

CORRUPTION PREVENTION STRATEGIES

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ABSTRACT:

This paper has tried to highlight corruption and its impact. An example has been given to show the impact of corruption in road sector. Several solutions on the key areas, e.g., institutional capacity, transparency and project supervision have been highlighted. The solutions are being used in different countries. It is believed that each organization has to follow the relevant solutions to eradicate corruption phase-wise. The paper has recommended for a study to assess sensitivity of each solution on the impact of corruption and to formulate specific corruption policy.

1. INTRODUCTION

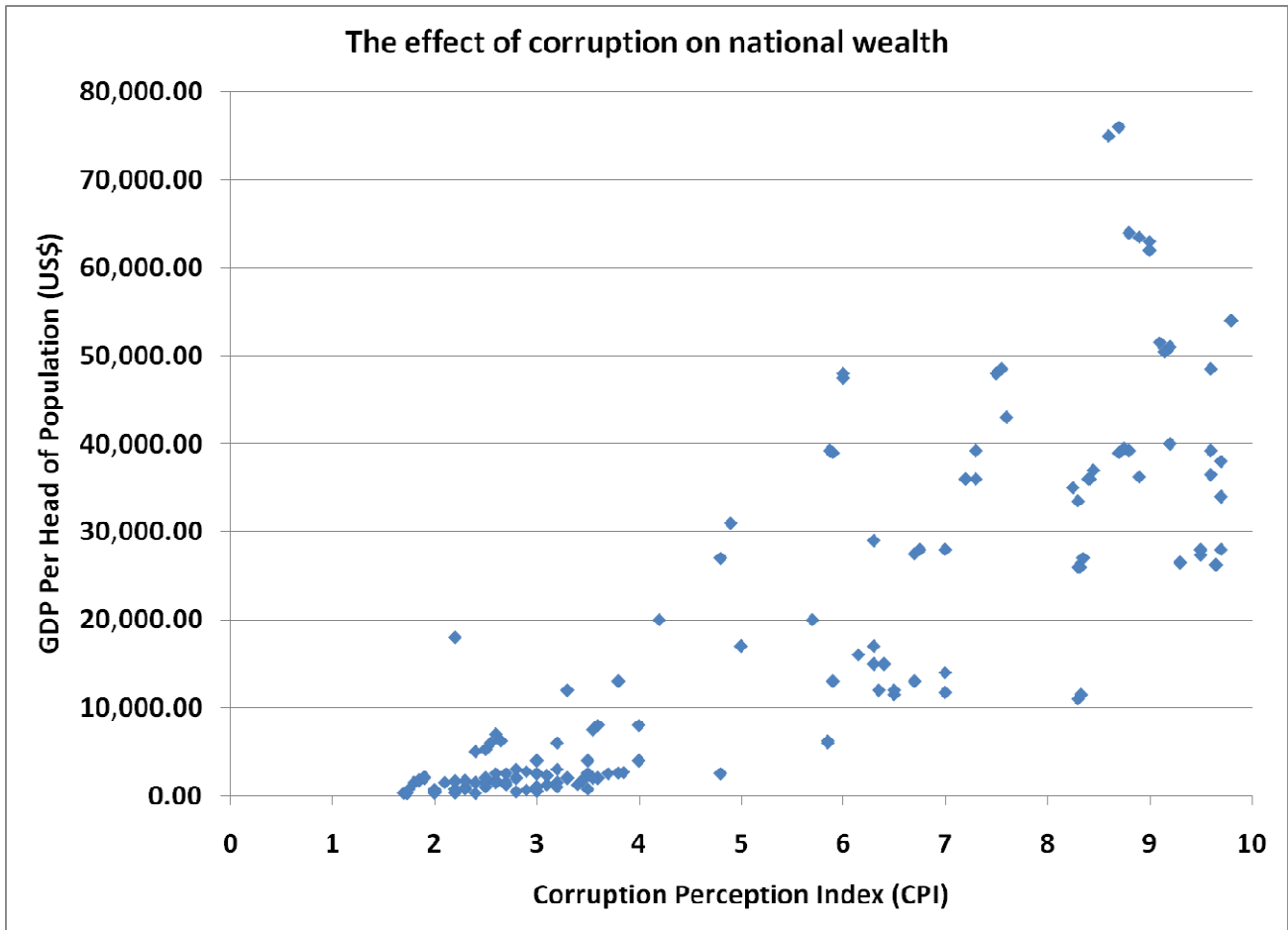
Corruption means wastage or loss of money because of malpractice. It is certain that corruption is all over the place in different sectors and its impact is severe to the society. The current paper concentrates on corruption in the road sector and has tried to identify preventive measures.

