitude of this change in land use, including:

a. *Regulations*. Through this approach, policymakers need to establish a number of rules in the use of existing land. Based on various technical, economic and social considerations, policymakers can carry out the zoning of existing land as well as possibilities for the process of conversion. In addition, a clear and transparent licensing mechanism is needed by involving all stakeholders in the process of land conversion.
b. *Acquisition and Management*. Through this approach, related parties need to improve the systems and rules for buying and selling land as well as improve existing land tenure systems to support efforts towards maintaining the existence of cultural heritage areas.
c. *Dicicentive and Charges*. The policy of providing discentives to actors who have built commercial buildings that are not in accordance with the applicable utilization guidelines causing incompatibility in the cultural heritage environment.
   Therefore the control directives that can be applied to be able to control changes in land use in the Benteng Somba Opu subdistrict that are in accordance with the cultural characteristics are as follows:

a. The policymakers, in this case, the Gowa Regency government, carried out the request/zoning (zoning) within the cultural heritage site area of the Somba Opu fortress and regulated what regulations were in each zoning that had been made.
b. The policy of giving a disincentive to actors who have built commercial buildings within the cultural heritage site area of the Somba Opu fortress that is not in accordance with the applicable utilization guidelines, causing incompatibility in the cultural heritage environment.
   Meanwhile, based on Law No. 11 of 2010 concerning cultural heritage and the documents of the Cultural Conservation Preservation Center, control within the cultural heritage area is based on the rules in accordance with the request/zoning.

1. Core Zone

The core zone is an area that provides the main protection for the most important part of the cultural heritage. The regulations for the core zone in accordance with Law No. 11 of 2010 are as follows.

Table 19. Regulation of the Core Zone of the Cultural Conservation Area

Can be done	Conditional	No to do
The addition of non-permanent buildings that are reversible or easily disassembled and moved	• Consultation with BP3 Makassar • Must be preceded by a study or research	Addition/ erection of permanent buildings
Layout of the site and its environment	• Consultation with BP3 Makassar • Must be preceded by a study or research	Cut down trees if they do not endanger the preservation of cultural heritage

Source: Makassar Cultural Heritage Preservation Center 2014

2. Buffer Zone

It is the area surrounding the core zone and serves to support and protect the core zone. The regulations for the buffer zone in accordance with Law No. 11 of 2010 are as follows.

Table 20. Regulation of the Cultural Conservation Area Buffer Zone

Can be done	Conditional	No to do
The addition of non-permanent buildings that are reversible or easily disassembled and moved	• Consultation with BPCB Makassar • Must be preceded by a study or research	Addition/ erection of permanent buildings

Layout of the site and its environment	• Consultation with BPCB Makassar	Carry out felling of trees if it does not endanger the preservation of cultural heritage
Activities of a religious nature, Education, development of knowledge	• Consultation with BPCB Makassar • It must be preceded by a study/research	Activities that violate community norms and ethics, especially the local community

Source: Makassar Cultural Heritage Preservation Center 2014

3. Development Zone

It is an area that functions to increase the potential of cultural heritage for recreational purposes, natural environment conservation areas, cultural landscapes, traditional cultural life, religion and tourism. The development zone is closely related to the purpose of utilizing cultural heritage for religious, social, educational, scientific, technological, cultural and tourism interests. The regulations for development zones in accordance with Law No. 11 of 2010 are as follows.

Table 21. Regulations for Development Zones of Cultural Heritage Areas

Can be done	Conditional	No to do
The addition of non-permanent buildings that are reversible or easily disassembled and moved	• Consultation with Makassar BPCB and South Sulawesi Provincial Government • Must be preceded by a study or research	Construction and development that do not match the values, themes and nuances of the Somba Opu fortress
Layout of the site and its environment	• Consultation with Makassar BPCB and South Sulawesi Provincial Government	Carrying out land conversion without consulting the Makassar BPCB and the South Sulawesi Provincial Government
Activities of a religious nature, Education, development of knowledge	• Consultation with BPCB Makassar • It must be preceded by a study/research	Activities that violate community norms and ethics, especially the local community

Source: Makassar Cultural Heritage Preservation Center 2014

4. Support Zone

Supporting zones are areas designated for supporting facilities and infrastructure as well as for commercial activities and public recreation. The regulations for supporting zones in accordance with Law No. 11 of 2010 are as follows

Table 22. Regulations for Supporting Zones of Cultural Conservation Areas

1	Development and development must be in accordance with the values, themes and nuances of the area (somba opu fort)
2	The construction of buildings that have a height not exceeding the applicable spatial provisions
3	Activities adjust to the norms and ethics of society, especially the local community
4	Does not close public access to the Somba Opu Fort
5	Contributed to the preservation of the Somba Opu Fort

Source: Makassar Cultural Heritage Preservation Center 2014

Based on the regulations that have been regulated regarding land use in each zoning of the cultural heritage, the directives for controlling the zoning of the cultural heritage site of the Somba Opu fortress are as follows:

1. Core Zone

a. Provisions for Space Use Activities

-Activities and permitted use of space in the core zone are buildings that support the preservation of non-permanent cultural heritage, agriculture, plantations and green open space.

