

This item was submitted to Loughborough's Institutional Repository (<https://dspace.lboro.ac.uk/>) by the author and is made available under the following Creative Commons Licence conditions.



CC creative commons
COMMONS DEED

Attribution-NonCommercial-NoDerivs 2.5

You are free:

- to copy, distribute, display, and perform the work

Under the following conditions:

BY: **Attribution.** You must attribute the work in the manner specified by the author or licensor.

Noncommercial. You may not use this work for commercial purposes.

No Derivative Works. You may not alter, transform, or build upon this work.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the [Legal Code \(the full license\)](#).

[Disclaimer](#) 

For the full text of this licence, please go to:
<http://creativecommons.org/licenses/by-nc-nd/2.5/>

Combating Corruption in the Delivery of Infrastructure Services

M.Sohail and S.Cavill

ABSTRACT

Internationally, corruption in the planning, procurement, construction and operation and maintenance (O&M) of infrastructure services (defined here as water supply, sanitation, drainage, access roads and paving, transport, solid waste management, street lighting and community buildings) has been recognised as a constraint to development. What progress has been made, therefore, in implementing greater accountability to combat corruption in the planning and delivery of infrastructure services? This paper documents the growing interest (in developed and developing countries) in securing better governance for the delivery of infrastructure and assesses the potential of greater accountability to improve both provision and performance of infrastructure services.

Key words: procurement; construction projects; corruption; ethics

Introduction

The infrastructure sector has a world wide reputation for incidences of corruption, asset misappropriation and bribery. The term ‘infrastructure services’ cover a wide variety of activities but is defined here as those services derived from physical infrastructure networks or installations, including water supplies, sanitation, drainage, access roads and paving, street lighting, and solid waste management. The paper is structured as follows: Section 1 begins by describing and defining corruption. Section 2 moves on to examine how corruption affects the way infrastructure services are delivered in greater detail and gives examples of different types of corrupt practices which can take place during the various phases of infrastructure delivery. Section 3 discusses how accountability can be operationalized in the context of infrastructure services. It is the purpose of this paper to argue that institutional reforms that seek to improve the relationships of accountability between stakeholders can reduce corruption, making it possible to construct, operate and maintain infrastructure on a more sustainable basis. This paper is based on a literature review and the initial findings of an on-going research project undertaken by the authors on anti-corruption practices for infrastructure services in a number of countries in South Asia, Southern Africa, UK, Central Eastern Europe and Latin America.

Section 1: Corruption

What is corruption?

A general definition of corruption is the misuse of office for personal gain either at one’s own instigation or in response to inducements. Corruption can be ‘grand’ (involving large amounts of money and taking place at higher levels of society) or more commonly ‘petty’ (involving small amounts of money and which citizens may experience in their daily encounters with junior officials such as policemen). Various forms of corruption include:

- **Bribe** - payments made in order to gain an advantage or to avoid a disadvantage,
- **Fraud** - theft through misrepresentation,
- **Embezzlement** - misappropriation of corporate or public funds,

- **Kickbacks** -sweeteners or rewards for favourable decisions.

Corruption can be ‘collusive’ (the willing and planned cooperation of the giver and taker), or ‘anticipatory’ (paying a bribe in anticipation of favourable actions or decisions from an authority) but can also be ‘extortionary’ (forced extraction of bribes or other favours from vulnerable people by those in authority) (Davis, 2004).

The literature describes the main causes of corruption as low salaries, a lack of morals, peer pressure, institutional cultures of corruption, the lack of accountability of public officials, poor law enforcement or lack of punishment of corrupt officials, and complex processes and regulations.

Infrastructure, corruption and development

Infrastructure services are central to the UN’s Millennium Development Goal of eradicating extreme poverty in two respects, as the motor of local economic growth and supporting sustainable livelihoods through equitable access to services; leading to increased employment, improved environments, better living standards, healthier people and lower infant mortality and promoting good governance.