Branigin (2009) indicated using the World Bank (WB) Institute's report that US\$ 1 trillion is used for bribery in a year which is about 5% of the global Gross Domestic Product (GDP) [1]. In the same paper, Branigin quoted from the statistics given by the Transparency Institute of London Corruption Sector that direct and indirect losses due to corruption in the construction sector are about 15-30% per year [1]. Therefore, global perception concludes that public works or construction is the most corrupt sector.

The WB and the International Monetary Fund (IMF) conducted several studies to obtain relationship between corruption and GDP for about 100 countries. It was observed that the higher the corruption the lower the GDP. Figure 1 illustrates this finding where corruption was represented as CPI, and high CPI indicates a less corrupt country.

As an example Bangladesh may be considered where CPI is low and as a result GDP is poor, which situation is mostly common in the developing countries. Corruption data in Bangladesh shows that road sector is very vulnerable [2]. Anon (2006) stated from an WB observation that if corruption in Bangladesh were eradicated then there would have been a 2% to 3% improvement in the GDP [3]. Several reasons in the road sector have been highlighted which are mainly integrity problem of personnel, bad material and construction quality, money

require as bribe in getting the works, lack of transparency in procurement, lack of effective supervision and commitment [2].



“Figure 1 - Relation between corruption and GDP [4] and [5]”

2. IMPACT OF CORRUPTION IN THE ROAD SECTOR

This paper uses effect of corruption in the road sector in Bangladesh as an example in order to show its importance. Khan (2005) and Khan and Snaith (2008) proved that corruption in road maintenance affects to the society [2] and [6], and as a result of that the followings scenarios are frequent.

- A road cannot be maintained appropriately in its life-cycle; and
- Road standards and desired treatments are compromised.

In fact, Khan (2005) observed existence of corruption in any kind of road projects which was found out through a questionnaire survey conducted among the stakeholders [2]. Government of Bangladesh (GoB) projects suffers the most compared to the foreign aided projects where Asian Development Bank (ADB) projects have higher rate of loss compared to the WB projects [2]. Khan and Snaith (2008) indicated that WB project has better audit system which may be a reason of less corruption [6].

To assess the impact of corruption, the Highway Development and Management Model (HDM-4) was utilized for a set of representative roads (two lanes two ways with moderate traffic mixed with non-motorized vehicles) by changing the unit costs of treatments. The results reveal that the higher the corruption the higher the loss to the society (see Table 1).

Two analysis were done where in the first case road was kept at a fixed set standard (4 IRI) in its life cycle and the different maintenance strategies were developed for Normal case (no corruption), WB case (least corruption), ADB case (less corruption but higher than WB) and GoB case (high corruption). As there is no loss in the normal case, the developed optimum maintenance strategy by Khan (2005) was possible to implement which is Routine Maintenance (RM) + Overlay 80 mm. As indicated earlier, in the WB case, due to loss, RM + Overlay 50 mm was possible to utilize. Similarly, RM + Overlay 40 mm was achievable for the ADB case and GoB case did not have a chance to use overlay due to high corruption. In the GoB case, RM + Double Bituminous Surface Treatment (DBST) were acceptable to use as a maintenance strategy in its life cycle. The analysis results show that WB case had 2% loss, ADB case 8% and GoB case -158% loss to the society (see Table 1). As the appropriate treatments (RM + Overlay 80 mm) were not possible, accordingly losses were observed based on the maintenance strategies.

In the second analysis, using the HDM-4 model, maintenance standards were relaxed assuming that optimum standard (4 IRI) may not be possible for a road to be maintained due to corruption. Therefore, 4.5 IRI was set for the WB case, 5 IRI for the ADB and 6 IRI for the GoB case and RM + Overlay 80 mm were considered for all the cases. As usual, 9%, 13% and 16% losses were observed in the WB, ADB and GoB cases respectively.

“Table 1 - Affect of corruption to the society [2] and [6]”

Type of Analysis	Treatments Considered	Reasons to Select	Loss to the Society (%)			
			Normal case (no corruption)	WB case (least corruption)	ADB case (higher corruption than the WB)	GoB case (very high corruption)
Fixed Standard: 4 IRI	<i>Normal case:</i> RM + Overlay 80 mm <i>WB case:</i> RM + Overlay 50 mm <i>ADB case:</i> RM + Overlay 40 mm <i>GoB case:</i> RM + DBST	Lower treatments were considered for different cases due to corruption.	0%	2%	8%	158% (Negative benefits. Over 100% loss.)
Changed Standard: Normal case: 4 IRI WB case: 4.5 IRI ADB case: 5 IRI GoB case: 6 IRI	RM and Overlay 80 mm for all cases	Reset standards were chosen due to deferred maintenance for corruption.	0%	9%	13%	16%

**RM = routine maintenance, DBST = double bituminous surface dressing

The above example clarifies necessity to identify the causes in order to obtain reasonable solutions to reduce corruption.

