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Performance Analysis of Supervisory Consultant in the Water Resources Sector of Department Of Public Works and Spatial Planning In Tapin Regency

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ABSTRACT

The supervision activities on the implementation of the construction process must be performed effectively and efficiently to achieve a construction that is categorized as successful. This is certainly related to the performance of the supervision process. If the performance of the consultant is good and satisfactory, it can be concluded that the construction work can also compete in terms of the right quality, time and cost in accordance with the planning. The research methods used are the analysis of the Customer Satisfaction Index (CSI) and Importance-Performance Analysis (IPA). The questionnaire where also checked in terms of the validity and reliability of the questionnaire. The CSI percentage value obtained shows a good results with the level of customer satisfaction is 89.00%, means very satisfied. IPA analysis is used to determine the results of the supervisory consultant's performance priority analysis in accordance with the IPA analysis quadrant. The IPA's quadrants will provide results whether the performance of this supervisory consultant needs to be maintained, the main priority for performance improvement, included in excessive-performance or exceeding expectations. In this research, the dominant factor of performance improvement according to the IPA results which showed that the factors are in quadran A (performance improvement top priority) are monitoring the time and work progress, supervision of the OSH implementation, the ability to analyze planning design, communication and coordination skills in construction project implementation activities, the ability to review and evaluate contraction work methods, and the ability to be present in the field of supervisory activities every single time.

The results of this research are in the form of determining the direction of the the strategy to improve the performance of supervisory consultant resources that are expected to provide input to the owner, in this case the Commitment Making Officer to determine sustainable improvement measures in the implementation of construction activities in the Sector of Water Resources in the following fiscal years.

In this research, the strategy of consultant performance improvement is the supervisory consultant needs to recruit personnel with required soft skills and also organized a training to improve their softskills. The purpose is to improve leadership ability, with the result that the soft skills training certificate can be attached in the file supervisory consultant offer as additional requirement. That certificate can add more value when the owner searching for new supervisory consultant in the future. Besides, the supervisory consultant needs to manage supervisory personnel well.

KEYWORDS: Performance, CSI Analysis, IPA Analysis, Improvement Strategy

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I. INTRODUCTION

The construction field is a business that is full of quality and technology competition both in terms of methods, design, materials and human resources. It requires continuous innovation. All of this is intended to achieve the objectives of the construction implementation and minimize the risk of failure and work accidents. To achieve a construction that is categorized as successful, the supervision activities on the implementation of the construction process must be conducted effectively and efficiently. This is certainly related to the performance of the supervision process. If the performance of the consultant is good and satisfactory, it can be

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concluded that the construction work can also compete in terms of quality, time and cost in accordance with the plan. The Department of Public Works and Spatial Planning of Tapin Regency (in this case is the Water Resources Sector), conducted 64 packages of construction activities and 15 packages of supervision consultant services in the 2020 fiscal year. Due to the limitations of the regional budget, it is necessary that supervision activities for several packages of construction activities are combined into one package. Although it will affect the management of human resource mobilization in the field, this is a challenge that must be faced by the supervisory consultant who approves the written contract. The owner, in this case PPK (The Commitment-Making Officer), needs to obtain information on the performance of its consultant from this contract, to evaluate and supervise the implementation of construction activities as a whole. In addition, the audit of activities results which executed by the Supreme Audit Agency in the implementation of activities projects in the Natural Resources Sector indicate that there are still findings of discrepancies between back-up data and the volume installed in the field every year. The back-up data is carried out and made by the contractor who usually coordinates with the supervisory consultant. The data back-up sheet is always affixed with the signature of the supervisory consultant field supervisor which means approval of the data results that have been made. For this reason, there is a need for a review, where this data error was made, whether it was purely due to the contractor's fault or there was also an error factor from the supervisory consultant. It needs an evaluation to determine steps for continuous improvement in the implementation of construction activities in the Water Resources Sector for the following budget years.

