

A Critical Analysis on Electro-Mechanical Works of Public Works Department Based on Key Performance Indicators to Comply PPA 2006 & PPR 2008

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Received: 9 December 2015 Accepted: 2 January 2016 Published: 15 January 2016

Abstract

Using Public funds for Public Works is of great responsibility and accountability for the procurement officials of the government. Transparency, efficiency, accountability, competitiveness, equitable treatment and free fair competition are essential to be ensured in the procurement using public funds. In Bangladesh, these could not be ensured earlier due to a lack of proper rules and regulation. To streamline the public procurement activities, the Government of the People's Republic of Bangladesh has enacted Public Procurement Act (PPA) 2006 and thereafter issued Public Procurement Rules (PPR) 2008. Since then government agencies are bound to abide by the Act and Rules very strictly in their procurement activities.

Index terms— PPA, PPR, KPI and PWD.

1 I. Introduction a) Background and Context

procurement” means the purchasing or hiring of Goods, or acquisition of Goods through purchasing and hiring, and the execution of Works and performance of Services by any contractual means. When procurement is done with public money, then it is called public procurement.

Until 2003, there was no standard and legal framework for public procurement in Bangladesh and General Financial Rules (GFR) had regulated public procurement procedures and practices in Bangladesh. These rules were originally issued during the British period and slightly revised in 1951 under the Pakistani rule. After Bangladesh's independence, few changes were made to these rules in 1994 and 1999 respectively (Islam, 2011).

To ensure transparency and accountability in the procurement of goods, works or services using public funds, and ensuring equitable treatment and free and fair competition among all persons wishing to participate in such procurement, the Government of the Upon issuance of the PPA 2006 and PPR 2008, the government agencies are bound to follow the Act and Rules in the day to day procurement activities of their own. The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning have been established for carrying out the purposes of Section 67 of PPA 2006 which states as follows: Section 67: For carrying out the purposes of the Act, the Government shall, through a Central Procurement Technical Unit or any other unit established by it relating to procurement monitoring, coordination and management, perform the following responsibilities, namely: a. Providing for monitoring compliance with and implementation of this Act through the authority as designated by the Government; b. Arranging for performance of the necessary functions and responsibilities incidental thereto, through the authority as designated by the government and c. Performing any other responsibilities as prescribed.

2 b) Statement of the Problem

Procurement of Goods, Works, and Services are also covered by the IMED's existing way of undertaking implementation monitoring and evaluation tasks but not monitored and evaluated on the basis of any key

7 II. METHODOLOGY A) METHODS OF COLLECTING DATA/SAMPLING METHOD

performance monitoring indicators. That's why CPTU of IMED is monitoring procurement performance through the PPRP-II project. CPTU has appointed a Project Implementation Support Consultant for each of the four target agencies. These consultants are submitting the procurement performance report of each agency on quarterly basis. Also, a consultancy firm, Survey Research Group (SRG) Bangladesh, appointed by CPTU, is submitting quarterly the reports to CPTU based on KPIs. Though it is reported that procurement performance of the target agencies are improving day by day, it would be wise enough to have an independent study to ascertain the procurement performance of the target agencies.

3 c) Significance of the proposed research

The procurement performance of the target agencies have been described and classified in terms of transparency, efficiency, competitiveness and compliance of government procurement rules and procedures. Among the four different categories, compliance of PPR 2008 is considered as the vital one. It is generally considered that if compliance is ensured, then the government purpose for ensuring value for money in the public procurement will be possible.

Among the four target agencies, PWD has a significant quantity of budget allocation against the projects in the Annual Development Program me (ADP).

4 d) Research Questions

This study is aims to know the extent of compliance of PPR 2008 by PWD procurement activities. Also it is intended to know the hindrances which have been faced by PWD while complying with the rules of PPR 2008.

5 f) Scope of the Study

Under the supervision of the Project Implementation Support Consultant appointed to PWD on behalf of CPTU, the procuring entity (PWD) is carrying out the monitoring and evaluation of their procurement performance in accordance with the set KPIs. But an independent study is intended from the concerned authorities to find out the gap of compliance of PPR 2008 in PWD. This study is such an approach for ascertaining the facts in PWD.

