

# RECOMMENDING STRATEGIES TOWARD TRANSPARENCY AND INTEGRITY FOR CONSTRUCTION PROJECTS OF AFGHANISTAN

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**Abstract:** The construction industry is one of the most corrupted industries in the world. There is \$340 billion loss because of non-transparency and corruption per year worldwide according to the clam of American society of civil engineers. Construction industry involves a big number of stockholders in a complex way which causes it to be prone to corruption. This research is conducted for Kabul Municipality construction projects in Kabul, Afghanistan. The main problems for transparency and integrity in different phases of construction found using RII (Relative Important Index). This research paper is concludes by providing recommendation actions for those main problems which found in different phase of constructions project.

**Keywords:** Corruption, Construction, Transparency, accountability Construction Industry

## I. INTRODUCTION

Transparency and integrity is one of the real and practical measures to reduce the corruption. The global market of construction worth around \$3200 each year and according to the clam of American Society of Civil Engineers (ASCA) there is a loss of \$340 billion annually in construction because of non-transparency and corruption which is around 11% of all worth of construction market. Construction industry is prone to the corruption. Transparency which is the share of facts is beneficial for every segment of society in reduction of corruption. The transparency and integrity has a correlation with the corruption, high level of transparency cause the reduction of corruption. There is a need of transparency and integrity in every phases of the construction for example in planning the government project. The government officials need to select the project that majority of people needs that not to select projects that a special group of people wants that.

In the same way at the time of contracting the process of evaluation of the projects should be transparent and not as per influence of politicians and other reasons. In this research reason for the non-transparency and anti-integrity will discourse and also recommendations for the Kabul Municipality (KM) for improvements of transparency and integrity will be given.

## II. RESEARCH OBJECTIVE

Afghanistan is developing country and the enforcement of law is low so the transparency and integrity in construction sector is not in a good situation. Non transparency and anti-integrity which has bad impacts in development of construction industry in Afghanistan can be removed by combine efforts of public and government. This research is all about the challenges to transparency and integrity in construction projects in Afghanistan. This research is trying to find out best way for the projects to implement in a transparent and integrate way. The objectives of the research are as follow:

1. To investigate the current scenario of the transparency and integrity of the construction projects in Kabul.
2. To find out existing problems related transparency and integrity.
3. To recommend strategies for effective transparency and integrity for successful projects completion.

## III. RESEARCH METHODOLOGY

From the literature review and from the four phase of a construction project we prepared 17 questions for the four phases of construction project and also for suggestion for improvement of transparency and integrity. The different departments which are involved for completion of a project in the Kabul Municipality were selected for answering the questionnaire. The questionnaire was divided into 2 parts in which part I contains the general information of respondent. Part II was the questions with their answers and the respondent were asked to select how much they are agree or disagree with the answers which analyzed by RII method.

After analysing of the questionnaire the main problems for each of the question has been found so for each of the problem recommendation action has been prepared that if the Kabul Municipality applies those recommendations the situation of transparency and integrity will improve.

## IV. DATA ANALYSIS, RESULT AND RECOMMENDATION

The questionnaire was prepared for all phases of a construction project so the analysis, result and recommendation are prepared as follows.

### 4.1. Planning and Design Phase

As per questionnaire every questions has related answers as shown in the Table 1. The focused areas in this research for each of the questions are the answer which got the highest RII value. The answer with the highest point is shown in Figure 1 and bolded in the table. For each of those bolded answers recommendation action is given.