The research related to consultant performance has been conducted by several previous researchers such as Tomigolung (2013), examining the performance of supervisory consultants with the analytical method used is multiple regression analysis. The number of samples available is 33 consultants supervising road and bridge projects in North Sulawesi. The results of this study are the leaders and employees in North Sulawesi Province must pay attention to the important role of these six factors and other factors towards increasing or decreasing the Performance of Supervisory Consultants for each road and bridge project in North Sulawesi Province, in order to ensure development future area. Azwardhana, Hasvivaldi (2019) whose research was conducted on the performance of the management consultant BBPJN XI Banjarmasin. The conclusion from this research is that the overall performance of the management consultant BBPJN XI Banjarmasin can be categorized as satisfactory, however, special attention is given to the indicators with the lowest scores in each aspect of performance. It can be concluded from the analysis that the indicators with the lowest value for each aspect of performance need attention because they show the lowest index values such as indicators of communication and coordination skills, indicators of document management responsibility, indicators of attendance discipline, and indicators of gathering input. There is also research that has been conducted by Noor, Ahsan (2020). The research was conducted on the performance of supervisory consultants who have conducted a bridge project supervision of the BBPJN XI Banjarmasin. The results concluded that indicators in the top priority category need attention since they showed the lowest quadrant is an indicator of communication and coordination skills in construction project implementation activities. The main strategy that needs to be done for the quadrant according to the researcher is to choose a Chief Inspector who is experienced and check the workers' certificate of expertise, therefore they can properly maintain the project and avoid construction failures.

The difference between this research and the previous one is that in the previous research, the supervisory consultant did not supervise several construction activities in one package at once as is currently applicable in the Natural Resources Sector of DPUPR (Department of Public Works and Spatial Planning) in Tapin Regency, so it was deemed necessary to conduct research related to performance analysis of supervisory consultants in the Sector of Water Resources of DPUPR in Tapin Regency.

Preliminary Studies

II. RESEARCH METHOD

To formulate the research problems, the preliminary study was conducted by studying the work contract between the CMO (PPK) and the supervisory consultant, conducting discussions and seeking information about the implementation of the supervision consultant contract as well as preliminary observations in the Water Resources Sector of the DPUPR in Tapin Regency.

The result of this activity is the

discovery of allegations of aspects of the supervisory consultant's performance that need to be improved. Preliminary studies are also carried out by seeking information from written sources such as journals, books, texts, applicable regulations and taking into account all related aspects in order to achieve the objectives and thus the implementation of the work can be optimized. Afterwards, the results from the future work can be appropriated for the requirements specified in the Terms of Reference.

Determination of Performance Indicators

It consists of the independent variable (X) called the supervisory consultant performance satisfaction variable and the dependent variable (Y) called the consultant's performance expectation variable.

Primary Data Collection

Questionnaire

The data collection instrument is a series of questionnaires consisting of several questions and is divided into two categories of assessment, called an assessment of the satisfaction of the consultant's performance and an assessment of the consultant's performance expectations. The answers are selected based on the answer options and are marked with five codes as mentioned in Table II.2

Scoring	<u>Code</u>	<u>Sc</u>	<u>core</u>
1	SP	Very Satisfied	Very Important
2	Р	Satisfied	Important
3	СР	Sufficiently Satisfied	Quite Important
4	TP	Dissatisfied	Not Important
5	STP	Very Dissatisfied	Very Unimportant

The steps of data processing in this research include editing, coding, and scoring are as follows:

1. Editing

The data that has been collected is edited based on the category of analysis of performance satisfaction and analysis of consultant performance expectations.

2. Coding

Each respondent who gives an opinion is given a code with a serial number according to the position, experience, gender and level of education.

3. Scoring

Afterwards, the data is given a score with a percentage score of each answer by each respondent from each indicator in the questionnaire. The respondents' answers score in this study refers to a scale of 5 point, so the lowest respondent's answer score is 1 and the highest answer score is 5. A scale of 5 levels of respondents' answers to the expectations and performance of the supervisory consultant as in Table III.3

Expected	Performance	Answer Weight
Very Satisfied	Very Important	5,00
Satisfied	Important	4,00
Quite Satisfied	Quite Important	3,00
Dissatisfied	Not Important	2,00
Very Dissatisfied	Very Unimportant	1,00

Table II 2 Deependent's Answer Weight Value Scale

Priority Factor Analysis

The IPA method will be used to analyze the priority factors for improving the performance of the supervisory consultant. The priority factor is the research indicator/variable which is included in quadrant A (Main Priority). Observation

To find out how the method of implementation in the sector is carried out by supervisory consultants, it is necessary to make observations that aim to analyze how consultants conduct supervision on the implementation of construction activities. Whether the method of executing the work is in accordance with what has been stated in the Term of Reference (TOR) made by the CMO. This is important to the satisfaction of the owner (in this case is the CMO of the activities) with the performance of the consultants. Observations are also made to check the suitability of IPA analysis results with implementation in the sector.