In the nineties, corruption became one of the focal points of the international development debate. Klitgaard (1988: 31) proposed that corruption might be an acceptable and normal means of obtaining routine low-level actions and/or approvals by officials. He suggested that corruption can in fact benefit private actors by putting “goods and services in the hands of people who value them the most, who use them the most”. Thus, corruption may benefit people by cutting red tape, making decision-making predictable, motivating underpaid workers and enabling some to obtain political power e.g. selling a vote for services. However, currently, there appears to be a consensus that corruption is harmful and that it has become increasingly unacceptable to a broad range of stakeholders, including businesses, governments, academics, and citizens. It is argued instead that corruption contributes is a significant barrier to economic, social and political development and poverty reduction. For example The Commission for Africa (2005)

identified corruption as the single most important explanatory factor for the lack of economic development in Africa.

Nevertheless, corruption is an international problem: the Transparency International Corruption Perceptions Index points to high levels of corruption in many highly industrialised, democratic countries as well as poor ones. Lewis (1996) notes corruption is typically viewed ethnocentrically: while western corruption is often interpreted as a one-off individual act, corruption in developing countries is typically seen as endemic and systematic.

Section 2: Corruption in infrastructure services

Some US \$250 billion is spent annually on infrastructure in the developing world alone (Rodriguez, Waite, and Wolfe, 2005). However, worldwide, the sector is known for its association with corruption (DFID, 2002). The 2005 edition of Transparency International's Global Corruption Report (Rodriguez, Waite & Wolfe, 2005) highlights the devastating impact of corruption in infrastructure (such as wasted tender expenses, tendering uncertainty, increased project costs, economic damage, blackmail, criminal prosecutions, fines, blacklisting, and brand damage and reputational risk). Corruption typically results in infrastructure projects which are unnecessary, unsuitable, defective or dangerous (Estache and Kouassi, 2002; Shadrach & Ekeanyanwu, 2003).

In developing countries corruption in infrastructure is of importance for poverty reduction strategies for two main reasons: firstly because it diverts resources away from the provision of public goods from social sectors that do not lend themselves to grand corruption, and towards large capital-intensive (non poverty-focused) infrastructure projects and through limiting development, growth and poverty reduction and secondly through increasing the cost of public services, lowering their quality and often all together restricting poor people's access to such essential services as water and sanitation as the loss of revenue, diversion of public funds, and evasion of taxes associated with corruption mean that governments have less to spend on infrastructure (Deininger, 2003; Bo Dal & Rossi, 2004; DFID,2002).

Corruption in the industry often results from a combination of the highly competitive nature of the tendering process, a lack of transparent selection criteria for many projects, tight margins, close relationships between contractors, subcontractors and project owners, and cronyism in the industry (Stansbury, 2005; Rodriguez, Waite, and Wolfe, 2005, DFID, 2002). PricewaterhouseCoopers' (2003) Global Economic Crime Survey examined data from 184 construction companies in 44 countries around the world and found that corruption is currently a substantial threat, with one-third of those surveyed have experienced some form of economic crime. Corruption also represents a threat to those institutions companies which are financing, guaranteeing or insuring construction projects. Whilst, corruption might once have been viewed as a necessary requirement of doing business, yet is increasingly seen instead as a form of misconduct. For example, Britain banned U.K.-based companies from making facilitation payments as part of its 2002 anti-terrorism law and companies have established comprehensive anti-corruption and bribery programs that include written policies, training, auditing and internal controls.

Yet, PricewaterhouseCoopers (2003) found that corruption generates immense opportunities for payoffs with comparatively low risk of detection. This is a key problem in the infrastructure sector where incidences of corruption can be obscured by the complexity of projects, large number of small-scale contractors, delays and cost overruns, design changes and the fact that it is possible to conceal the quality of work (Stansbury, 2005; Rodriguez, Waite, and Wolfe, 2005, DFID, 2002).