Table 1: Focus area and recommended action for planning phase

No	Question	Focused Area (Bolded Answer)	Recommended action
1	To what extend do you think selection of project in planning stage influenced by followings?	1.1. It is according to the needs of people. 1.2. Sensitivity of the reigns. <b>1.3. Political enforcement.</b> 1.4. Availability of finance.	<ul style="list-style-type: none"> <li>Opinion of stakeholders should be incorporated to reduce political pressure.</li> <li>Sharing of responsibility and duties could be effective way to reduce the political enforcement.</li> </ul>
2	How much do you agree the following problems for land acquisition in KM projects?	2.1. The land acquisition is a time consuming process in KM <b>2.2. There is a need for improvement of land acquisition laws to make for benefit of people and Govt.</b> 2.3. The master plan for Kabul city is changing time by time which cause more land acquisition. 2.4. The influence of politics in land acquisition cause a big problem	<ul style="list-style-type: none"> <li>The land acquisition mechanism could be enhanced by using town planning model of Gujarat, India.</li> <li>Involving people and stockholders during concept phase of the project can minimize the problem.</li> </ul>
3	To what extend do you agree that the design and schedule of the projects in KM are prepared as per influence of followings?	3.1. As per standards and needs of project 3.2. Particular contractor 3.3. Politicians <b>3.4. Government officials</b>	<ul style="list-style-type: none"> <li>The Government officials can be undergone for the training of LEAN principal , Six sigma and value engineering</li> <li>Tools like MS project or Primavera can be used for designing and scheduling.</li> <li>Supply Chain Management principle can be used for procurements</li> </ul>
4	To what extend do you agree that the BoQ and specification projects in KM are prepared as per followings?	4.1. Real rates of material and machinery in market. 4.2. Random selection of rates and method of work <b>4.3. Use of Past experience for rate of material and complexity of work</b> 4.4. Government officials 4.5. Availability of equipment	<ul style="list-style-type: none"> <li>Use of new technology/ advance technology will help for effective BoQ and specification</li> <li>The LTK (Laiha Taqat Kar) should be updated regularly.</li> <li>Sustainable material and technology can be added in LTK</li> </ul>

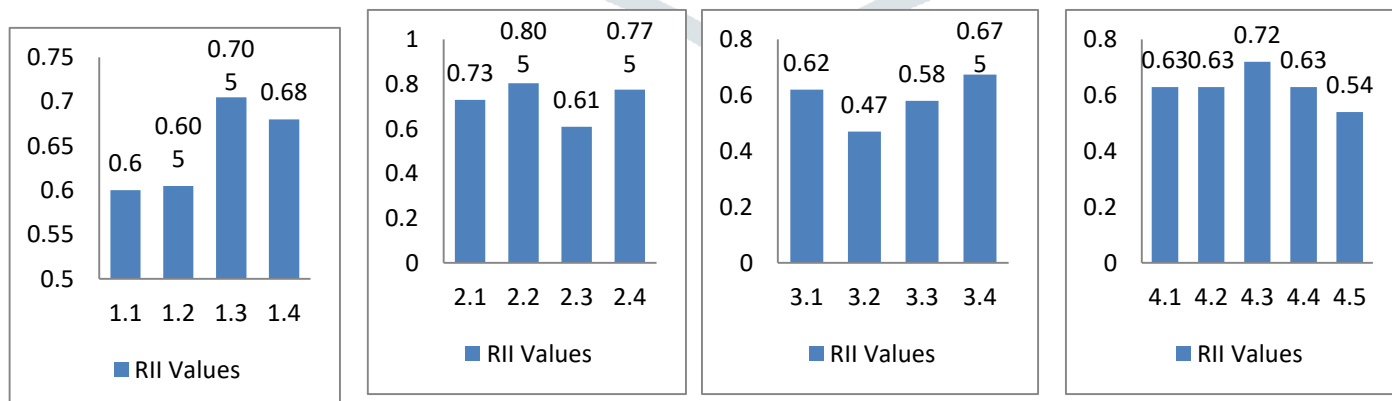


Figure 1: RII values for answers of questions 1 to 4 respectively

#### 4.2. Contract Phase

As per questionnaire every questions has related answers as shown in the Table 2. The focused areas in this research for each of the questions are the answer which got the highest RII value. The answer with the highest point is shown in Figure 2 and bolded in the table. For each of those bolded answers recommendation action is given.