Development of Improvement Strategy Direction

According to the results of the respondents' answers to the questionnaire, the results can be concluded to be a factor that affects the performance of the supervisory consultant. Then, the results of data collection were analyzed using Importance Performance Analysis (IPA). The first stage of the IPA results as seemed in Figure II.1. According to the matrix results, the variables in zone A or the main priority will be the focus of determining the strategy for improving the performance of the supervisory consultant.

After finding the results of the IPA, it will be checked again based on the results of field observations. Are the results of the IPA directly proportional to the results of the observations or vice versa? If the performance level of the supervisory consultant based on the results of IPA and observations is known, strategic steps to improve the consultant's performance can be arranged.

Respondents Profile

III. RESULTS AND DISCUSSION

In this study, the respondents were the parties involved in the performance measurement indicators of the supervisory consultants at the DPUPR of Tapin Regency in the Water Resources Sector, called Commitment Making Officers, Technical Implementing Officers for Supervisory Consultant Activities, Technical Implementation Officers for Physical Activities, Field Supervisors, Teams Receiving Work Results and other parties. Implementing Contractor who feel the impact of the supervisory consultant's performance, thus the answer is expected to be more actual. In addition to the number of distributed questionnaire and the limited time, the biggest obstacle was the distribution of this questionnaires coincided with the pandemic situation due to the spread of the covid-19 virus. Therefore, the questionnaires distribution is conducted online.

Respondents involved in this research consist of:

a. The DPUPR of Tapin Regency for natural resources sector i.e. *SDA* as the CMO who felt the impact of the supervisory consultant's performance was 1 respondent.

b. The DPUPR of Tapin Regency for *SDA* as the Supervisory Consultant of Technical Activities Executive Officers i.e. *PPTK* who felt the impact of the supervisory consultant's performance was 1 respondent.

c. The DPUPR of Tapin Regency for Natural Resources as the Physical of *PPTK* who felt the impact of the supervisory consultant's performance were 4 respondents.

d. The DPUPR for *SDA* of Tapin Regency as the Field Supervisor who felt the impact of the performance of the supervisory consultant was 5 respondents.

e. The DPUPR of Tapin Regency for the Natural Resources Sector as the Team of Work Recipients who felt the impact of the supervisory consultant's performance were 5 respondents.

The Physical Activities Contractors who felt the impact of the supervisory consultant's

Table III.1 Respondent's Position and Agency

Ν	Institution	Position	Total	Presentation
0				
1	DPUPR	СМО	1 Person	2.85%
2	DPUPR	PPTK Supervision Consultant	1 Person	2.85%
3	DPUPR	PPTK Physical	4 Persons	11.43%
4	DPUPR	Field Supervisor	5 Persons	14.28%
5	DPUPR	Recipient Team of Work	5 Persons	14.28%
6	PT. Marata Cipta Sarana	President Director	1 Person	2.85%
7	CV. Sinar Pelita	President Director	1 Person	2.85%
8	CV. Sahabat Sarana Teknik Mandiri	Director	1 Person	2.85%
9	CV. Bintang Kecil	Director	1 Person	2.85%
10	CV. Mitra Utama Mandiri	Director	1 Person	2.85%
11	CV. Harapan	Director	1 Person	2.85%
12	CV. Rezky Mulia Pelita	Director	1 Person	2.85%
13	CV. Sekumpul	Director	1 Person	2.85%
14	CV. Keluarga Borneo	Director	1 Person	2.85%
15	CV. Hafiza	Director	1 Person	2.85%
16	CV. Ronoro & Coy	Director	1 Person	2.85%
17	CV. Amanah Raya	Technical Manager	1 Person	2.85%
18	PT. Arya Jaya Karya	Project Manager	1 Person	2.85%
19	CV. Shofadina	Field Implementer	1 Person	2.85%
20	PT. Prakarsa Teknindo Pembangunan	Field Executor	1 Person	2.85%
21	CV. Sinar Harapan	Field Implementer	1 Person	2.85%
22	CV. Anugerah Bintang Cemerlang	OSH Officer	1 Person	2.85%
23	PT. Kelana Multi Konstruksi	Staff	1 Person	2.85%
24		Architects	1 Person	2.85%
		Total	35 Persons	100%

