

## Strategies for Minimizing Corruption in the Construction Industry in China

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**Abstract:** Corruption is a social phenomenon deep rooted in the history of mankind. It is similar to other kinds of crime which are likely to occur in procurement of works by governments and local authorities, due to the large amount of money involved in a single transaction and the difficulty in monitoring project expenditure. Therefore, it is necessary to develop strategies to minimize any corruption risks and corrupt behaviour in procurement of construction projects. The aim of this paper is to review the current corruption prevention practices in China's construction industry and suggest ways for improvement. To collect useful and insightful information, desktop studies, focus-group workshops and face-to-face interviews were conducted with supervisory and construction officers at different levels – state, province and municipal in China, who have direct responsibilities and experience in cracking down construction corruption. It was found that corruption happens in different forms during any stage of construction project procurement, and the current anti-corrupt practices are reactive rather than proactive. It was also found that improvements on the legal system, inspection strategies and processes, and promotion of ethical culture are all required. Based on the research findings, corruption prevention strategies were developed. The paper concludes that institution of random and regular checks, severe punishment and prosecution to corrupt personnel, and promotion of a healthy and clean construction culture are all necessary to mitigate the scourge.

**Keywords:** Construction, Corruption, Risk, China, Procurement, Project

### INTRODUCTION

Szeftel (1998) cited in Shakantu (2003) offers a working definition of corruption as the "behaviour which deviates from the norms, rules and duties governing the exercise of a privileged role or office for purposes of private gain. It may do so by ignoring prohibitions against certain acts, or

by fulfilling obligations to act or by exercising legitimate discretion to act, as long as it does so for a private advantage or private motive." Corruption around the world is believed to be endemic and pervasive, and a significant contributor to the low economic growth, inhibition of the provision of public services and increase in the inequality. This has led to international organizations such as the World Bank to identify corruption as the single greatest obstacle to economic and social development (World Bank, 2001). Furthermore, many countries have developed guidelines

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for corruption prevention, for example, the Hong Kong Independent Commission Against Corruption (HICAC) (HICAC, 1999a, b, c) and the Australia Independent Commission Against Corruption (AICAC) (AICAC, 1993, 1995a, b).

Corruption is likely to occur in procurement of works by governments, public authorities and other public entities due to large amount of money involved and the difficulty in monitoring the processes of money spending. Globally, the construction industry has been criticized for many years neither for its inability to innovate nor to adapt to modern management methods. According to Shakantu (2003: 281), many of the corruption is a result of the nature of construction projects and that of the process itself. Corruption in the construction industry is initiated by project participants at every level and in every phase of the process, and the professional advisers and consultants are the first line of attack as well as defence. The situation has been compounded by the fact that a low level of capital investment is required to set up construction companies, which in turn, allows easy entry into the industry by new, and sometimes, unscrupulous players. To overcome this problem, some governments have developed and implemented procedural guidelines on procurement of services, goods and works to ensure the contracting of government funded works/services are transparent and fair, in order to achieve value for money and to prevent

corruption risks from happening, for example, as being practised by the New South Wales Government Department of Public Works and Services (NSW, 2000).

In the case of China, the situation is no different and the change of its planned-economic system to a market-driven system has a direct impact on the operation of the construction industry (Shen and Song, 1998). Resulting from the change, the issues confronting the Ministry of Supervision and Construction are serious. For example, in Guangzhou, China some 205 officials in the construction sector were charged with bribery between January and June 2002 (*China Daily*, 2002). According to Dreyer (2004), there were many grey areas in the transition between a planned economy and a market economy, and some people sought to take advantage of a situation in which the rules were unclear. Speculation, profiteering and bribery became accepted norms for doing business. Newly built bridges and dams collapsed, and just-finished highways developed cracks soon after completion that subsequently rendered them unusable. Paying bribes raises the cost of doing business, and because inspectors are regularly bribed, the quality of the goods sold is adversely affected. The Chinese government is committed to promote, regulate and protect the openness, fairness and competitiveness of the construction industry by developing legal systems including tendering and construction law (People's Congress of China, 1999a, b). The Chinese

government has also established a number of anti-corruption legislations (Levi and Ruan, 1997). The government's commitment also includes effectively promoting the capability of Supervisory Department officials, especially at provincial and city levels, who are responsible for supervision of the construction industry according to the laws on supervision, construction and tendering, and other related laws and regulations. However, in many cases, although the legal systems, checks and balances appear to be in place to inhibit corrupt practices and risks, these systems, checks and balances by-and-large, do not seem to be fully effective. As such, the Chinese government is looking for methods and strategies to improve the situations, particularly in corruption prevention.