Table 2: Focus area and Recommended action for contract phase

No	Question	Focused Area (Bolded Answer)	Recommended action
5	What is your interpretation related to transparency in contractor selection in KM? With which one of the following statement do you agree the most?	5.1. Selections of contractors are as per international standard method. 5.2. Politicians have their influence in project selection. 5.3. Unofficial payment (corruption) plays important role in selection of contractor <b>5.4. Conflict of interest of Government officials has effect on selection of contractor.</b>	<ul style="list-style-type: none"> <li>E-contracting can be adopted for better transparency.</li> <li>Past work done by the contractors could be given more weightage along with the financial stability of the contractor.</li> </ul>
6	To what extent do you think the projects of KM go through a transparent method of inviting tenders by Public advertising?	<b>6.1. All KM projects are contracting after of inviting tenders by Public advertising.</b> 6.2. Conflict of interest cause projects to contracts without inviting tenders by Public advertising. 6.3. Corruption in case projects are contracts without inviting tenders by public advertising. 6.4. The public advertising of KM is poor.	<ul style="list-style-type: none"> <li>Public advertising and scrutiny criteria and major attributes can be prepared and also mentioned in the advertisement for more transparency.</li> </ul>
7	What do you think which one of the following effect transparency and integrity in KM in contract phase?	<b>7.1. Leaking of information from the organization to contractor/contractors.</b> 7.2. Improper favoring of one bid over another at different phases of contract. 7.3. Inadequate advertising which lead to lack of competitive bidders. 7.4. Conflict of interest in approval process.	<ul style="list-style-type: none"> <li>E-contracting can be adopted for better transparency.</li> <li>Pre bid conference/meet could give the mindset of all bidders.</li> </ul>
8	For tender evaluations in KM with which of the following conditions are you agree more?	8.1. The evaluations of tenders are done as per standards and tender evaluation committee members are integrated. 8.2. There is conflict of interest in tender evaluation in KM. <b>8.3. There are unofficial payments to tender evaluation committee members.</b> 8.4. The tender evaluation committee members are not technical people.	<ul style="list-style-type: none"> <li>Digital payment/NEFT (National Electronic Fund Transfer) /RTGS (Real Time Gross Settlement) financial matter method can be adopted.</li> <li>Financial records for the contractors can be verified.</li> </ul>

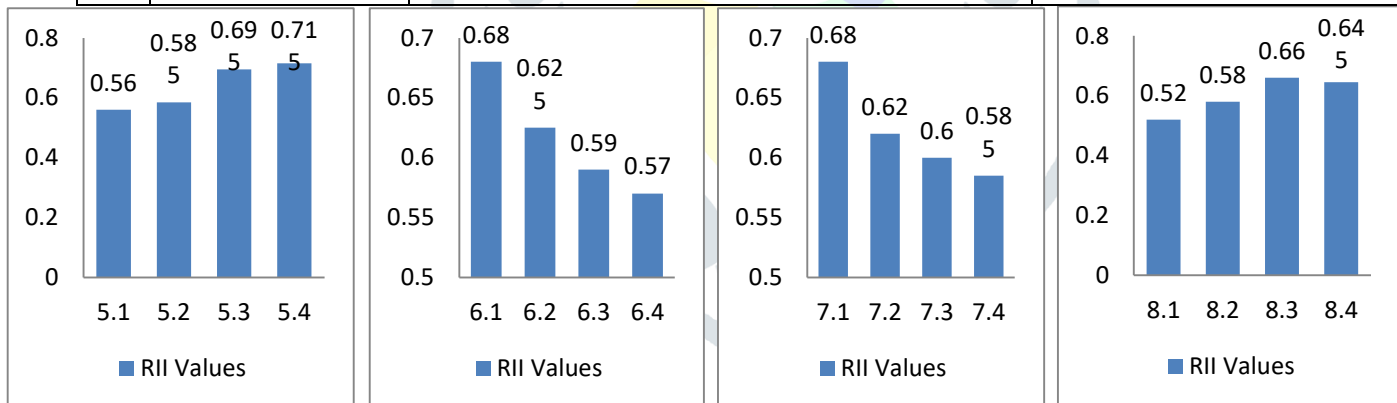


Figure 2: RII values for answers of questions 5 to 8 respectively

### 4.3. Construction and Execution Phase

As per questionnaire every questions has related answers as shown in the Table 3. The focused areas in this research for each of the questions are the answer which got the highest RII value. The answer with the highest point is shown in Figure 3 and bolded in the table. For each of those bolded answers recommendation action is given.

