

Stakeholder Perception Of Limitations Of Environmental Conditions In The Project In Bromo Tengger Semeru National Park (Tnbts)

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Abstract: The area of BromoTenggerSemeru National Park (TNBTS) is one of the natural resource conservation areas located in East Java. Natural conditions in the TNBTS area are different from others, because the area is a plateau consisting of the Tengger mountain complex in the north and the Jambangan Mountain complex in the south. The access that must be passed to reach the area is very difficult due to the steep road and very far from the city center. These problems become obstacles for stakeholders when implementing development in the TNBTS area. Limited environmental conditions in the TNBTS area will affect the availability of project resources. The method used in solving the problem is the Importance Performance Analysis (IPA). Based on the results of the calculation of the IPA method there are 25 items in quadrant I, in Quadrant II there are 14 items that must be maintained, quadrant III is as many as 3 items, quadrant IV consists of 4 items.

Keywords: Project Performance, IPA, TNBTS, Natural Conditions.

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I. INTRODUCTION

The area of BromoTenggerSemeru National Park (TNBTS) is one of the natural resource conservation areas which is located in East Java and is a national and international tourism site. The management of TNBTS is functioned as a protection area for life support systems, as a preservation area for plant and / or animal species and their ecosystems, and for the sustainable use of living natural resources and their ecosystems. The condition of the area in TNBTS is currently unable to significantly resolve tourism problems.

The natural conditions in the TNBTS area are highlands consisting of the Tengger mountain complex in the north and the GunungJambangan complex in the south. So, making the TNBTS area different from the others. The access that must be passed to reach the area is very difficult due to the steep road and very far from the city center. These problems become obstacles for stakeholders in carrying out development in the TNBTS area.

In addition, the limitations of environmental conditions in the TNBTS area will affect the availability of project resources. The influence of these environmental limitations is that there are significant difficulties in the form of availability of power resources in the form of materials, workers, and tools used. Human, material, field management, management and natural and environmental conditions are factors that influence quality performance in the implementation of building construction projects^[4]. The ideal field characteristics will influence the development process on a project^[3].

II. MATERIAL AND METHODS

A. Material

- **Characteristics of TNBTS Area**

The management of TNBTS is functioned as a protection area for life support systems, as a preservation area for plant and / or animal species and their ecosystems, and for the sustainable use of living natural resources and their ecosystems. The total area in TNBTS is 50,276.2 Ha, which is divided into 7 zones namely, core zone (17,223.5 Ha), Jungle Zone (27,200.67 Ha), Rehabilitation Zone (540.01 Ha), Utilization Zone (3,341.3 Ha), Rehabilitation Zone (1,909.8 Ha), Special Zone (55.92 Ha), and Religious Zone (5.00 Ha). The utilization zone is a zone that can be used 10% for the existence of a development and the development of an area for tourism). In this zone, the development of natural tourism services and natural tourism infrastructure can be carried out by involving the participation of the private sector and the community around TNBTS. In other zones there should be no utilization due to preserving the environment so that it is maintained.

- **Construction Project Resources**

Resources in construction management have several types including costs, time, workers, materials, machinery

1. Money

Costs can be defined as the sum of all efforts and expenditures made to develop, produce, and apply an activity to make a product as planned.

2. Time

Time is a unique resource because time cannot be played back or repeated in the execution of a construction project. So, in planning and controlling time must be done as well as possible, because bad time management can have an impact on the implementation of the construction project.

3. Man

Workers in this case can be interpreted as human resources. The construction project requires human resources (workers) in completing a construction project work). Human resources (HR) in management and planning must be done appropriately so that it can produce an optimal product.

4. Materials

Each construction project uses material is an important part and has a fairly large percentage of the total budget in the construction project. From several studies stating that the material absorbs 50% -70% of the project budget, the budget does not include the budget for material storage^[5].

5. Machine

The implementation of a construction project means combining various resources to produce the desired final product. Construction equipment is one of the important resources in supporting the achievement of a goal that must be achieved.

- **Construction Project Performance**

The performance of a construction project is about doing work and the results that can be achieved from the work^[1]. Project performance measurements are mostly focused on results orientations that are objective and easily measured^[5]. The performance appraisal system in construction service companies focuses more on employees / workforce. Because labor is the main driver of all other resources^[1].