### **OBJECTIVES OF THE STUDY**

The study was aimed at providing strategies for supervisory officials to undertake systematic inspections and reviews of construction projects to ensure that the conduct of public officials responsible for construction projects is efficient and ethical, and in accordance with the laws and regulations. Its objectives were to:

- a. review the current practice and identify the principal areas of corruption risks and mal-administration in the construction industry;
- b. identify specific issues for examination in each inspection or review; and
- c. provide strategies for examination of issues identified, including random and targeted inspections and reviews of completed construction projects.

It is hoped that the information presented in this paper will be of interest to all parties concerned, including Chinese construction personnel and foreign companies planning to enter the Chinese construction market. In addition, while the research focused on a particular country, China, its findings should be applicable to other countries particularly developing countries.

### **METHODOLOGY**

In order to obtain useful and insight information for achieving the above mentioned aims and objectives, the author visited China a few times and held discussion workshops with the Chinese supervision and construction personnel. The author also had opportunities to observe the actual tendering operation/practice, visit construction

sites and check in details some filed cases. Furthermore, face-to-face interviews were conducted with 14 Chinese supervisory/construction officials drawn from Supervision and Construction Departments at state, provincial and municipal levels. These 14 officers were carefully selected to represent as much as possible the profile of the Construction Supervisory officials. Despite the small number of interviewees, given their direct responsibilities, experience and involvement in corruption prevention practice, the findings should be seen as representative. It should be noted that due to the sensitive nature of the topic and the purpose of the research, it was inappropriate to conduct industry-wide surveys but interviews, case studies and on-site observation were deemed to be more appropriate.

## **STUDY FINDINGS AND DISCUSSIONS**

The results of interviews conducted with a focus-group of 14 officers aimed at understanding their current practice and viewpoints in relation to corruption prevention are summarized in the following sections which are responses to a list of structured questions.

### **Q1. What Forms of Corruption Exist in the Construction Industry?**

The answers provided by the respondents can be summarized in two groups: (1) contractor related, and (2) professional consultant clients of government officers related. The forms of corruption related to consultants, clients or government officers include administrative interference, illegal award of contract or subcontract of construction projects, disclosure of confidential project baseline price information to some companies prior to tendering, and clients or government officers asking for money and/or in-kinds from contractors.

The forms of corruptions related to contractors include, for example, the construction company offer bribes (money and in-kind) to client or the tender evaluation committee members in order to win the project; purposely lower the tendering prices or collusion in the tendering prices among construction companies using of substandard materials or workmanship, submitting false reports of project expenditure, forging and altering original invoices, non-compliance with contract, and supervision and construction companies colluding together.

It appears from the responses that the root causes of corrupt activities come from government officials, clients or contractors. This finding is similar to that of Shakantu (2003). Therefore, it is essential to ensure that the government officials and clients understand their roles, responsibilities and works in order to be transparent and accountable to the public.

**Q2. Which Areas Do You Think Are Most Risky for Corruption in the Construction Industry?**

The respondents felt that corruption exists with all different stakeholders and in every stage of project procurement, from concept and design stages to tendering and construction stages (including materials purchasing), right through commissioning and handover stages (for project final cost account as well as design changes or construction variations, final cost settlement and final payment and evaluation of project quality at completion). Furthermore, there were comments directly related to the conduct of the government officers and clients, for example, clients asking construction companies for bribes and management is not properly regulated.

It is interesting to point out that some respondents see the corruption concerns do not rest on the process of construction but on the government authorities or departments and management organizations, and lack of

ethics of the officials involved in the process. For example, corruption does not happen in the process of construction, but it happens in the powerful authorities departments and organizations and lack of ethics. These comments echo well with the answers of Q1. Thus this means that the responsibility should not be vested in one individual alone and that an effective and rigorous auditing process is an essential part of any contract-letting mechanism. Auditing should also be carried out for the final cost account of a project to ensure the materials, plants or equipments used meet the specifications and quality standard.