Table 3: Focus area and Recommended action for construction and execution phase

No	Question	Focused Area (Bolded Answer)	Recommended action
9	To what extent do you agree with the following statement related to the construction phase in KM?	9.1. The construction works are done totally as per design and drawings and specification. 9.2. The company corner cut the design as per their benefits. <b>9.3. The company is not working proper material and technics as per specification.</b> 9.4. Inadequate testing of material or falsification of the laboratory results. 9.5. Company is not following proper	<ul style="list-style-type: none"> <li>Appointment of quality control manager can be done for proper inspection and verification.</li> <li>Material testing reports, skilled labor, and qualification of site engineer or supervisor</li> </ul>

		managerial techniques	can be regularly checked.
10	To what extent do you agree with the following related transparency and integrity of lower staff of the construction company?	<p>10.1. They are working honestly as per specifications and drawings.</p> <p>10.2. They are cutting corners from materials for getting satisfaction of higher authorizes of company.</p> <p>10.3. They are ignoring complex process of specification</p> <p><b>10.4. They are not implementing the safety measures on their selves.</b></p>	<ul style="list-style-type: none"> <li>• Regular inspection should be performed for checking safety related measures.</li> <li>• Punishment can be given in form of penalty/fine/delay in return of security deposit.</li> </ul>
11	How much do you agree with the following statements related inspection of work which is done by KM project managers?	<p><b>11.1. Inspectors inspect the project as per role and responsibilities that the organization gives them.</b></p> <p>11.2. Receives unofficial money to approve defective work.</p> <p>11.3. Receives unofficial money to avoid environmental regulation.</p> <p>11.4. Inspectors hold the invoices and not sign to receive unofficial money form the company</p>	<ul style="list-style-type: none"> <li>• Effective tools for inspection can be used to make it more precise for example live photos, live records and checking with project schedule through software.</li> </ul>
12	What do you think there is less transparency and integrity in the following responsibility of inspector?	<p>12.1. Checking the project progress as per schedule, design and specification</p> <p>12.2. Day to day supervision of site</p> <p>12.3. Check of safety of workers</p> <p><b>12.4. Check of quality of materials.</b></p> <p>12.5. Checking equipment</p>	<ul style="list-style-type: none"> <li>• Establishment of material testing laboratory can solve the specified problem.</li> <li>• Updating LTK (Laiha Taqat Kar) can give more precise specification.</li> <li>• Understanding the design and technical needs with site supervision can give better result.</li> </ul>
13	To what extent do you agree with the following reasons for delay in invoice payment for the company	<p>13.1. There is no delay in invoice payments in KM</p> <p>13.2. There is no delay in invoice payments in KM</p> <p><b>13.3. The contractors not finish the work as per design and specification and want more money.</b></p> <p>13.4. The inspector not signing to receive unofficial money.</p> <p>13.5. Details in settlement of extra items</p>	<ul style="list-style-type: none"> <li>• Shortlisting the contractor who have not completed the work as per design and specification and banning/blacklisting them for few years from government projects.</li> <li>• Financial agreement can be prepared stage wise for more transparency</li> </ul>

