estimate the population parameters. The samples in this study are Service Providers (Contractors and Consultants) who have handled projects with a sustainable construction approach, the Government (District, Province, and Central), investors, academics, and the community (around SEZ and the general public).

The research location is in the Likupang Special Economic Zone (SEZ). The location selection was based on the consideration that the Likupang SEZ is one of the government's priority super projects in developing the tourism and economic sectors in the Eastern Indonesia region. The Likupang SEZ was chosen because it is the only SEZ different from other SEZs. The Likupang SEZ is the only SEZ built by the private sector and is an SEZ with a special super-priority tourism economic zone in Indonesia. The government is responsible for building and sustaining the infrastructure, while the private sector builds special economic zones. This is a particular and unique concern, so it is interesting to explore it further, especially in the architectural development approach that is applied. This study examines the implementation of the sustainable construction model and the strategy for sustainable construction in the Likupang SEZ area. See Figure 1.

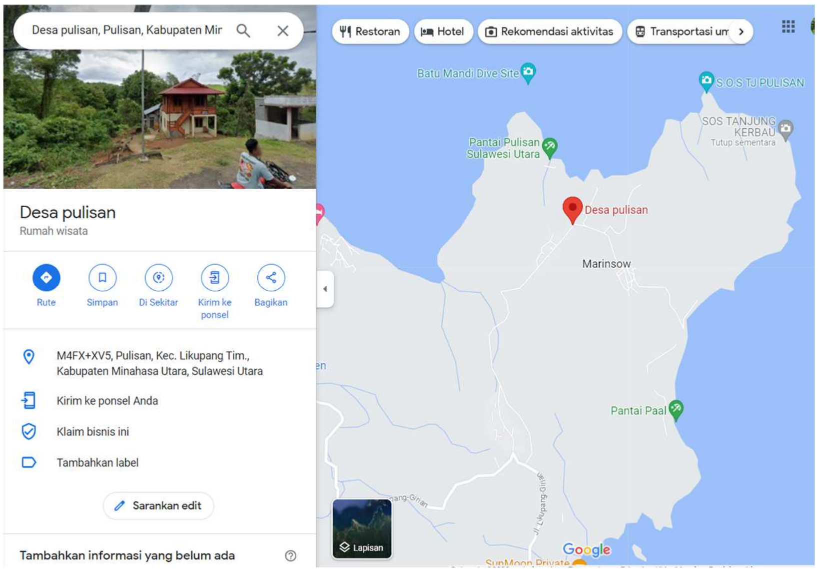

Fig. 1 Likupang SEZ Location Map

Currently, the construction site for the Likupang SEZ has begun with the construction of access road infrastructure to the SEZ and the provision of supporting utilities such as electricity, clean water, and telecommunications networks. The construction process was supposed to be in progress in 2020. However, due to the Covid-19 pandemic, construction was delayed to early 2021. The SEZ location, which is ready to be built for the initial stage, is 183 hectares, has passed the feasibility study process, and is currently under construction—waiting for the Presidential regulation document on the development of Special Economic Zones.

III. Results and Discussion

A. Distribution of Respondents by Institution/Company

The results of the calculations performed on the respondents showed that 73.8% or 59 companies are private companies on an international, national and local scale. The remaining 12.5% are companies or government agencies, both national and local. The composition of the respondents also consisted of the public and academics from universities, which consisted of 8% and 3.75%, respectively. The total amount can be seen in Table 1 and Figure 2.

TABLE I
DISTRIBUTION OF RESPONDENTS BY AGENCY/COMPANY

No	Agency/Company	Amount
1	Government	10
2	Private companies	59
3	Public	8
4	University	3
	Total	**80**