**Q3. What Measures Are You Using to Combat Corruptions?**

The responses can be divided into three groups: (1) law and regulation enforcement issues, (2) work process issues, and (3) people-related issues. While each of these is explained in more details below, the responses can be summarized in one sentence as: the need to strengthen the management of the construction market through the development of laws and regulations, and development of a transparent work process, as well as providing ethical and technical education to the related personnel.

1. *Law and regulation enforcement issues* – The respondents pointed out that the Chinese government is developing more regulations and

laws, and implementing these laws and regulations strictly. The government punishes related parties where corruption is identified. They have set-up a supervisory organization with effective reporting systems, and adopted internal and external supervisions. For example, for internal process, they deal with each section of the process individually; and for external supervision, congress, supervisory department and news media can play various roles. It was also mentioned that taking prevention in the first place is the first priority.

2. *Work process issues* – The respondents pointed out that they are strengthening the management and supervision of the tendering process, and making the process more transparent by requiring all projects to go through the tendering process and have strict control over project variations. Furthermore, they require clients to make payment strictly according to the contract and proportion of work done.
3. *People-related issues* – The respondents claimed that they supervised the officials involved in the project procurement to ensure the work is done in accordance with the laws and regulations. They also provided ethical education for these officials, and listen to the peoples' complaints and take necessary actions accordingly.

#### **Q4. Do You Think the Current Anti-corruption Laws and Regulations Are Sufficient? If Not, What Kinds of Improvement Are Needed?**

About two-third of the respondents felt that the current anti-corruption laws and regulations are "insufficient" and improvement is needed since the corruption behaviour becomes more and more complex. The other one-third felt that the current laws and regulations are sufficient but they also agreed that improvement is needed. One respondent commented that there are not enough details in the related laws and regulations, and therefore some cases are being prosecuted lightly. Another respondent commented that eventually new circumstances will be encountered, and therefore there is always a need to review the laws and regulations. Furthermore, one response reads that with the development of socialist market economy system and the increased investment in construction, the actual anti-corruption statutes need to be further developed, continually summarize the experiences and lessons learned in dealing with corrupt practice in construction project, protect officers who refuse corruption, strengthen investigation of corrupted cases, and severely punish corrupted officers.

It is interesting to note that one respondent pointed out that the problem is not whether anti-corruption laws

and regulations are sufficient or not, but that rests with other areas:

- a. corruption is from those in power and authority. Therefore, the main task for uprooting corruption is to eliminate the unnecessary power and authorities, optimize the administration approval process and let the market make adjustments;
- b. try to establish and prevent corruption through a complete supervising system; and
- c. establish a complete and detailed supervising procedure to allow the supervising officials work proactively, positively, continually and independently, and to avoid administrative interference and at the same time, protect the innocent public.

**Q5. What Methods, Rather Than the Ones You Are Using, Do You Think Will Be More Effective in Fighting Corruption?**

The respondents' answers could be summarized as attitude-related and system/method-related. They claimed that having proactive working attitude will strengthen the execution of laws or regulations and reduce the try-your-luck mentality of some people, and hence decreases the

chances of corruption or taking the risk of being involved in corruption. Besides, active and positive working measures can urge supervisory officials to find out the root of the problems, and solve them effectively and completely. They also mentioned that there is a need to develop special treatment to the field where problems happen continually, develop special supervision and examination procedures for major consisted of people from various departments including Discipline Examination Department, Supervision Department and Construction Department; and appoint commissioners to supervise the operation of tangible construction market (i.e. tendering centres where all tendering are carried out) to prevent corruption. This allows them to perform supervision function well and carry through comprehensive supervision in the construction industry. However, prevention beforehand is the fundamental measure and treatment from root is very important. The respondents also pointed out the need in gaining the trust and rely on the public, and to expose corrupt cases to the public to warn the others; as well as the need to provide more authority or freedom to supervisory officials to check and prosecute corruption behaviours that can effectively prevent the corruption from happening. Furthermore, one respondent pointed out the need to strengthen the tracking, examining and dealing with problems in time; strengthen the public media supervision; and ultimately form a better social atmosphere. This in fact is similar to one of the current

focuses of the Independent Commission Against Corruption (ICAC) in New South Wales State Government of Australia – the public's attitude or concerns and action against corrupt behaviour (ICAC, 2005).