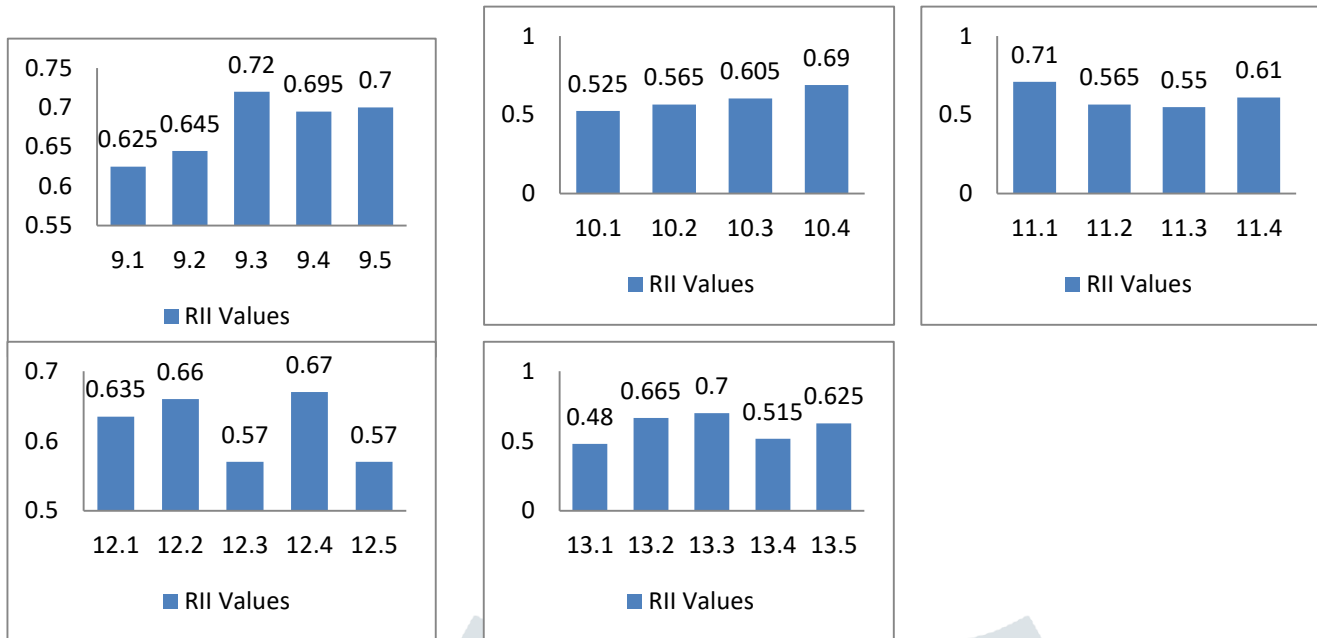


Figure 3: RII values for answers of questions 9 to 13 respectively

#### 4.4. Operation and Maintenance Phase

As per questionnaire every questions has related answers as shown in the Table 4. The focused areas in this research for each of the questions are the answer which got the highest RII value. The answer with the highest point is shown in Figure.2 and bolded in the table. For each of those bolded answers recommendation action is given.

Table 4: Focus area and recommended action for operation and maintenance phase

No	Question	Focused Area (Bolded Answer)	Recommended action
14	To what extent do you agree with transparency and integrity exists in operation and maintenance?	<p><b>14.1. Using of lower standards in repair and maintenance.</b></p> <p>14.2. There is bribe to win the O&amp;M contract.</p> <p>14.3. There is incensement in cost of spare parts</p> <p>14.4. There is exist corruption in procurement of spare parts</p>	<ul style="list-style-type: none"> <li>• For O&amp;M, third party can be invited for effective utilization.</li> <li>• O&amp;M terms and condition should be made more precisely and also future sustainability should be look.</li> </ul>

#### 4.5. Suggestion of Some Solution

As per questionnaire every questions has related answers as shown in the Table 4. The focused areas in this research for each of the questions are the answer which got the highest RII value. The answer with the highest point is shown in Figure.2 and bolded in the table. For each of those bolded answers recommendation action is given.

No	Question	Focused Area (Bolded Answer)	Recommended action
15	To what extend do you think transparency and integrity is important in which phases of a construction project?	<p>15.1. Planning Phase</p> <p><b>15.2. Contract phase</b></p> <p>15.3. Construction phase</p> <p>15.4. O&amp;M phase</p>	New methods of contract should apply.
16	To what extend do you think these are the reason for corruption in Afghanistan construction industry?	<p>16.1. The weakness of ethics</p> <p>16.2. High rate of poverty</p> <p><b>16.3. Construction phase Upper levels are involved and lower levels are forced for that</b></p> <p>16.4. Low implementation of laws for corrupted people</p>	<p>Code of conduct could be design or formed.</p> <p>Introducing ethical study, positive attitude and job satisfaction related activity can give good environment for the work.</p> <p>Timely checking and monitoring the work or banning the contractor, introducing modern technology, moving toward digital payment and strictly implementation the law can solve the problem.</p>