3. CAUSES OF CORRUPTION

Generally, a bad system and lack of integrity are the main reasons that aggravate corruption in road sector [2]. The Transparency International (TI) reported with relevant information that bribes to win contracts is very common in many countries [1]. In most cases, integrity is dependent on one’s income and basic demand; as a result, loss in integrity is quite common. Therefore, human factor is the main cause for financial mismanagement [7] and [8].

In a nutshell, reasons of corruption can be classified in the following ways:

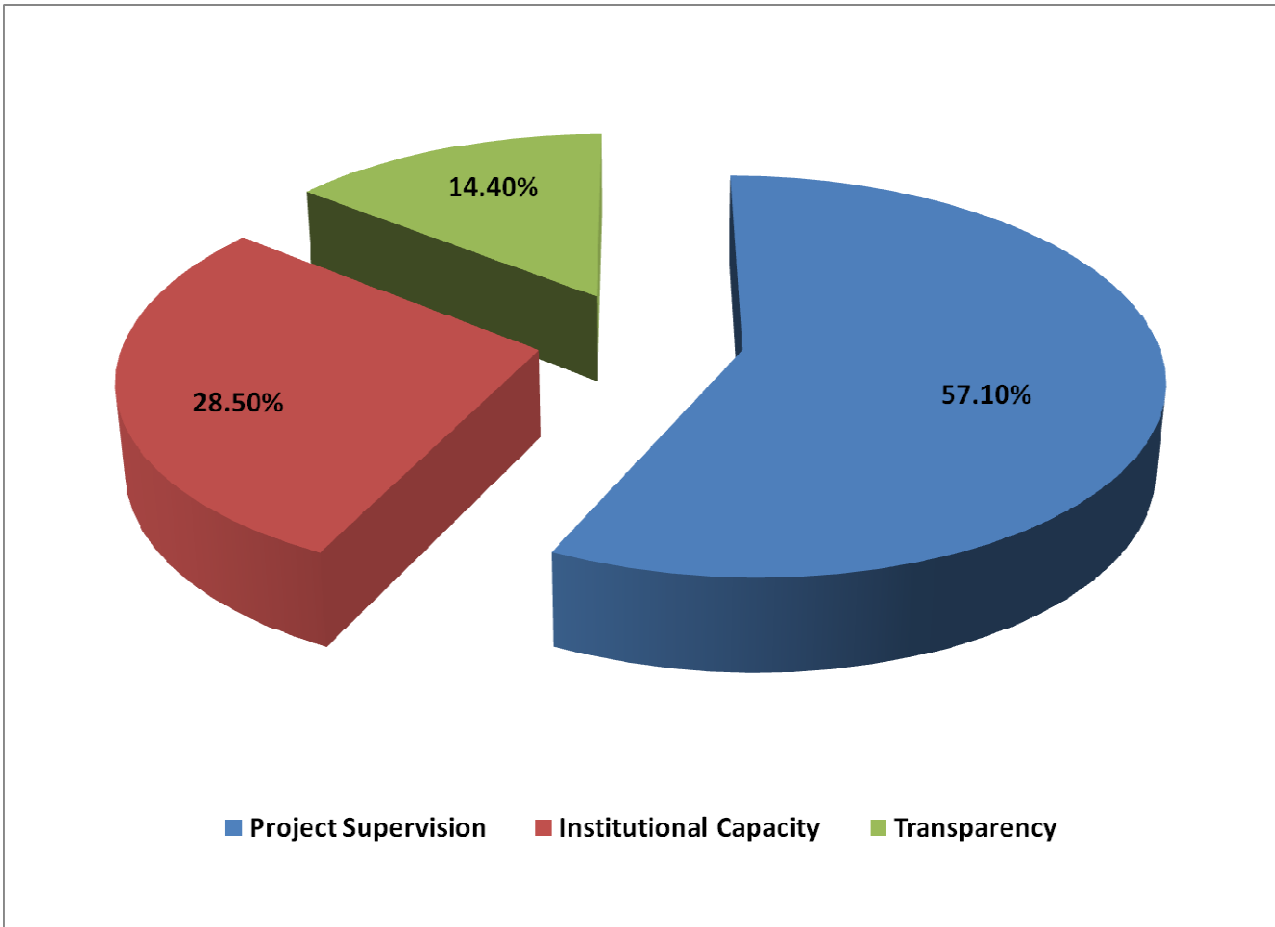
- A bad system (bribery at different stages, lack of transparency, collusion and compromising quality, etc.), and
- Lack of integrity among staff (commitment, income, basic demand, social status, culture, etc.).