Primary Data Processing

Inclusion of Instrument Code Questionnaire Question

Before beginning the calculation of the analysis, it is necessary to provide a code in the questionnaire question instrument to make it easier to distinguish the question variables given to respondents. The code for this instrument is shown in Table III.2

No	Indicator	Instrument Question	Code
1	Document	Expert Qualification Documents	D.1
		Analysis of adding less volume of work	D.2
		Reporting on work progress activities	D.3
		Reporting the results of supervision activities	D.4
2	Supervision	Quality Control of Construction Implementation	P.1
		Supervision of construction work methods	P.2
		Monitoring of time and work progress	P.3
		Monitoring the progress of financial absorption	P.4
		Supervision of the implementation of OSH	P.5
3	Ability	Ability to analyze planning design	K.1
		Ability to communicate and coordinate in construction project implementation activities	K.2
		Ability to review and evaluate construction implementation methods	K.3
		Ability to always be present in supervisory activities in the field	K.4
		Ability to attend PHO activity audits	K.5

Tabel III.2 Questionnare Question Instrument Code

Questionnaire Result Data Recapitulation

To answer the questionnaire is by giving a check ($\sqrt{}$) mark on one of the most appropriate answers according to the respondent. The assessment is carried out based on a scale of 1 to 5 which has the following meanings:

Scale 5 for SP = Very Satisfied

Scale 4 for P = Satisfied

Scale 3 for CP = Quite Satisfied

Scale 2 for KP = Unsatisfied

Scale 1 for STP = Very Dissatisfied

Table III.3 Test Results Validity of Consultant Performance Satisfaction

No	Performance Aspect	Variable	R	Result
1	Document	D.1	0.868	Valid
		D.2	0.802	Valid
		D.3	0.932	Valid
		D.4	0.890	Valid
2	Supervision	P.1	0.897	Valid
		<i>P.2</i>	0.895	Valid
		<i>P.3</i>	0.844	Valid
		<i>P.4</i>	0.773	Valid
		P.5	0.768	Valid
3	Ability	K.1	0.897	Valid
		К.2	0.895	Valid
		К.З	0.844	Valid
		<i>K.4</i>	0.773	Valid
		K.5	0.768	Valid

No	Performance A	spect	Variable	R	Result
1	Document		D.1	0.886	Valid
			D.2	0.858	Valid
			D.3	0.888	Valid
			D.4	0.873	Valid
	Supervision	P.1	0.89	7 V	alid
		<i>P.2</i>	0.89	5 V	alid
		P.3	0.84	4 V	alid
		<i>P.4</i>	0.77	v3 V	alid
		P.5	0.76	58 V	alid
	Ability	K.1	0.77	vo V	alid
		<i>K</i> .2	0.89	v3 V	alid
		<i>K.3</i>	0.68	4 V	alid
		<i>K.4</i>	0.80	v2 V	alid
		K.5	0.81	1 V	alid

Table III.5 Test Results Reliability of Consultant Performance Satisfaction

No	Performance Aspect	Variable	Α	Result
1	Document	D.1	0.860	Reliable
		D.2	0.891	Reliable
		D.3	0.832	Reliable
		D.4	0.850	Reliable
2	Supervision	P.1	0.791	Reliable
		<i>P.2</i>	0.815	Reliable
		P.3	0.773	Reliable
		<i>P.4</i>	0.797	Reliable
		P.5	0.865	Reliable
3	Ability	K.1	0.919	Reliable
		<i>K.2</i>	0.908	Reliable
		<i>K.3</i>	0.918	Reliable
		<i>K.4</i>	0.900	Reliable
		K.5	0.910	Reliable

Table III.6 Result of CSI Method Calculation						
No	Performance Aspect	Variable	Норе	Importance	WF (%)	WSi
			MIS	MSS	_	
1	Document	D.1	4.43	3.77	7.57	32.44
		D.2	4.44	3.54	7.11	31.08