17	What measure should be use more to improve transparency and integrity and reduce corruption in construction projects in KM?	<p><b>17.1. Enforcement of laws and regulation strictly</b></p> <p>17.2. Improvement of work process</p> <p>17.3. Providing ethical educations for officials</p> <p>17.4. E-governance which cause reduction of involvement of human in all process.</p> <p>17.5. Improvement of organizations and NGO which works for transparency and integrity</p> <p>17.6. Public disclosure Media and social media should take part</p>	
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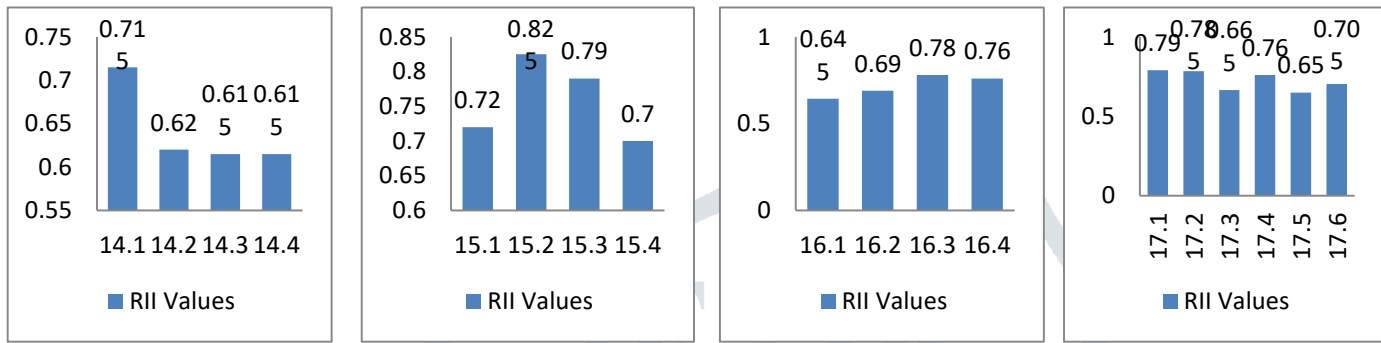


Figure 4: RII values for answers of questions 14 to 17 respectively

**V. CONCLUSION**

This research finds out the current scenario of the transparency and integrity in KM. This study investigates the problem of transparency and integrity in four phases of construction projects through a structured questionnaire which distributed in different departments of Kabul Municipality (KM). The survey results are subjected to analysis and ranking of each answer and ranking of that to find out the most critical problems using the Relative Important Index (RII) Method. In four phase of construction which are Planning and design phase, contract phase, Constriction and execution phase and operation and maintenance phase there was 17 questions that each of them was a concerning problem in KM. A grand total of 60 questionnaires were distributed but only 40 of them returned that 66.67% was the response rate. For each of the questions in the questionnaire those answers which got the highest rank that become the focuses area. For each of the focused area there should be a recommendation action. The recommendations have been done for each of the questions in the recommendations.

**VI. FUTURE SCOPE**

In this study, only factors which was critical and has got the highest RII values considered and the recommendation actions provided for only those factors. The work can be extended for the second and third important and critical factors and recommendation action can provide to improve more the transparency and integrity in Kabul Municipality. Here the focused was on the Kabul Municipality we can extend this study to improve transparency and integrity in other governmental and non-governmental organizations of Afghanistan.

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	<p><b>Abdul Latif Hamid</b> received his Bachelor of science in Civil Engineering from Kabul University, Engineering faculty (Kabul, Afghanistan) in 2014. He has an experience of 3 year in the field of construction in Kabul Municipality and completed several construction projects. At present, he is pursuing Master of Technology degree in Construction Engineering and Management from Birla Vishwakarma Mahavidyalaya Engineering College (Vallabh Vidyanagar, Gujarat- India). He has published two paper in international journals.</p>
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