4. SOLUTIONS

Khan (2005) identified some key measures to reduce corruption in road works (see Table 2) [2]. Generally, in broader sense, institutional capacity, transparency and project supervision needs to be addressed. Figure 2 (extracted from Table 2) shows a result which gives an idea where to put thrust to reduce the loss. It shows that about 57% stresses needs to be given in supervision, but it may vary as this analysis was done mainly to the on-going road works. However, Figure 2 clearly reveals that institutional capacity, transparency and supervision are the key areas where interventions are required.

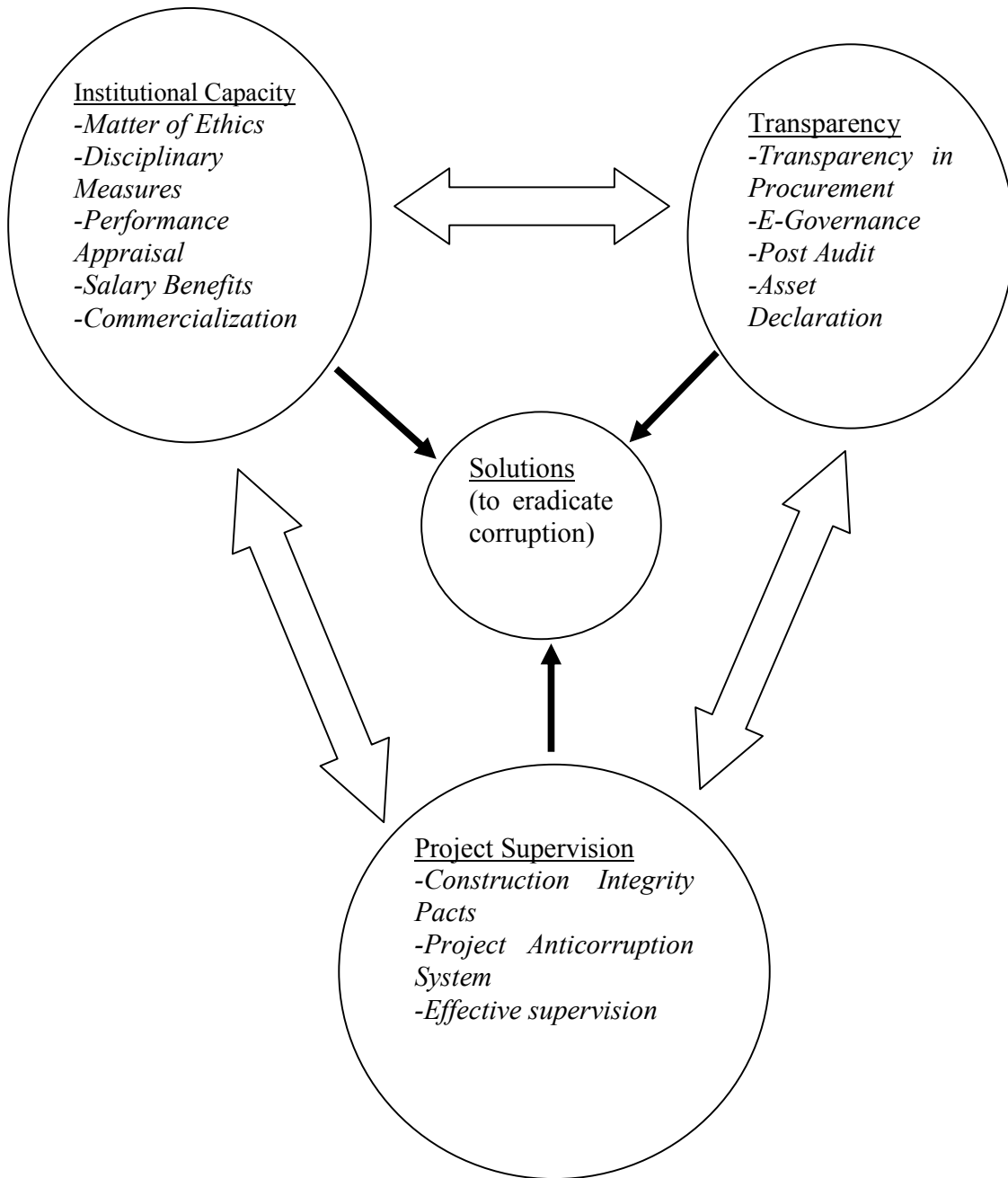
“Table 2 - Measures to reduce corruption [2]”