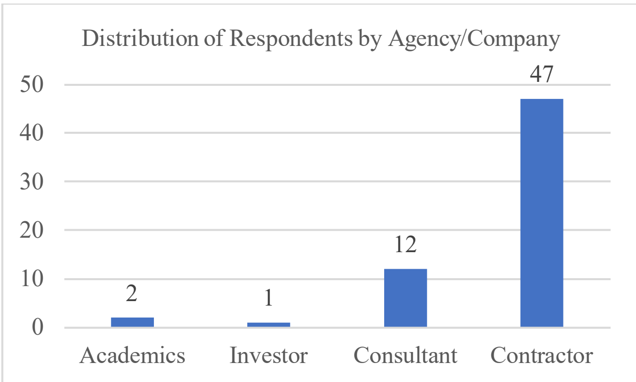

Fig. 2 Distribution of respondents by agency/company

B. Distribution of Respondents based on Company Qualifications

As a result of the analysis of the respondents, it was found that the respondents who worked for the companies concerned could be qualified using large, medium and small categories. This category was created to analyze the types of qualifications of companies involved in sustainable construction research in the Likupang SEZ. The results showed that the respondents who worked for companies involved in the Likupang SEZ were 63 respondents and constituted 78.75% of the total respondents. Respondents who work in companies with the following categories: only one respondent who works with small companies, 29 respondents who work in companies with medium qualifications, and constitutes 46.03% of the total respondents who work in the companies involved. At the same time, the majority are respondents who work in large companies, as many as 33 people and 52.38%. See Table 2.

TABLE II
DISTRIBUTION OF RESPONDENTS BASED ON COMPANY QUALIFICATIONS

No	Company Qualification	Amount
1	Not Filling	17
2	Small	1
3	Intermediate	29
4	Large	33
	Total	**80**

The remaining 17 respondents did not fill in but were respondents from community members, government, and academics, as many as 17 people or 21.25% of the total respondents, as many as 80. View figure 3.

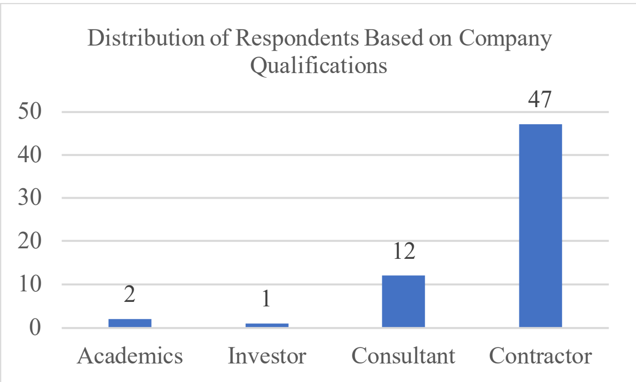

Fig. 3 Distribution of respondents based on company qualifications

C. Distribution of Respondents by Role as Stakeholders

The analysis of the recapitulation of respondents involved in this study found that the stakeholders involved can be seen in Table 3.

TABLE III
DISTRIBUTION OF RESPONDENTS BY STAKEHOLDER

No	Stakeholder	Amount
1	Academics	2
2	Investor	1
3	Consultant	12
4	Contractor	47
5	Public	7
6	Government	7
7	Owner	4
	Total	**80**

Two stakeholders work as academics and seven people in the community. Most stakeholders are contractors, as many as 47 people or 58.75% of the total respondents involved in this study. The rest is spread to 1 investor, 12 consultants, seven government people, and four owners. See Figure 4.

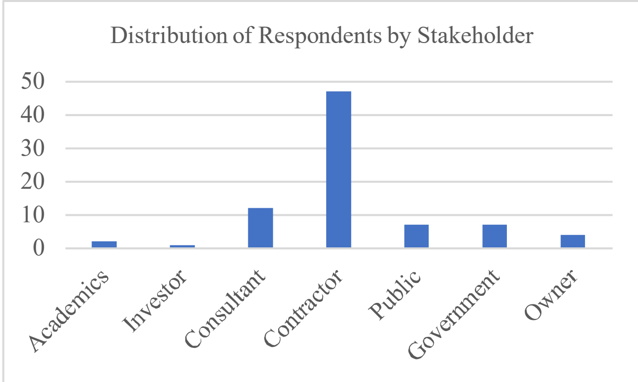

Fig. 4 Distribution of respondents by stakeholder

D. Calculation Results of Validity and Reliability

The results of the validity calculation were carried out using the Convergent Validity test (Average Variance Extracted (AVE)). This technique is to measure the Average Variance Extracted value with the measurement value (Average Variance Extracted (AVE)) must meet the value of each variable, which is >= 0.5. see table 4.