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		D.3	4.40	3.63	7.28	32.0
		D.4	4.20	3.51	7.05	29.0
2	Supervision	P.1	4.51	3.66	7.34	33.
		P.2	4.42	3.48	7.00	30.9
		P.3	4.57	3.46	6.94	31.7
		P.4	4.43	3.77	7.57	33.5
		P.5	4.46	3.43	6.88	30.0
3	Ability	K.1	4.60	3.54	7.11	32.7
		K.2	4.46	3.54	7.11	31.6
		К.З	4.54	3.48	7.00	31.7
		K.4	4.48	3.28	6.59	29.5
		K.5	4.57	3.71	7.45	34.0
	Amount		62.31	49.83	100.00	445.0

MIS (Mean Important Score): The average value of each aspectSatisfaction: The average value of each aspectMSS (Mean Satisfaction Score): The average value of each aspectHope: The average value of each aspect

WF (Weight Factors):MIS score percentage

WSi (Weight Score): Multiplication between Weight Factors (WF) and Mean Satisfaction Score (MSS)

CSI (Customer Satisfaction Index):Performance Satisfaction Index

Based on the results of data processing, it can be seen that the average value of each supervisory consultant's performance satisfaction is Mean Important Score (MIS) and the average value of each supervisory consultant's performance expectation is Mean Satisfaction Score (MSS). The highest performance expectation of the supervisory consultant (MIS) is the ability to analyze the planning design with a performance score of 4.60 and the attribute that has the lowest performance is the reporting document on the results of supervision and supervision activities of time and work progress with a performance score of 4.20. In addition, the average value obtained from each of the highest performance expectations of supervisory consultants (MSS) is the qualification document for experts and supervision of the progress of financial absorption with an expected score of 3.77 and the ability to always be present in supervisory activities in the field gets the lowest expected score of 3.28.

The analysis results using the Customer Satisfaction Index (CSI) method show that the performance level of the supervisory consultant for the Natural Resources Sector is 89.00%, which means the value is in the very satisfied category as shown in the table of satisfaction value index. This shows that the Water Resources Sector who feels the impact of the supervisory consultant's performance is very satisfied with the performance of the supervisory consultant. However, the supervisory consultant must be consistent and continue to improve performance, especially the ability to always be present in supervisory activities in the field

Importance Performance Analysis (IPA)

Importance Performance Analysis is an analysis technique used to identify which of the important performance factors that must be performed by an organization to fulfill the satisfaction of their consumers.

Analysis of the priority level of the supervisory consultant's performance in the Water Resources Sector is using the IPA (Importance Performance Analysis) method. To see the results of the priority analysis of the supervisory consultant's performance using the IPA method, it will be explained in Table III.7.

Table III.7 IPA Analysis								
No	Questions	Performance Score	Performance	Performance Expectancy	Score	Expectancy Level of Conformity (%)		
1	D.1	132	3.7714	150	4.2857	88%		
2	D.2	124	3.5429	153	4.3714	81%		
3	D.3	127	3.6286	154	4.4000	82%		
4	D.4	123	3.5143	147	4.2000	84%		
5	P.1	128	4.6571	158	4.5143	81%		
6	P.2	122	3.4857	155	4.4286	79%		
7	P.3	121	3.4571	160	4.5714	76%		
8	<i>P.4</i>	132	3.7714	155	4.4286	85%		
9	P.5	120	3.4286	156	4.4571	77%		
10	K.1	124	3.5429	161	4.6000	77%		
11	K.2	124	3.5429	156	4.4571	79%		
12	K.3	122	3.4857	159	4.5429	77%		
13	<i>K.4</i>	115	3.2857	157	4.4857	73%		
14	K.5	130	3.7143	160	4.4571	81%		
	Amount	1741	49.8286	2181	62.3143	80.025%		

$$\mathbf{X} = \frac{\Sigma XI}{K} = \frac{49.8286}{14} = \mathbf{3.5592}$$

 $\mathbf{Y} = \frac{\Sigma YI}{K} = \frac{62.3143}{14} = \mathbf{4.4510}$

After obtaining the X axis and Y axis, the results of the calculation of the IPA analysis are plotted into the IPA graph to get the results of the performance quadrant. The results of the performance quadrant can be seen in Table III.8