Task	Percentage may be Reduced (%)
Decrease in overpay (extra money required to pay in different stages of a project)	3.6%
Improve effective supervision	25.0%
Improve quality of materials	10.8%
Improve construction quality	17.7%
Improve integrity of officers, consultants and contractors	17.7%
Regular laboratory tests	3.6%
Post audit by individual body	7.2%
Transparency in procurement	7.2%
Commitment	3.6%
Schedule rate of construction should not be decreased	3.6%
Total	100.0%



“Figure 2 – Key areas to be addressed to reduce corruption [2]”

This paper tried to highlights key solutions in three broad areas, e.g., institutional capacity, transparency and supervision, which were obtained from the previous study done by the author which results have been shown in Table 2 and Figure 2. Moreover, several relevant literatures were utilized for this to develop the Figure 3 as a solution. Intervention in each key area may help reducing corruption as a totality and also they assist other two key areas as they are linked. It is believed that in future a detail study may be conducted to review the sensitivity of each solution in reducing corruption.



“Figure 3 - Obtaining solutions to eradicate corruption”

Details of the above solutions shown in Figure 3 are briefly discussed below.

- *Matter of Ethics*: There should have an internal committee in any organization to deal with the matter of ethics and code of conduct for implementation,

sensitization and train to the public officials at a regular (see Article 7 of African Union Convention on Preventing and combating Corruption in [7]). Ethics on commitment and integrity need to be exercised [2].

- *Disciplinary Measures:* There are certain laws to take corrective steps, but are not properly followed. The disciplinary measures has to be implemented in all organizations, otherwise, due to weakness of disciplinary actions in many cases, corruption has also increased (see Article 7 of African Union Convention on Preventing and combating Corruption in [7] and [8]).
- *Performance Appraisal:* Rewards for the best and honest officers in an organization are necessary, which is an effective tool for motivation.
- *Salary Benefits:* It should be attractive, competitive and a govt. staff should get a package similar to the good private companies. Good salary package with incentives can make sure basic needs of a person. As a result, better service delivery with less corruption is observed [8].
- *Commercialization:* *Though it is not always easy to implement,* but it can increase work productivity of an organization as it will become more customer focused. Generally, it is believed that govt. organizations should be commercialized to provide more transparent services.

Transparency may be achieved in the following ways:

- *Transparency in Procurement:* Procurement standards and performance code need to be reformed, to ensure transparency, equity and efficiency in the whole process ([2] and see Article 7 of African Union Convention on Preventing and combating Corruption in [7]).
- *E-Governance:* Modern era should be dominated by the e-governance, where transparency and customer focus services are ensured.
- *Post Audit:* It was observed that post audit by a neutral party is essential to obtain useful feedback [2].
- *Asset Declaration:* It is important that assets are declared by the civil servants before and after services, which may help identifying corrupt civil servants (see Article 7 of African Union Convention on Preventing and combating Corruption in [7]).

Project supervision is vital in construction works which can be improved as follows:

- *Construction Integrity Pacts:* Several contractors may be united during procurement stage which may reduce bribing to obtain a job. About 14 countries are using this type of pact and it has been successful in Pakistan and Indonesia as commitment is there. However, it needs thorough monitoring to avoid unfair practice [1].
- *Project Anticorruption System:* This is valid for the whole project up to implementation. Anticorruption standards on commitment, transparency in procurement, monitoring and audit need to be ensured [1]. The system has been started in 7 countries.

- *Effective supervision*: To ensure quality of works, effective supervision by all parties is the key which was also suggested in the survey results [2].

5. CONCLUSIONS

This paper tried to stress on the importance of corruption and its impact to the society by providing an example in road sector. It was observed that major areas to be addressed in broader sense are three, e.g., institutional capacity, transparency and project supervision. Several solutions have been highlighted, which were observed from the case study and also from several literatures and they are being used in different countries successfully. It is believed that any organization can follow the relevant solutions to eradicate corruption in long term.

6. RECOMMENDATIONS

This paper has the following specific recommendations:

- A study may be conducted to assess sensitivity of each solution on the impact of corruption, which will help in taking necessary steps.
- Specific corruption policy may be formulated for an organization.
- Identified solutions may be targeted to implement phase-wise.

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