### **STRATEGIES TO PREVENT CORRUPTION**

To prevent corruption, three strategies are suggested namely: (1) development of honest and ethical construction culture, (2) institution of random and regular checks, and (3) supervision of processes and work over project life cycle. The first strategy is a long-term strategy while the other two are short-term actions.

#### **Development of Honest and Ethical Construction Culture**

In addition to laws and regulations, another important issue is the construction culture at both corporate and industry levels. Regardless of how good the laws and regulations are, people are root causes of any corruption; and therefore people are the key to make sure the construction operation is honest, ethical, healthy and clean. Corporate which may include statements, visions, customs, slogans, values, role models and social rituals set the moral tone for an organization and can be used to resist corrupt practice (Luo, 2004). It is suggested that the Chinese government pays more attention to the development of a healthy

construction culture. The government should put more effort into promoting honest and healthy rights all the time, not only technically, but also morally, ethically and culturally. When taking actions in promoting healthy and ethical construction culture, the following issues should be considered:

- a. political leadership and top management commitment is crucial;
- b. assess vulnerability and identify corruption risk factors, and educate staff about these risks and actions to minimize the risks;
- c. improve the level of employees' awareness and understand the conduct of corruption, and promote employees' positive attitude to report corruption;
- d. management should create an atmosphere of trust and feeling of safe to report corruption; and
- e. link contract award to best practice.

#### **Institution of Regular and Random Checks**

It is important to review the conduct of the officials involved in the construction industry through regular and/or random checks. The regular checks include detailed review of the entire procurement process on selected



projects. In this process a supervisory official can be assured that the officials' responsibilities have been fully and properly discharged.

The random checks include the review of a number of different projects chosen randomly. The benefits of random reviews and inspections include:

- a. it is a fair process; no individual official or company is singled out or victimized;
- b. the random nature of the process ensures that it cannot be anticipated and avoided by corrupt officials;
- c. consequently, officials are less likely to participate in corrupt conduct or deliberate maladministration as they cannot be confident that their conduct will not be detected by detailed scrutiny of supervisory officials; and
- d. it maximizes the use of supervisory resources.

As a consequence of these random and regular reviews or checks, may be a pattern of misconduct can be identified at one or more specific stages during the construction process. If this occurs, it would be appropriate to target that particular aspect of the process for review over as many projects as possible. This way,

patterns of conduct or impropriety, or institutionalized misconduct, may be identified which will in turn facilitate the targeting of specific officials or eradication of shortcomings in the systems. Further, where corrupt conduct or maladministration by individuals is identified, all projects with which that particular official has been associated should be targeted for detailed review in order to identify the extent of the official's corrupt conduct, corrupt associations and any associated risks to public safety. It is considered that by the use of the above processes, the effect of supervision can be maximized.

### **Supervision of Process and Work during the Project Life Cycle**

The supervisory officials have a role and responsibility in respect to the conduct of public officials involved in the construction industry. It is not sufficient nor is a complete discharge of duties for supervisory officials to simply rely on reports and documents prepared or provided by officials. The supervisory officials must also identify and recognize areas in the construction processes where corruption has the potential to occur. Having identified the appropriate areas of corruption risks, it is the officials' responsibility to carry out focused and detailed supervisory activities at random or on a targeted basis. The supervisory activity must also involve detailed personal scrutiny of individual projects, with independent expert technical assistance if

necessary, and examination of relevant documentation for the project, or projects under review.

According to Zhou (1998), the strategy of corruption prevention should be comprehensive, consisting of precaution, relief and warning, and combine sanctions and education, together with a constant reminder to the public servants of their duties and reputations, and the penalties for breaches of the laws and regulations. In order to carry out regular or random checks effectively, a supervision checklist is developed here. This checklist provides guidelines for supervisory officials to undertake random and targeted examinations at specific stages of a construction project, and specifically addresses the areas of corruption risks or conduct. It highlights "areas of risks or

concerns" for supervisory officials to direct their attention and strategies for supervisory inspection or review. This supervision checklist is designed according to the procurement stages of a construction project from inception to completion.