-Apart from buildings that support the preservation of non-permanent cultural heritage, agriculture, plantations and green open space, other activities and use of space are not permitted in the core zone.

b. Minimum Infrastructure and Facilities Provisions
In the core zone, only vital facilities and infrastructure are allowed, such as roads, information boards, exit and enter gates, BTS networks, garbage networks and sanitation networks.

c. Other Provisions
Land ownership status in the core zone should preferably belong to the government so that it is easier to carry out maintenance and excavation of cultural heritage objects in the ground.

2. Buffer Zone
a. Provisions for Space Use Activities
-Activities and permitted use of space in the buffer zone are buildings that support the preservation of non-permanent cultural heritage, agriculture, plantations and green open space.
-Apart from buildings that support the preservation of non-permanent cultural heritage, agriculture, plantations and green open space, activities and other uses of space are not permitted in the buffer zone.
b. Minimum Infrastructure and Facilities Provisions
Facilities and infrastructure that are allowed to exist in the buffer zone are roads, information boards, BTS networks, garbage networks and sanitation networks

3. Development Zone and Support Zone
a. Provisions for Space Use Activities

- Activities that are permitted are single houses, traditional houses, kiosks, shophouses, stalls, hotels, restaurants, small and craft industries, educational facilities, worship, health, government, tourism, agriculture, plantations, and green open space.
- Large industry and moderate industries are permitted on condition that they do not disturb the preservation of cultural heritage

b. Minimum Infrastructure and Facilities Provisions

Facilities and infrastructure that are allowed to exist in the development and support zones are roads, information boards, BTS network, garbage network, and sanitation network

c. Spatial utilization intensity provisions

- Maximum Basic Building Coefficient of 50%
- The floor coefficient of the building is 2 floors
- Green Basic Coefficient of 20 %
- Green Open Space of 10%

4. Conclusion
The conclusion from the results of this study is as follows:

1. The pattern of building development in the last 10 years (2012-2022) has experienced a rapid increase followed by a decrease in the paddy field area. This pattern of change indicates that some of the land use functions that were originally rice fields have changed into buildings.
2. Based on the results of path analysis, it is concluded that:
   a. Livelihoods have an indirect effect on the decline in cultural heritage identity through changes in land use.
   b. Human resources, institutions, and changes in land use have a direct effect on the decline in cultural heritage identity
   c. Accessibility and social community have no influence, direct or indirect, on the decline in the identity of cultural heritage.
3. Directions for zoning control on cultural heritage sites are explained separately according to independent variables, which have a significant linear effect on the decline in cultural heritage identity.
   a. Increase outreach and education to the public regarding the preservation of Fort Somba Opu.
   b. Increasing public awareness through stakeholder partnership activities at the Somba Opu fort site (community, agencies, communities and others).
   c. Involve the people of the Fort Somba Opu sub-district in the management and preservation of the Fort Somba Upo cultural heritage;
   d. Improving the institutional performance of the Gowa Regency government to avoid the possibility of illegal land conversion within the cultural heritage site area of the Somba Opu fortress so that it has an impact on the decline of the site's identity.

e. Collaboration between the Government and Regional Government, and the special community in the Fort Somba Opu Village is the main pillar of development in the preservation of the Fort Somba Opu Cultural Heritage site.
f. Encouraging the Regional Government of Gowa Regency to immediately form a Cultural Conservation Expert Team (TACB) and Regional Regulations in order to create harmonious, clear and transparent cooperation.
g. Strengthening detailed zoning regulations and regulations within the cultural heritage site of the Somba Opu Fort.
h. Provision of disincentives to actors who have built commercial buildings within the cultural heritage site area of Somba Opu Fort, which is not in accordance with the applicable utilization guidelines, causing inconsistency in the cultural heritage environment.
i. Carry out strict supervision related to the issuance of permits in the cultural heritage area of Fort Somba Opu.

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