TABLE IV
VALUE OF AVERAGE VARIANCE EXTRACTED

Variable	Cronbach's Alpha	rho_A	Composite Reliability	AVE
X (BU)	0.791	0.816	0.877	0.704
Y (SC)	0.831	0.832	0.887	0.664

Calculating the Average Variance Extracted value shows that all the calculated factors have a value greater than 0.5. The discriminant validity (Fornell Lacker criterion) calculation results are performed to determine the value of the discriminant validity (Fornell Lacker criterion), which is the correlation value between the variable itself and variables with other variables, cannot be less than other variables. The valid value must be greater than the value of the variable itself and the other variables. The results can be seen in Table 5.

TABLE V
CALCULATED DISCRIMINANT VALIDITY (FORNELL LACKER CRITERION)

Variable	X (BU)	Y (SC)
X (BU)	0.839	
Y (SC)	0.543	0.815

The calculation results show that the value of Counting Discriminant Validity (Fornell Lacker Criterion) has fulfilled the requirements of all the calculated variables. The validity value is also continued by calculating the value of Discriminant Validity (Cross Loading), which is a validity test between the indicator value that measures the variable itself and the value of other indicator variables. The validity value must be greater than that indicator with other variables. Conclude that cultural factors are proven to affect the implementation of sustainable construction.

The calculation results show that the discriminant validity (Cross Loading) has met the requirements. The results of Computing Reliability (Composite Reliability and Cronbach's Alpha) are the results of Computing Reliability (Composite Reliability and Cronbach's Alpha), defined as the instrument's efficacy in measuring the indicator value. Reliability Count Value (Composite Reliability and

Cronbach's Alpha) must be > 0.7. The calculation results can be seen in Table 6.

TABLE VI
VALUE OF COMPUTE RELIABILITY (COMPOSITE RELIABILITY AND CRONBACH'S ALPHA)

Variable	Cronbach's Alpha	rho_A	Composite Reliability	AVE
X (BU)	0.791	0.816	0.877	0.704
Y (SC)	0.831	0.832	0.887	0.664

The calculation results have shown that the calculated reliability value (Composite Reliability and Cronbach's Alpha) is greater than 0.7, so it can be said that the instrument is reliable and effective for use in research.

E. Model Evaluation: Inner Model Test (Path Coefficients)

The value of the Inner Model Test (Path Coefficients) is a value that shows the direction of the relationship between positive or negative variables. The results of this calculation show the direction of influence of each X variable on the Y variable (Continuous construction). The acceptance value is at zero. If it is greater than 0 to 1, it shows the direction of a positive influence, whereas if it is less than 0 to – 1, it means it has a negative influence, see Table 7.

TABLE VII
VALUE OF INNER MODEL TEST (PATH COEFFICIENTS)

Variable	X (BU)	Y (SC)
X (BU)		0.264
Y (SC)		

The results of this study conclude the direction of the influence of the variables as follows: Variable X (Culture) has a POSITIVE effect on Y (Sustainability Construction). These results indicate that the cultural factor variable positively influences sustainable construction. Factors that have a positive influence will positively impact the implementation of sustainable construction projects in Likupang SEZ. This can be a critical success factor in sustainable construction. Factors that have a negative effect can also be seen in how they can hurt sustainable construction implemented in the Likupang SEZ.

F. Model Results: Inner Model Test (Significance T-STATISTIC)

The result of calculating the value of the Inner Model Test Evaluation (Significance T-STATISTIC) is a calculation result that shows the Significance value of a variable. This value can be seen in the results of the T-STATISTIC calculation, which shows how significant the influence of the variable-on-variable Y is sustainable construction. The acceptance value is the significance level used alpha = 0.05 or the T-Statistic value > 1.96 = SIGNIFICANT, see Table 8.