6 g) Limitations of the study

The limitations of this study have come from both its scope and its methodology. Survey was confined to electro-mechanical works of PWD Head Quarter and Dhaka. The respondents were selected mainly from the organization's head office and Sher-e-Bangla Nagar office of Dhaka city. On the other hand, officers were selected on the basis of researcher's convenience. Key informant interview was conducted on few senior officers and with the consultant engaged in PWD from CPTU. Time constraint was also one of the major limitations of the study. Most of the respondents had gathered different types of experiences in different projects; sometimes experiences were not generalized rather project-specific. This issue had come across during the interviews. Also the officers were requested to give answers based on their own perception. As the perceptions on situation varied from person to person, this may have been a major limitation of the study.

7 II. Methodology a) Methods of collecting data/Sampling method

A questionnaire survey was adopted for this study. Survey method was used as this is considered as the best method available to the social scientists interested in collecting original data. It gives a clear idea about the actual facts. A quantitative method was followed in this study. A questionnaire survey was adopted for collecting primary data from different stakeholders related to procurement activities of PWD and having an acquaintance with PPA 2006 and PPR 2008. For the indepth study on compliance issues of PPR 2008, Questionnaire was given to all Division of PWD that are closely related to Electro-mechanical works with a general introduction of the research. Among them 20 (Twenty) Divisions replied with the procurement data of single project. Here both only closed ended questions were stipulated for getting the in-depth essence of procurement activities.

Before asking for filling the questionnaire, the general idea of the research objectives were exchanged with them. After the exchange of general idea of the research objectives, the questionnaire was given to them. They were requested to fill the questionnaire based on the actual data of a specific project under his/her territory. Some electronics means was also used to collect feedback from some of the PWD persons affiliated with the project. PWD Head Quarters and District offices were selected for collection of data in the questionnaire. Due to time constraint of the present study, it was not possible to collect data from all the districts. The study was mainly focused on the BCC Bhaban's Electromechanical works; As the implementation of work from the ministry wise project progress report has been attached in Appendix C, from where we get the idea that most of the works of the project have been completed and some of them are ongoing and a few of them are not yet started as work order has recently been placed against those works. Especially those which are in the middle stage of their implementation were considered for the study, but some procurement information from the rough estimate of the works as stated bellow- We get the original approved official estimate on which the Project work was performed.

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9 c) Study Period

Survey was conducted at different Division offices of PWD, Planning Commission, IMED, and TEC members of PWD from Roads and Highways Department (RHD) and Public Works Department (PWD) Dhaka, Bangladesh from December 2015 to May 2016.

10 d) Sample Size

For Questionnaire, the respondents were categorized in four different types namely i) PWD's employee, ii) TEC Members, iii) Persons who are dealing with PWD's projects iv) Others. As there are numerous people are concerned with PWD's procurement activities of Electro-mechanical works, a total of 28 different officers given their data.

Projects for the study were randomly selected as PWD does not do a lot of Electro-mechanical Project work every year, and due to the time constrain of the dissertation. As a means of processing, collected data have been cleaned, edited, arranged and coded before statistical analysis. The main statistical analytical tool used in this study was Statistical Package for Social Science (SPSS) to analyze and interpret the matter of the study and for preparing the frequency table & other tables and for constructing pie charts. 5-point Likert scale was used in the questionnaire to categorize the answers for easy analysis.

11 e) Data processing and Analysis/Analytical Fram

Microsoft Excel has been used for preparing Some of the tables related to the BCC Bhaban Project. Microsoft Word has been used for preparing the report.

12 III. Result & Discussion

Aim of this study is to find out the level of compliance of PPR 2008 by BCC Bhaban in its procurement activities. This study is specifically aimed to assess the gap of compliance and scope of improvement for implementation of PPR 2008 in BCC Bhaban vertical extension 3 rd phase.

13 a) Demographic overview of the respondents

Questionnaire survey has been conducted among officers mainly responsible for Vertical Extension of BCC Bhaban under the project "Strengthening of BCC Bhaban by Development of structure". These officers are from PWD and involved in the project in various engineering activities. Also the respondent holds different ranking and all of them are well acquainted with procurement process of BCC Bhaban extension 11 th floor to 14 th floor.