Table 1: Examples of corruption in the different stages of infrastructure delivery

Stage of service delivery	Examples
Project selection	<ul style="list-style-type: none"> Corruption can negatively affect the selection of projects. For example, corruption can divert resources away from social sectors and toward major infrastructure projects. Corruption may also encourage the selection of uneconomical projects because of opportunities for financial kickbacks and political patronage.
Planning stages	<ul style="list-style-type: none"> Project used as vote winners/opportunities for personal gain not on basis of priority/availability of financial resources. Planning in favour of high value infrastructure (white elephant projects) and against the interest of the poor. Project requirements may be overstated or tailored to fit one specific bidder.
Inspection stages	<ul style="list-style-type: none"> Weak oversight and supervision mechanisms have been created that would prevent detection of fraud and corruption. Kick-backs can be given to persuade inspectors to turn a blind eye to slow implementation of projects, unfulfilled contract requirements, and other instances of malpractice.
Design	<ul style="list-style-type: none"> Corrupt selection of consultants for feasibility studies, preparation of specifications/bid documents. Over designed and overpriced projects to increase potential corrupt earnings during implementation. Bribe for favourable environmental impact assessment/planning proposal/approval. Project design has been manipulated to benefit particular suppliers, consultants, contractors, and other private parties. The timing of the project has been altered to suit vested interests.
Bid and contract signing stage	<ul style="list-style-type: none"> Political parties levy large rents on international businesses in return for government contracts. Officials take percentages on government contracts. Officials receive excessive “hospitality” from government contractors and benefits in kind. Kickbacks for construction and supply contracts. Lack of competitive/inequitable contract practices. Inappropriate bidding procedures; excessively short bidding time or insufficient or inadequate advertising of tender. Corrupt practice on the part of bidders (e.g. unjustified complaints, misleading bids etc). Collusion among firms or between public officials and bidders.
Construction	<ul style="list-style-type: none"> Changing subcontract party after receiving bribes. Cutting corners, ignoring rules, by passing procedures Payment for equipment, materials or services which were not supplied. The provision of equipment or goods of lower than specified quality (typical examples include lesser cement or steel reinforcements). Concealing substandard work. Bribe the relevant official to certify that the work was done according to specification. Non-implementation. Unjustified complaints from contractors as a way to obtain unjustified contract price increases. Duplication of payments, alteration of invoices, lack of supporting records, ineligible payments, overbilling, misuse of funds (i.e. for purposes other than those aligned to project needs), misappropriation of discounts from suppliers/contractors, unauthorised payments etc. Unauthorized use of project property. Theft of materials, equipment or services.
Service delivery	<ul style="list-style-type: none"> Ghost/absent workers. Siphoning off supplies to market. Favouritism in hiring/promotions Use of contacts/money to get better/faster service or to prevent delays. Elite capture of infrastructure services.
Maintenance and management stages	<ul style="list-style-type: none"> Corruption in procurement of equipment and spare parts. Withholding needed approval/signatures of gifts/favours. Corruption increases costs meaning lack of resources for O&M. Bribes to win O&M contracts/ personnel appointments. Lower standard of construction creates need for expensive repair and maintenance.

Section 3: Accountability

Accountability is a relationship between people. By way of general definition, Schedler, Diamond, Plattner (1999; 17) state “A is accountable to B when A is obliged to inform B about A’s (past or future) actions

and decisions, to justify them, and to suffer punishment in the case of eventual misconduct”. Accountability has two elements answerability (making power holders explain their actions) and enforceability (punishing poor performance) (Schedler, 1999). Accountability works by formalising expectations of action or behaviour, creating sanctions for failure, enabling trust, and providing the motivation and incentives to use resources efficiently and effectively (Cavill & Sohail, 2005).