TABLE VII
MODEL CALCULATION RESULTS: INNER MODEL TEST (SIGNIFICANCE T-STATISTIC)

	Original Sample (0)	Sample mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
X (BU)-> Y(SC)	0.264	0.249	0.139	1.898	0.058

The same thing also happened to variable X (culture), which had a calculated value of 0.264, which means it has a positive effect on the sustainable construction variable but is not significant for variable Y because it only has a T-statistic value of 1.898. Thus, the cultural factor does have a positive effect on sustainable construction but does not significantly affect the sustainable construction factor. This cultural factor must still be considered when implementing sustainable construction in the Likupang SEZ.

The study's overall results provide an intriguing finding that the identified cultural factors positively influence sustainable construction. This is evident from the results of statistical calculations, which show a positive effect of 0.264. However, the effect does not seem significant because the results of the T-Statistic calculation only show the number 1,898. This figure is still less than the number of receipts of 1.96, or P Values show the number 0.058 and still does not meet the number less than alpha = 0.05. Thus, cultural factors still have not significantly influenced sustainable construction but have a positive role in the implementation of sustainable construction.

The findings of this study indicate that local cultural factors are important to consider in implementing sustainable construction. Things that focus on local culture in planting trees as materials for construction, local heritage (Values & Mindsets), Work Culture, and the migrant community environment should be of particular concern in implementing a sustainable construction approach in the Likupang SEZ area. This is to maintain the sustainability and balance of natural ecosystems. The development of the SEZ project in Likupang must pay attention to and preserve nature to meet current needs while maintaining the availability of resources for future generations. Thus, cultural factors have an important role in ensuring development with this sustainable construction approach considering environmental, social, and economic factors as well as cultural factors as new factors identified as having an influence.

The results of this study indicate that in the implementation of sustainable construction, it is not only materials that need to be considered, such as polymers [15] and management factors [16], and a more conference approach must be considered [17]. This shows the influence of a local culture that plays a role in implementing sustainable construction. The findings of another study state that the design process needs to pay attention to BIM-based designs [18], recyclable concrete materials [19], other material properties [20], and pay attention to the Physical-Chemical Processes factor in the materials used [21]. This shows that managing a sustainable construction approach is a comprehensive process involving all elements. A better approach is a holistic approach involving the community in the project area directly affected by the construction project. This certainly has an impact on the costs incurred in the construction of construction projects [22]. Another indicator that needs to be considered is projecting waste management which must be managed properly to remain environmentally friendly [23]. The development is expected to have no significant environmental impact in the area surrounding the project. The factor that must be the main concern is also the economic factor [24] which is the driving force for all project work, especially for the Likupang SEZ. The aim is to make tourism projects an economic driver because of the economic impact of the project's construction. In constructing infrastructure projects with a sustainable construction approach, materials such as cement must still be considered to ensure project quality [25], [26]. This requires adequate and modern technology. One technology that can be applied to sustainable construction projects is nanotechnology and carbon to maximize the energy used [27], [28]. In addition, the landscape factor in the construction project area also affects the project [29], so it is very important to choose an effective material to produce a good quality, ecological and durable project [30]. Another thing that must be measured is the user's perception of sustainable construction to ensure understanding and perception so that a thorough evaluation of the construction project can be carried out [31]. This study succeeded in identifying cultural factors as one of the factors that influence projects with a sustainable construction approach.

IV. Conclusion

This study concludes that cultural factors influence the construction of projects with sustainable construction. The cultural factor is a new factor that we have successfully identified as one that has a role in implementing sustainable construction. These local cultural factors include the local culture in planting trees as materials for construction, local heritage (values & mindset), work culture, and the migrant community environment. This is very important to ensure the implementation can be successfully implemented. In this study, we concluded that cultural factors could be considered new to complement the previous factors, such as economic, environmental, and social factors. This study suggests that cultural factors can be implemented in a sustainable construction approach, especially in projects like the Likupang SEZ.

Acknowledgment

We thank Hassanudin University's postgraduate civil engineering doctoral program for facilitating this research. We also thank the North Minahasa Regency government for supporting this research and the Likupang Special Economic Zone manager for supporting and facilitating the implementation of this research.

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