***Project conception stage – land use, urban planning and approval***

At this stage, the areas of concerns and risks are project application documents provided to the Bidding Office of the Construction Commission. Areas of risks and associated strategies to mitigate corruption risks are provided in Table 1.

Table 1. Key Areas of Corruption Risks and Strategies at Project Conception Stage

Areas of risks/concern	Actions/Strategies
Unauthorized use of land	Check that project design conforms with land usage conditions and city plan
Failure to obtain all necessary approvals or failure to comply with planning and land usage conditions	Examine all relevant approvals and receipts to ensure they were properly obtained and relevant to the project under review
Avoidance of fees and taxes	Check if appropriate fees have been paid to the land occupants with the pre-agreed amount of money or in-kind. It is necessary to check with both parties—the developer and the land occupants on their agreement and the actual fees transaction history
Unauthorized changes to the scope of the project	Review project design documents and drawings to ensure that project under review is not part of a larger project (project splitting) and has not been otherwise altered. Check for any other projects associated with the same land by the same client
Evasion of tender scrutiny by splitting project into a number of small projects.	

***Tendering stage – call for tender and tender evaluation***

Project tendering stage is a critical stage as it determines which construction company will be awarded the

contract. Therefore, there is a high level of corruption risk at this stage. As such, supervision officials should pay special attention at this stage. Table 2 provides areas of risks and associated strategies.

Table 2. Key Areas of Corruption Risks and Prevention Strategies at Tendering Stage

<b>Areas of risks/concerns</b>	<b>Actions/Strategies</b>
Appropriateness of tender evaluation criteria	Check if the tender evaluation criteria was prepared strictly in relation to the nature and scope of the project, and the preparation of the criteria was completed prior to call for tender
Preferential treatment of tenderers	Check if the tender teams and conditions favour any individual tenderer(s)
Invitation of unqualified tenderers	Ensure that original tendered qualification conditions are attached to the invitations to tender Check qualification of tenderers and current project commitment of the proposed project managers
Collusion between tenderers	Review tenderers' and project managers' past performance reports for validity and completeness. If necessary, review previous project completion reports involving tenderers to confirm accuracy of past performance reports
Tenderer offering bribes	Review contract to ensure conformity with design documentation and consistency with tender documentation, especially in ensuring that the contract does not provide additional benefits or rewards to either party that are not included in the design or tender documentation
Disclosure of the "baseline price" or other confidential information to tenderers	Check to ensure only appropriate information is provided to tenderers Review tender prices to ensure that prices provided are adequately supported by documentation
Tender evaluation committee member seeking bribes	Check and audit the work done by committee members to see if any preference has been given to particular tenderer
Technical competence of evaluation committee	Check if the members of the committee have met the requirements set by the government Review the selection process of evaluation committee to ensure that selection is truly random and experts chosen do not have a relationship with individual tenderers or client
Adequacy of tender evaluations	Review adequacy of time allocated to tender evaluation by evaluation committee
Integrity of members of tender evaluation committees	Review evaluation report provided by tender evaluation committee to ensure scoring is consistent with pre-determined criteria and scale; review scoring scale for suitability to project and impartiality Check tender documentation to ensure that the recommendation of the tender evaluation committee has been signed off by the Director of the Tendering Office

**Construction stage – conduct of contractor and on-site supervision company**

In China, for the government-funded project, a supervision company is employed to act on behalf of the client to carry out on-site supervision to assure cost, quality and

safety. The supervisory check actions are to be carried out during project construction particularly at the critical points of construction such as part-way through the concrete pour and material testing reports. Areas of risks and strategies to mitigate corruption risks are provided in Table 3.