O’Donnel (in Schedler, Diamond, Plattiner, 1999; 2-3) makes the further distinction between the forms of accountability which operate in a horizontal or vertical direction. For example, horizontal accountability includes legal accountability or administrative accountability, and is characterised by ‘the capacity of state institutions to check abuses by other public agencies and branches of government’. Citizens have also been involved directly in the workings of horizontal accountability institutions, for example, in participatory evaluation of public spending: Goetz and Jenkins (2001) call this diagonal or ‘hybrid accountability’. Vertical accountability can be achieved through fair elections, civil society activity, the media, public meetings, and formal grievances procedures. However, commentators argue that too much accountability “can clog up the works, diverting resources and opening organisations to perverse pressures” (Considine, 2002; 21).

The complex nature of infrastructure services, asymmetries of information and expertise between provider and user involved mean that service providers have an incentive to engage in corrupt activities (Walsh, 1995; 50). Accountability improves infrastructure services principally in two ways:

1. by making service providers explain and justify their actions against commonly agreed standards of effectiveness and
2. the existence of sanctions for those found to have behaved immorally or performed ineffectively (Schedler in Schedler, Diamond, Plattiner, 1999; 16).

The World Development Report (2004) has developed accountability as a way to promote pro-poor service delivery. It conceives service delivery as a relationship between providers, clients and policy makers. Accountability can be differentiated into the short route, (the client can hold the provider directly

accountable, without any intermediaries), and long route, (from citizen, to policymakers, to provider). Accountability to citizens is achieved when the state ensures that utilities, boards, and government departments provide efficient and equitable services for all citizens, including the poor.

The potential of accountability to improve the outputs and sustainability of infrastructure services has been identified (World Bank, 2004). The main reasons advanced for applying accountability to the delivery of infrastructure services can be summarised as: -

- ***Reduce discretion:*** Discretion has the effect of introducing bias into service delivery, which may result in denying full service provision to certain people, or the selective provision of information. Increasing accountability for decisions and actions can reduce this discretion.
- ***Improve information flows:*** Greater accountability can make information on the performance of services more widely available to service users, who are then equipped to ensure better quality and standards of service, and more effective use of resources.
- ***Improve trust:*** The institutions traditionally responsible for service delivery have been accused of abusing the trust of citizens, for example, in their use of public money as well as their capacity for impartial and predictable provision of infrastructure services.
- ***Compensate for weak political accountability:*** Democratic deficit, clientelistic politics and patronage in service delivery has weakened the voice of voters in service delivery. Currently, attempts are being made to rework the relationships involved in service delivery, so that service providers are more directly accountable to service users.
- ***Create demand for better services:*** Putting accountability arrangements in place can work to change levels of tolerance for poor service leading citizens to reveal their demand for better quality and more accountable infrastructure services.
- ***Induce greater monitoring by service users:*** When citizens exert their influence over service providers it ensures that service providers (and policy makers) have the incentives to respond to their preferences.

- ***Protect the socially and economically disadvantaged:*** As well as extending access to infrastructure services, greater accountability of service providers and policy makers can be used to protect the quality of supply available to marginal and excluded groups in society.
- ***Improve public sector provision:*** Growing antipathy towards the provision of infrastructure services by a large, hierarchical, public sector has led to attempts to reduce and reorganise the public sector and improve the accountability of its activities.
- ***Address fragmentation:*** In some countries, the for-profit private sector, non-government organisations, and community-based organisations, are key service providers. Attention is being paid to the allocation of accountability in the context of fragmented service delivery.
- ***Improve cost recovery:*** Greater accountability in the delivery of infrastructure services may have the consequence of improving cost recovery since service users may be more willing to pay for the services they receive.

Institutions and Accountability

The international development discourse has focused on improving institutions in recent years in order to improve per capita GDP growth. The literature describes the institutions that matter for development as property rights, civil liberties, political rights, democracy, as well as social clubs and associations.