Below is a summary of demographic information of respondents,

14 Overview of survey questionnaire

The respondents were asked Seventeen (17) questions regarding compliance of PPR 2008 in BCC Bhaban's procurement activities for the Vertical extension from 11 th floor to 14 th floor. Questionnaire were asked to the respondents on compliance KPIs in a 5point Likert scale where as 1 for "Very Poor", 2 for "Poor", 3 for "Neutral", 4 for "Good" and 5 for "Very Good". Frequency distributions of response are shown in Table 2

15 c) Overview of the Key Informant Interview

Key informant interview has been conducted with several engineers involved in strengthening of BCC Bhaban by development of structure, 3 rd phase (11 th floor to 14 th floor). Most of the key informants mentioned that before PPR, General Financial Rules (GFR) was applied for the procurement of goods, works and services. The monitoring and evaluation of the then procurement activities were not so structured. These all were streamlined with the introduction of PPR 2003 and strengthened after PPR 2008.

All key informants were asked about the compliance of KPIs and in-depth opinion was expected for a clear view of the issue, understanding the same and concluding thereof. Also, the key informants were asked about the problems of compliance of PPR 2008 in their respective procurement activities. The opinion of the key informants were noted down and used for analyzing the findings of the questionnaire survey. In response to this question, 42.9% of the respondent have given their opinion as 'Very Good' while 28.6% opted for 'Good', 14.3% opted for 'Neutral' response to the question. 10.7% & 3.6% opted for 'poor' or 'very poor' respectively. The mean, median and mode of the responses are 3.964, 4.00 and 5.00 respectively. The standard deviation of the response is 0.63725 which means a small effect on the study result is present. It indicates that BCC Bhaban is complying to the Rule 36 of PPR 2008 keenly following standard time between tender opening and tender valuation. Key informant interviews also reflected in the similar manner. Year 2016 F KPI 19: BCC Bhaban followed standard time between submission and approval of Tender Evaluation Report (TER) KPI 14: BCC Bhaban followed standard time between tender opening and tender evaluation

In this question, 39.3% respondents choose 'Very good' while 35.7% reported as 'Good' and 14.3% shown 'Neutral' response to the question. 7.1% marked it as 'poor' while 3.6% said its 'very poor'. The mean, median, mode and standard deviation of the responses are 4.00, 4.00, 5.00 and 1.088 respectively.

In response 35.7% of the respondent have given their opinion as 'Very good' while 32.1% reported as 'Good' and 25% ticked 'Poor' as response. 3.6% gave verdict for 'poor' none opted for 'very poor'. The mean, median, mode and standard deviation of the responses are 4.77, 5.78, 4.00 and 5.00 respectively. Similar results were found among the opinions of the interviewee while conducted the key informant interview. A standard deviation of 9.294 also indicates a significant effect on the study. KPI 21: In BCC Bhaban, TEC submits TER directly to the CAA

The perceptions of the respondents on this question in this question were also very scattered, 32.1% of the respondent opted for 'very good' while the minimum 3.6% ticked 'Poor'. The other 25% respondents chose 'Good' and 39.3% remained 'Neutral' in their opinion. However, no 'Very poor' answer was received. The mean, median, mode and standard deviation of the responses are 3.857, 4.00, 3.00 and 0.9315 respectively. Though majority of the respondent's perception is 'Very good', but it can be said that BCC Bhaban is complying this rule in a fairly basis as there some respondents choose 'Poor' option.

In response to this question, respondents' choices were also scattered. 25% of the respondents (60%) answered the question as 'Very Good' and 35% answered it as 'Good'. 35.7% marked as 'neutral', and 3.6% respondents went for poor'. The mean, median, mode and standard deviation of the responses are 3.82, 4.00, 3.00 and 0.862 respectively. According to the responses regarding this requirement of PPR 2008, the present study indicates that BCC is fairly comply with this timeline.

In response to this question also, respondents' choices were also scattered majority of the respondents 50% answered the question as 'Good', while 21.4% opted for 'Very Good', 'Neutral' 10.7%, 'Poor' 14.3% and 'Very poor' 3.6%. Thus, there is an overall positive response to the question meaning. In response to this question, the respondents had shown a mixed response of their perceptions. 32.1% of the respondents opted for 'Very Good' while the same number of respondents for 'Good'. Among others, 25% opted for neutral, poor 3.6% & very poor 7.1%.shown their perception as 'Poor' while the rest 2.9% only replied as 'Very good'. There was no one answered the question as 'Very poor'. This has been shown in Table 3 and graphically expressed in Chart 10. The mean, median, mode and standard deviation of the responses are 3.11, 3.00, 3 and 0.676 respectively. While talked with the key informants, there found a perception that contractor's payment is timely disbursed.