Table 3. Key Areas of Corruption Risks and Prevention Strategies at Construction Stage

Areas of risks/concerns	Actions/Strategies
Qualifications and suitability of on-site supervision company or staff	Review selection process of supervision company with particular emphasis on qualifications, capacity and experience of the company and staff employed on the project
Appropriate checks and monitoring of supervision undertaken by the on-site supervision company	Examine supervision company diaries for detail and conformity with project progress, including construction progress, day-to-day supervision activities, quality testing and safety checks
Accuracy and validity of the supervision diary	Check to ensure project manager's attendance is appropriate to the nature of the project and that he is discharging his responsibilities properly
Adequacy of day-to-day supervision of the project by the on-site supervision company	Check to ensure that supervision team complies with timetable outlined in project design and contract, and that any variation from the timetable is justified
Collusion between on-site supervision company and contractor	Examine previous projects to identify unusual or suspicious relationships between on-site supervision company and contractor
Non-compliance with design specifications;	Independently confirm by on-site inspection that construction was carried out according to design and specification
Substitution of second-hand, substandard and unauthorized materials	Examine materials utilized during construction to check if there was use of unauthorized materials
Inadequate material testing or falsification of test results	Visit the construction site part-way through critical stages of construction (for example, sign-off on depth of footings or pylons, welding, structural steel and concrete pour)
	Independently confirm with testing laboratories that quality testing was properly conducted

***Project post-construction stage – contract compliance, design variations, final cost and quality evaluation***

The post-construction stage is one of the most critical stages to check for any possible corruption. Audit variations to the project is one of the main methods in

finding corruption risk and conduct. A detailed and careful review on the completed project is essential because the corruption would be purposely hidden. Table 4 provides key areas of corruption risks or concerns and actions to be taken at this stage.

Table 4. Key Areas of Corruption Risks and Strategies at Post-Construction Stage

<b>Areas of risks/concerns</b>	<b>Actions/Strategies</b>
Whether the contract price is the same as the one determined during tendering and the final cost aligns with the contract price	<p>Compare the tender price, contract amount and the final cost</p> <p>Review the sources and causes of design variations (for example, documentation errors or client requests)</p> <p>Review variation authorizations to ensure that: variations were necessary and unavoidable; cost estimations were detailed and independently verified; clear instructions were provided to contractor as to extent of variation and financial approval prior to variation work being commenced</p>
Contract compliance by the client and construction company	<p>Ensure that progress has been completed in accordance with the contract</p> <p>Review client's and on-site supervision company's reports on contractor performance to ensure adequacy, accuracy and fairness</p> <p>Review approvals for extension of time to ensure they are appropriate in liability and extent in terms of the contract</p> <p>Check to ensure there is no illegal subcontracting or improper transfer of contract to another contractor</p>
Improper commission of electrical and hydraulic equipment or plants	<p>Check if all electrical and hydraulic equipment or plants have been properly tested and signed off by licensed engineers</p> <p>Check completed project, with appropriate professional assistance, to ensure that the project is of adequate quality</p>
Process for approving progress payments and final cost evaluations	<p>Review documentation to ensure there has not been undue delay or impropriety in final cost evaluation and approval</p> <p>Examine contract price and final price to ensure that any variation between the two prices has been properly authorized and is reasonable under all the circumstances</p>

## **CONCLUSION**

The paper has provided an overview, current practice, areas of risks or concerns and strategies in relation to construction corruption. The study revealed that corruption may occur in different forms and at any phase during the procurement of construction projects, the root causes are project participants particularly some government officers, clients, consultants and contractors who are the first line of attack as well as defence. Therefore, the responsibility should not be vested in one individual, and that an effective and rigorous auditing process is an essential part of any contract-letting mechanism. The study also revealed that while legal systems, checks and balances appear to be in place to inhibit corrupt practices and risks, the systems, checks and balances by-and-large do not seem to be fully effective. Therefore, it is necessary to strengthen the management of the construction market through the development of laws and regulations, and development of a transparent work process as well as providing ethical education to the related personnel.

Furthermore, the study revealed that while the Chinese supervisory officers are taking active roles in corruption investigation and prevention, improvement on

the legal system, inspection strategies and processes, and promotion of an ethical culture are all required. The paper has provided useful supervision strategies which include regular and random checks with a detailed checklist; a proactive approach to corruption detection and prevention with the introduction and maintenance of a rigorous, focused and ethical supervisory procedure; and the promotion of an honest administrative culture in the construction industry. It is the only effective way to ensure that the construction industry which is the central pillar of China's economy operates effectively and efficiently.

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