Institutions are “humanly devised constraints” (North, 1990), ‘complexes of norms and behaviours’ (Uphoff, 1986; 8-9), the social rules, conventions, and other elements of the structural framework of social interaction (Bardhan, 1989). Institutions enforce of rules governing human behaviour and serve collectively valued purposes by reducing uncertainty, for example, by making information available, and making behaviour or another’s actions predictable. Accountability operates as an institution by formalising expectations of action or behaviour, creating sanctions for failure, enabling trust, and providing the motivation and incentives to use resources efficiently and effectively.

The literature typically uses the “principal agent” theory to analyse the problem of accountability for service provision. This theory describes a relationship in which a principal, (service users in this case),

attempts to secure services from an agent (service providers). Agents are expected to be prone to moral hazard (Agents only pursue principal's interests when they coincide with agent's own interests) and hide the information that principals require to monitor their performance.

In small face-to-face communities the transaction costs involved in monitoring service delivery would be less than in large scale urban societies. This is because urban areas are characterised by more heterogeneity, impersonal exchange processes and uncertainty in social interactions. All of which creates considerable scope for all kinds of opportunistic behaviour, (cheating, shirking, moral hazards) and leads to high transaction costs of monitoring. Incentives are needed to induce agents to act in ways that deliver the desired type and level of performance to meet users needs, as well as reduce the costs of monitoring service delivery and disciplining service providers at the point of delivery.

The theory of New Institutional Economics has been used to analyse and evaluate those institutions concerned with the provision of infrastructure services (Ostrom, Schroeder and Wynne, 1993). It is argued that public services have got the incentives wrong in the design, finance, construction, operation, maintenance and the use of facilities. Service providers lack the incentives to prioritise the use of resources, to provide services for those in need, and users lack incentives to use services optimally (Reddy in Mwambu, 1995). Another example is Hardin's Tragedy of the Commons (1968), where a resource is overused because the resource is non excludable. Ostrom, Schroeder and Wynne (1993) conclude that market based incentives, for example, those associated with private property generate better use of resources and more effective and efficient service delivery, as well as ensure greater sustainability than those provided by the state.

Institutional arrangements for infrastructure delivery

The various institutional arrangements for delivering infrastructure services:

- Private sector participation; has been used both an alternative financing mechanism and a way to improve the productivity, quality and cost effectiveness of services through changing the incentives

operating in service delivery (For example commercial pressures, contracts, regulatory procedures, property rights and cost recovery are said to change incentives).

- Government is the foremost provider of urban services; government finances 70% of infrastructure investment in Less Developed Countries (DFID, 2002; 2), and 90% of water systems worldwide are fully public utilities (The Economist, 2003; 5). It is the responsibility of governments to provide, finance, regulate, and in other ways influence infrastructure services. They do it for three reasons: First, networked infrastructure services exhibit economies of scale, or network externalities, that make it technically more efficient to have a single distributor of the service. Second, governments often redistribute resources—such as a lifeline water subsidy— to ensure the minimum equitable service access that markets cannot. Thirdly, citizens typically demand public sector involvement (provision, finance or regulation) through their votes.
- NGOs are another key infrastructure provider in developing countries. NGO's has a comparative advantage over the public sector in terms of flexibility, responsiveness, experimentation, motivation, and community participation. Community participation has been used to provide skills, resources, labour, and cost recovery in service delivery; in order to improve service levels, provide better channels of communication with provider agencies, more appropriate service delivery, better maintenance and more user-friendly procedures. Common property theorists such as Ostrom (1996) established that local people, as well as governments, can successfully manage resources through various kinds of property regimes.
- Households provide and maintain facilities which are self contained on the plot and are entirely the responsibility of the family.