B. Research Methods

Sampling will be used as many as 3 project packages in the TNBTS area with implementation in 2017. Research samples (respondents) are contractors, consultant supervisors, planner consultants, other parties, BBTNBTS, and related agencies. The total respondents in the research conducted were 108 respondents, where the determination of the number of samples used the solvin method. The data collection technique uses purposive sampling. The collected data is used as primary data in the study. The data analysis technique that will be used is the importance performance analysis (IPA) method.

III. RESULT

3.1. Level of Conformity

To find out the performance of the project, it will use IPA analysis. Variables in research on project implementation performance are human resources and material resources. The results of the analysis of the level of conformity will be presented in Figure 1

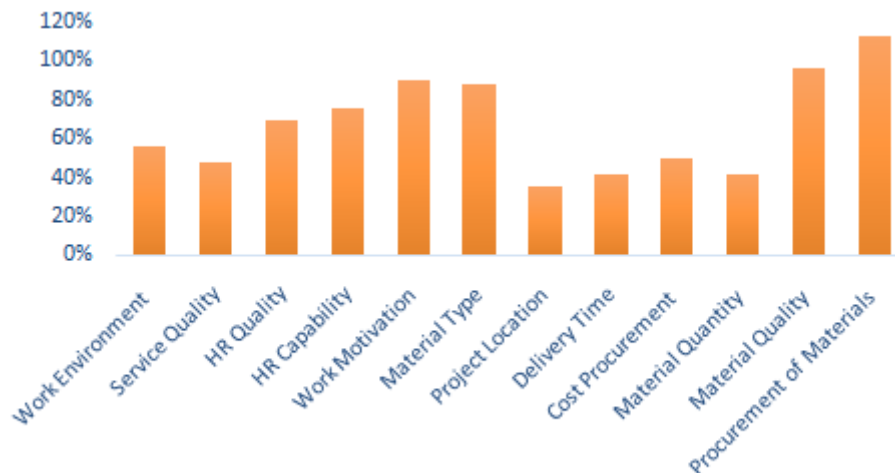


Figure No 1: Hasil Tingkat kesesuaian

Based on Figure 1, it can be seen that the appropriate indicator is the procurement of materials with a TKI value of 112%. The work environment indicator is 56%, 48% service quality, 69% HR quality, 75% HR capability, 90% work motivation, 88% material type, 35% project location, 41% delivery time, cost procurement of 50%, material quantity of 41%, and material quality of 96% has a value of TKI less than 100% so the indicator is said to be inappropriate.

3.2. Project Implementation Performance

The Importance Performance Analysis method is used to measure the value of the comparison between the level of satisfaction and the level of importance in the performance of the TNBTS project implementation . Then poured in a quadrant that can produce the performance value of the TNBTS project implementation. The calculation results will be presented in Figure 2.

In accordance with the picture 2 items that are in quadrant I consist of 25 items. Items that are in quadrant I are items that have a high degree of fatigue and low performance for stakeholders. Quadrant I is a quadrant which is a top priority, because it has high importance but the performance felt by stakeholders is low. Low performance can be interpreted that the item has different results than what has been expected, so there needs to be a main focus on quadrant I . Continuous improvement, until finding the right solution is prioritized and applied to quadrant I. In quadrant I, the project performance variable can be improved to improve the performance of the contractor^[2].

In Quadrant II there are 14 items that must be maintained, because the airport that is included in the category is maintained . In this quadrant the value of importance is high and the performance is high, so what is expected is in accordance with the results obtained during the implementation of the TNBTS project. But it would be better if the quadrant II continued to be improved, so that it could be better.

Quadrant III is as many as 3 items, which have a meaning that is low priority. Quadrant III has a low importance and has low performance for stakeholders . In this quadrant it can be a not-so-important quadrant, and performance during project implementation is also different from the expected results.

Quadrant IV consists of 4 items that can be categorized in excessive quadrants, because they have high performance values but low importance values. For stakeholders, items in quadrant IV have low importance in project implementation in TNBTS, but the resulting performance is very satisfying.