Performance Aspect	No	Variable	Coordinate (x, y)	Quadrant
	1	$D_{\cdot 1}$	3.77, 4.28	D
Document	2	$D_{\cdot 2}$	3.54, 3.47	С
Document	3	D.3	3.62, 4.40	D
	4	$D_{\cdot 4}$	3.51, 4.20	С
	5	<i>P</i> . ₁	4.65, 4.51	В
	6	<i>P</i> . ₂	3.48, 4.42	С
Supervisor	7	<i>P</i> . ₃	3.45, 4.57	А
	8	P.4	3.77, 4.42	D
	9	P.5	3.42, 4.45	А
	10	<i>K</i> . ₁	3.52, 4.60	А
	11	<i>K</i> . ₂	3.54, 4.45	А
Capability	12	<i>K</i> . ₃	3.48, 4.54	А
	13	<i>K</i> . ₄	3.28, 4.48	А
	14	K.5	3.71, 4.57	В

Table III.8 Quadrant Results



The variables in this quadrant are factors that are considered important and expected by consumers to be fulfilled, but the consultant's performance is considered unsatisfactory, thus in this case the consultant needs to concentrate on allocating the resources they have to improve their performance. After analyzing with IPA, the variables included in this quadrant are:

- 1. Monitoring the time and progress of work.
- 2. Supervision of the implementation of OSH.
- 3. Ability to analyze the planning design.
- 4. Communication and coordination skills in construction project implementation activities.
- 5. Ability to review and evaluate construction work methods.
- 6. Ability to always be present in supervisory activities in the field.

Observation

To find out how the implementation method in the field is executed by the supervisory consultant, it is necessary to make observations that aim to analyze how the consultant supervises the implementation of construction activities. Whether or not the method of carrying out the work has associated with the TOR made by the CMO. This is important related to the owner satisfaction i.e., the CMO of activities, with the consultants' performance.

1. Document

Observations for this variable document are fulfilled by examining the bid documents submitted by the consultant, checking the documents plus or minus the physical volume of work, checking the weekly physical progress report submitted by the consultant and checking the completeness of the results of the consulting activity report submitted by the consultant to the CMO.

According to the results of the observations of the four factors, two of them are in accordance with the results of the questionnaire. Both show more satisfied and very satisfied answers to the consultant's performance. Nevertheless, there is a slight discrepancy in the other two factors called reporting on work progress activities and reporting on the results of supervision activities. The results of the questionnaire shows a number of satisfaction while according to the results of observations there is still a lack of assessment of the performance of these two factors.

2. Observations for monitoring variables are carried out by randomly checking reports on the results of back up data, as built drawings and documentation of physical work, checking the files for disbursement term and visiting work locations at random.

The results of the observations show that the factors that are in the main priority quadrant of improvement are the monitoring factor for the implementation of OSH and the monitoring factor for time and work progress. The observation results show that the difficulty of assertiveness regarding the implementation of OSH by the

supervisory consultant and the dynamic non-technical conditions in several projects also affect the progress of the work.

3. Observations for this capability variable, apart from checking physical work files, are also conducted by direct visits to the project site and observing how consultants work and asking people in the field who are involved in the construction projects including construction workers and community around the location.

Observations show that the supervisory consultant lacks the ability to manage his personnel. This is indicated by the results of observations which show that the supervisory consultant's ability to always be present in the field cannot be fulfilled properly. Likewise, the lack of consultant soft skills such as the ability to communicate and coordinate well because in this case the communication skills possessed by the consultant are expected to be an information link between owners, contractors, construction workers and the surrounding community. Therefore, sometimes there is some information that is too late or untold, regarding project implementation. Likewise, it is the ability to review and evaluate where the consultant's report does not detail the results of the evaluation.

Performance Improvement Strategy

Improvement Strategy for Quadrant A (top priority) are:

1. Monitoring of work time and progress

For monitoring the time and progress of the work, the consultant is considered still not optimal so that there is still work progress that must be rescheduled.

Improvement Strategies:

- The consultant must continuously coordinate regarding the obstacles that occur in the field.

- The consultant must be more careful in preparing the updating time schedule for the implementation to the achievement is in accordance with the agreed targets.