The World Development Report (World Bank, 1994) reached the broad conclusion that it is the institutions traditionally responsible for public service provision that are the cause of most unsatisfactory service. By the early 1990's, an international consensus had emerged which viewed state provision of services as expensive and unsustainable. The inability of governments, particularly in Less Developed Countries, to provide, operate and maintain public services in pace with rapid urbanisation and population growth has been well documented. It was argued that the role of government as direct providers of services has given

rise to heavily subsidised, loss making utilities, operating to rigid rules with political interference. This is said to create inefficient services that are unable to improve or expand. Public Choice Theory has been used to further undermine the role of government in service delivery; it demonstrates that public officials would systematically benefit some economically powerful interest groups over others through public expenditures, goods, services and state regulations on the basis of self interest (Grindle and Thomas, 1991; 25; Estache, 1994; Gelb, Knight and Sabot, 1991; 1186). Politicians have also been criticised for clientelistic politics, capturing rents from urban services, and distributing them to their clients, for example, when the poor sell their vote in return for short term tangible needs such as basic services and land tenure (Beall, 1997; Moore and Putzel, 1999).

The World Development Report (1994) made three recommendations for the reform of service delivery institutions: namely:

1. the use of competition,
2. application of commercial principles to service providers, and
3. increased involvement of users in planning, operating, regulating and financing services.

Infrastructure is said to have become inoperable due to weak institutions and structures of government. Proposed institutional solutions include civil service reform, privatization, democratization, decentralization, contracting out, provision through NGOs, empowerment, participatory methods, social funds, community-driven development, and user associations. Ten years on, the World Development Report (World Bank, 2004) returned to the theme of getting the institutions of infrastructure provision right through accountability. Making services work requires improving the institutional arrangements for producing them as well as changing the institutional relationships among key actors (service beneficiaries, the state and providers). Accountability is claimed to be enhanced by the introduction of competition in service delivery through a clear split of responsibility for policy definition, service provision and monitoring. It is hypothesised that successful services for poor people emerge from institutional relationships in which the actors are accountable to each other. Donors and financial institutions have tried to reform institutions through conditionality as part of economic adjustment.

There is a tendency to suggest that the adequacy of infrastructure depends, to a great extent, on a well functioning liberal democracy. This is thought to require certain types of institution (capitalist institutions, parliamentary democracy, property rights, human rights, free markets and good governance). This agenda the transfer of western liberal democratic ideals of individual freedom, equity, efficiency, legitimacy, representation and accountability in isolation from a country's history, cultural tradition of politics or political culture.

Section 4: Anti-corruption institutions for infrastructure delivery

Curtailling corruption requires a multi-pronged strategy that addresses a number of concerns. Accountability initiatives of relevance to combating corruption in the infrastructure sector tend to include five important institutions: institutional restraints; citizens voice; institutional framework for monitoring; infrastructure of non-governmental anti-corruption organizations; and institutions supporting freedom of information.

Institutional restraints

Institutional restraints on corruption include an independent and effective judiciary, parliamentary oversight, courts, ombudsman, anticorruption commissions and other watchdog enforcement agencies as well as other forms of prosecution and enforcement. Tough sanctions are needed against companies caught bribing, including forfeiture of the contract and blacklisting from future bidding. There are a variety of anti-corruption conventions and treaties in place designed to lower levels of corruption. For example the U.S., European and Latin American countries have brought their criminal codes into line with the provisions of the OECD Convention Against Bribery of Foreign Public Officials in International Business Transactions (1997), enacting stiff criminal and civil penalties and removing tax deductions previously offered for payment of bribes. Anti Corruption Commissions receive and investigate allegations of mal-administration, including issues of corruption and lack of accountability and transparency. There are very few examples of successful independent anti-corruption commissions. Often cited are the experiences of Hong Kong Independent Commission Against Corruption (ICAC), Central Vigilance Commission India; Singapore

Corrupt Practices Investigations Bureau (CIPB). The Korea Independent Commission Against Corruption (KICAC) and Botswana Directorate for Economic Crime and Corruption (DCEC) In particular, progress has been made in recognising the problem of corruption by both multilateral development banks and export credit agencies. The World Bank includes fraud and corruption provisions in its procurement and consultants guidelines; companies found to have violated the provisions are placed on a public blacklist that is used by the World Bank and some credit agencies when considering loans and contracts. Nearly 70 firms have been permanently banned in this way from competing for World Bank contracts. Regional development banks have taken a similar approach.