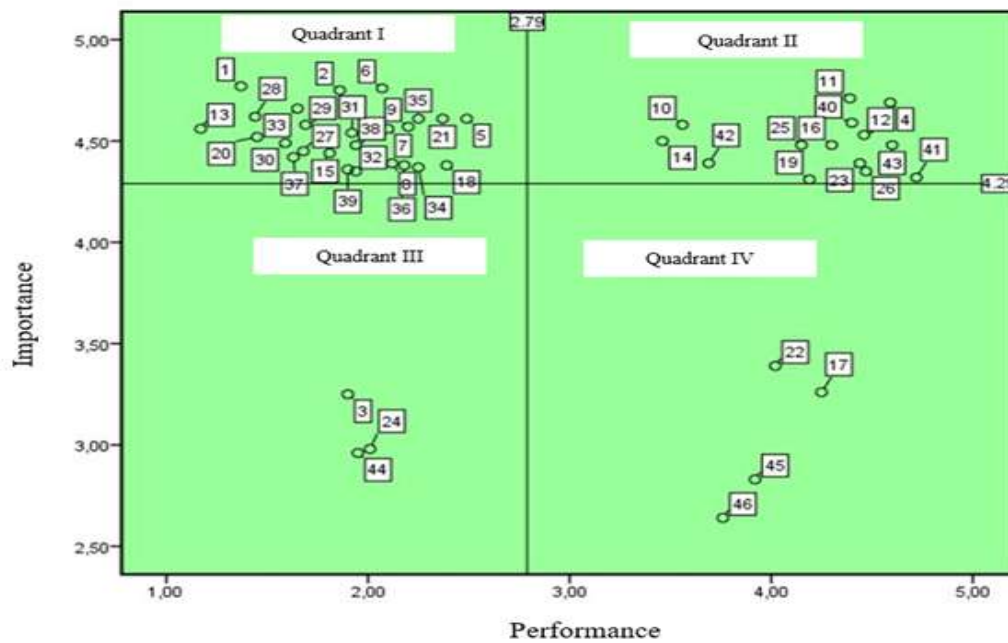


Figure No2:Quadran IPA

TableNo 1:Item Description In Each Quadrant

Kuadran	No. Item	Item	
I	1	Weather conditions on location	
	2	The project location is far from the City Center	
	5	HR knowledge and expertise	
	6	Suitability of results	
	7	Act quickly and actively to minimize bad possibilities	
	8	Can be trusted in providing services and having good performance	
	9	Good understanding of work methods (implementation method)	
	13	There is high morale	
	15	Ability to handle worker crises	
	18	HR capabilities adapt	
	20	Ability to Deal with Delays	
	21	Wage suitability	
	27	Affordability of the project location	
	28	the way to the project location	
	29	Circumstances (environment) at the project location	
	30	Extreme weather	
	31	Material delivery duration	
	32	Late delivery time	
	33	Environment and bad weather at the project site	
	34	Estimated unexpected costs in material procurement	
	35	Increase in material prices in the project environment	
	36	Incompatibility between material procurement budget plans	
	37	Availability of material at the project location	
	38	Number of suppliers	
	39	Adequacy of suppliers	
	II	4	Relations between workers
		10	Speed & willingness to repair damage
		11	Skills and responsiveness in doing every job
		12	Discipline when doing work
		14	HR is able to handle material delays

	16	HR is able to handle design changes
	19	HR is able to deal with social impacts
	23	There is overtime pay
	25	Good material quality
	26	Suitability of material types with needs
	40	Conformity of material quality
	41	Compatibility of material quality with needs
	42	Test the material to be used
	43	The right use of vehicles in material distribution
III	3	Comfort and safety when doing work
	24	Availability of material on the market
	44	Selection of suppliers as pensuplay material
IV	17	HR is able to maintain environmental security
	22	Security in carrying out work
	45	Parties involved in material procurement
	46	Changes in material demand

IV. CONCLUSION

Based on calculations using the IPA method there are 25 items in quadrant I, quadrant I is a quadrant which is a top priority, because it has high importance but the performance felt by stakeholders is low. In Quadrant II there are 14 items that must be maintained, because the airport that is included in the category is maintained. Items that are included in quadrant III are as many as 3 items, which have a meaning that is low priority. In this court it can be a not-so-important quadrant, and performance during project implementation is also different from the expected results. In quadrant IV consists of 4 items that can be categorized in excessive quadrants.

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