2. Supervision of The Implementation of OSH

Reminding each other the importance of using OSH attributes when working on projects, so as there are no fatal accidents during the work until it is finished.

Improvement Strategies:

- There is a need for firmness in the application of OSH in the field by always reminding the importance of maintaining work safety, especially in the Covid-19 pandemic situation which has not ended.

– Always remind the contractor of the obligation to fulfill PPE for construction workers in accordance with what has been stated in the Real Estimate of Cost contract.

- If necessary, emphasize sanctions on contractors if violations of OSH implementation are found.

- Provide an explanation of the sanctions imposed by the government through the regional Covid-19 task force officers which requires the implementation of the project to be postponed for the next 14 days if a positive case of COVID-19 is found. Moreover, the contract can even be terminated if the construction project becomes a new cluster for the spread of Covid-19

3. The Ability to Analyze the Planning Design.

This performance improvement must be directed at efforts to maintain the consultant's ability to read and understand the planning designs that have been made, thus they can provide instructions and directions to the implementing contractors in applying the designs.

Improvement Strategies:

- The supervisory consultant must learn in detail and depth about the planning design and the method of carrying out the work contained in the physical contract of TOR on the construction work package that will be supervised.

- The Planning Section team who previously coordinated with the planning consultant regarding the details of the project to be implemented may assist to understand this planning.

4. The Ability to Communicate and

Coordinate in The Construction Project Implementation Activities.

This performance improvement must be directed at efforts to maintain a coordinating relationship with the parties involved in the implementation of construction. Therefore, no information is not conveyed, or there is a misunderstanding that ultimately results in the disruption of project implementation due to communication that does not run well.

Improvement Strategies:

- The consultant must be able to improve communication skill. It is a tool to convey information between the parties involved in construction projects such as the owner, called the CMO, *PPTK*, technical directors/activity supervisors and the PHO team. Likewise with the contractors, project workers as well as

village officials and the local community in order to avoid misunderstandings from local residents when the project is complete.

5. The Ability to Review and Evaluate Construction Work Methods.

The ability to review and evaluate needs to be improved. Thus, it can be a suggestion for the owner, i.e. the CMO, for the Natural Resources Sector and the implementing contractor for the future work projects to be improved both in terms of quality and implementation methods due to the different work conditions in each existing location sometimes.

Improvement Strategies:

- The supervisory consultant can give the results of the evaluation and review in the form of a written report. Therefore, it can be documented by the owner. The evaluation and review is useful to observe things that can affect the method of performing work related to contractor performance, existing conditions and evaluation of the planning design. Thus, it can be taken into consideration by the owner in making a planning design for the next construction work.

6. The Ability to be present in the field of supervisory activities every single time.

The presence of consultants at the work site is still considered lacking due to the lack of the supervisory consultant's ability to always be present at all times supervising the work to coordinate with contractors and field implementation.

Improvement Strategies:

- The supervisory consultants must be able to manage personnel, time and costs to face this challenge. It is necessary with the result that every supervised construction work can run well.

IV.CONCLUSIONS

As seen in the description of the strategy in quadrants A and B, to meet the demands of the supervisory consultant contract where for one package of activities the consultant must supervise several packages of construction activities, it needs a special strategy from the consultant so it can be handled properly that at the time of implementation. There are some lacks of assessment, especially in the terms of:

- 1. Monitoring the time and work progress.
- 2. Supervision of the implementation of OSH.
- 3. The ability to analyze the planning design.
- 4. Communication and coordination skills in construction project implementation activities.
- 5. The ability to review and evaluate construction work methods.
- 6. The ability to be present in the field of supervisory activities every single time

The results of the consultant's performance are very influential on the assessment by the owner i.e. the CMO of activities. If the results of the consultant's performance are considered unfavorable or unsatisfactory, then the owner has the right to no longer use the services of the consultant whose performance assessment is lacking. For this reason, it is a must for the supervisory consultant to be able to maintain consistency in work. Therefore, the performance results that have been conducted always get a good assessment from the owner. This can be done by always being disciplined in complying with the contract. In addition, it also always strives to improve the soft skills of communication and coordination with the owner and related parties as well as improving the ability to manage time and personnel.

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