In this question equal number of respondents 28.6% marked it 'Very poor' and 'Good'. While 14.3% remain 'Neutral' in their perception 7.1% was in favor of the 'Poor' opinion. However, 21.4% stated their perception to this question as 'Very Poor'. The mean, median, mode and standard deviation of the responses Payment of interest for delayed payment is a mandatory requirement of PPR 2008. However, from the present study, it can be said that BCC Bhaban is not paying any interest for a delayed payment. While conducting key informant interview, the respondents expressed their opinion candidly that as there no provision of sufficient fund in the contract, the contractors never paid for a delayed payment.

16 IV. Conclusion

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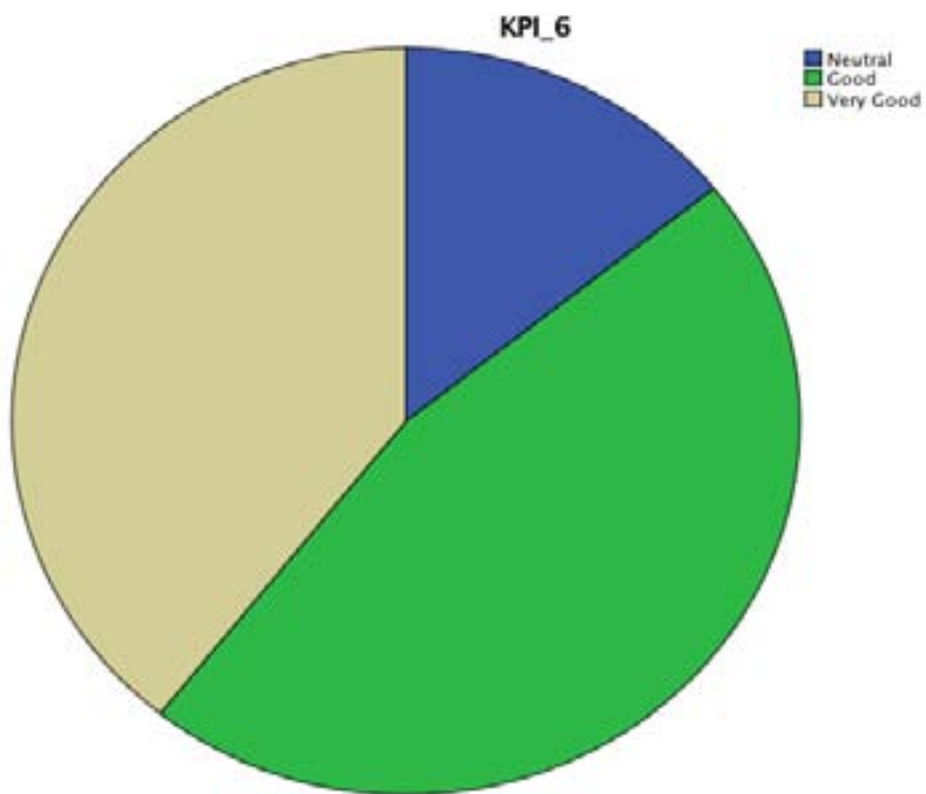


Figure 1:

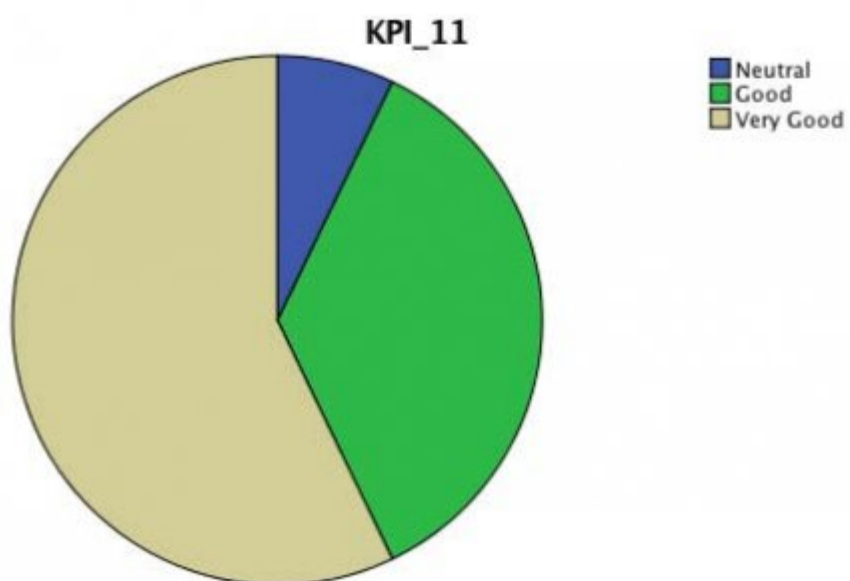
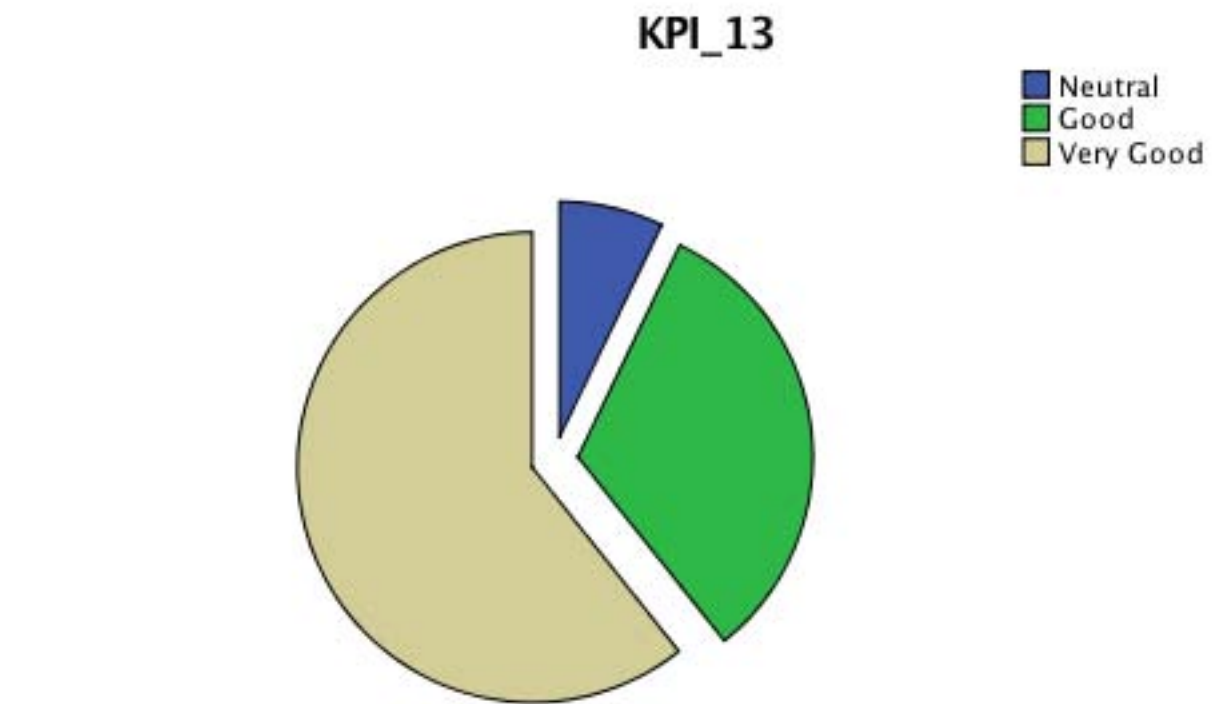


Figure 2:



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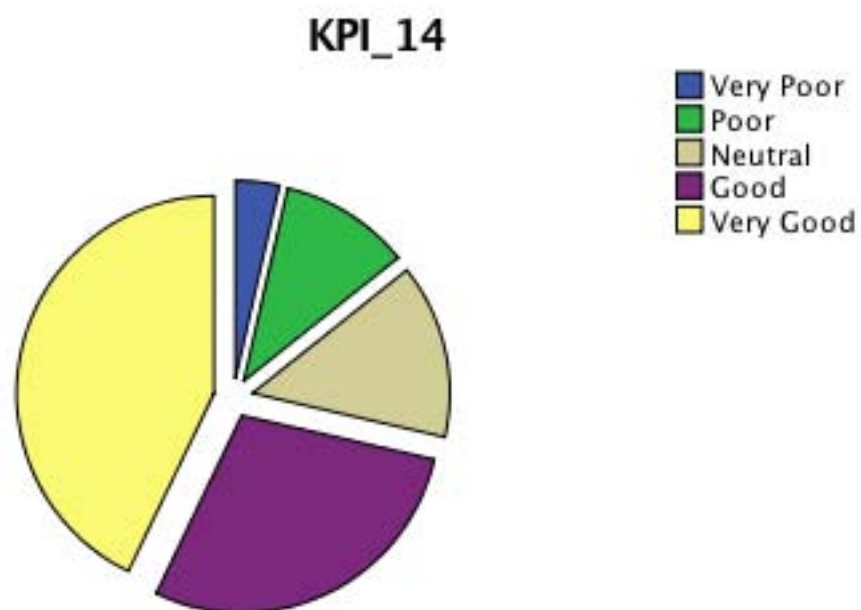


Figure 4: F

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Figure 5: Table 1 :

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Figure 6: Table 2 :

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	Frequency Percent		Valid Percent	Cumulative Percent
Valid Neutral	4	14.3	14.3	14.3
Good	13	46.4	46.4	60.7
	11	39.3	39.3	100.0
Total	28	100.0	100.0	

Figure 7: Table 4 :

5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Neutral	2	7.1	7.1	7.1
Good	10	35.7	35.7	42.9
Very Good	16	57.1	57.1	100.0
Total	28	100.0	100.0	

Figure 8: Table 5 :

3

Figure 9: Table 3 :

6

A Critical Analysis on Electro-Mechanical Works of Public Works Department Based on Key Performance Indicators to Comply PPA 2006 & PPR 2008												
		Respondent's Organization						Frequency				
		PWD						28				
		Total						28				
		Designation										
		Assistant Engineer						9				
		Senior Assistant Engineer						6				
		Executive Engineer						3				
Year 2016		Administrator/Consultant Project Director						6				
		Total						4				
								28				
64		Relevancy with PWD Employee						9				
()		TEC Member Dealing with BCC Bhaban 12 5 Others 2 Total 28 Education Level M										
Volume												
XVI												
Issue												
VII												
Version												
I												
Global	Valid	Total Good Very Good Neutral						9	28 Percent 32.1 60.7 7.1			
Journal								17				
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neering												
		Total						28	100.0			

[Note: F © 2016 Global Journals Inc. (US) b)]

Figure 10: Table 6 :

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[illegible]

Figure 11: Table 7 :

10

	Frequency	Percent	Valid Percent	Cumulative Per- cent
ValidPoor	1	3.6	3.6	3.6
Neutral	11	39.3	39.3	42.9
Good	7	25.0	25.0	67.9
Very Good	9	32.1	32.1	100.0
Total	28	100.0	100.0	
Table 11: KPI_25				
	Frequency	Percent	Valid Percent	Cumulative Per- cent
ValidPoor	1	3.6	3.6	3.6
Neutral	10	35.7	35.7	39.3
Good	10	35.7	35.7	75.0
Very Good	7	25.0	25.0	100.0
Total	28	100.0	100.0	
Table 12: KPI_31				
	Frequency	Percent	Valid Percent	Cumulative Per- cent
ValidVery Poor	1	3.6	3.6	3.6
Poor	4	14.3	14.3	17.9
Neutral	3	10.7	10.7	28.6
Good	14	50.0	50.0	78.6

Figure 12: Table 10 :

[Note: are 3.35, 4.00, 4.00 and 1.5205 respectively.]

Figure 13:

From the present study, in BCC Bhaban Project, PPR 2008 is being complied around 70%. This is seen from the viewpoint of compliance of KPIs which are only 17 out of 45 key procurement performance indicators.

[Bangladesh Computer Council Electro mechanical Works, tender document, tender opening report, tender evaluation report, project completion report, (implemented by Public Works Department (PWD))

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