A key institutional restraint adopted by service delivery organizations is the code of conduct. South Korea has adopted a *Code of Conduct for Maintaining the Integrity of Public Officials*. This code specifies the standards of conduct to be observed by both state and local public officials. It covers areas related to the prevention of conflict of interest, the prohibition to use public office for private purposes, the obligation of neutrality and impartiality and regulates the legitimate acceptance of gifts. Reports suggest that, since the code came into force, the number of duty-related offerings of gifts and hospitality have reduced substantially. However, it is not possible to prescribe exhaustive guidelines to cover each and every single ethical concern that employees are likely to face in their work. Today, a growing number of companies are designing programs that give employees a level of ethical understanding that allows them to make appropriate decisions.

Citizen Voice

Contemporary innovations in accountability rely on the voice and participation of service users in policymaking, planning, operating, regulating and financing infrastructure delivery. The involvement of citizens in promoting accountability compensates for weak government institutions and regulation by exposing professionals to the choice of consumers in a direct way. This model in effect breaks up hierarchical accountability of traditional Weberian bureaucracy, (i.e. reporting up the line to the senior officers and politicians) and replaces it with direct accountability of service providers to communities. Putnam (1993) argues, “Engaged citizens are a source of discipline and information for public agencies”.

In her study of Ceara, Brazil, Tendler (1997) examines how health workers were made accountable and self-regulating outside their agency through monitoring by the communities. Lam (1996) also highlights the 'social embeddedness' of irrigation officials in the local community and the importance of daily informal social interaction between farmers and officials. Social embeddedness creates a social pressure to do a good job, so that any wrongdoing on their part that causes harm to the local community could lead to social ostracism. If the poor have a say in service delivery they would be more likely to get access to affordable and appropriate services – either directly or via government. Informed citizen action and political activism is thought to require community institutions, cultural norms (e.g., women's status) and social capital, information, perceived rights, and literacy as well as legal protection. Abers (1998) documented the use of participatory budgeting in Brazil for the scrutiny of past year expenditure, to set spending priorities and allocate funds for public investments. This approach has been particularly useful in increasing transparency, reducing clientelistic relations, and securing better services in the favelas. As a result corruption has fallen and services are delivered more efficiently. Success is associated with higher stocks social capital and communities with less economic inequality and less social and ethnic heterogeneity (Olson, 1965) in order to help overcome the collective action problem underlying voice, particularly for poor people. Ostrom (1996) has described instances of successful common property management by communities. She found that reducing the costs and uncertainties of taking part in collective action would decrease the incentive for free riding, cheating, shirking and rent seeking.

The institutional framework for monitoring

Citizens have been directly involved in fighting corruption by monitoring their infrastructure delivery. Service users are considered best placed to monitor the services on which they depend, due to greater incentives and information, as well as the possibility of face-to-face interaction with frontline providers. In the Philippines, an NGO called Concerned Citizens of Abra for Good Government (CCAGG) trains community beneficiaries to conduct audits and monitor project implementation in order to reduce corruption in the construction of public works. Community-based audits have been conducted where corruption is suspected in the delivery of public works have been organised in slum areas of Delhi by an NGO called Parivartan using Right to Information Law (RTI) to access records of public works. Paul

(1992) has demonstrated how organised public feedback in the form of report cards can be used to challenge service providers to be more efficient and responsive to consumers. Transparency International Bangladesh created grassroots pressure groups called Committees of Concerned Citizens (CCCs) to promote integrity and curb corruption in public sector service delivery systems in selected sites of Bangladesh through grassroots participation of the recipients of public services. The 'Corruption Report Card to the Mayor' was initiated in Seoul in 1999. Officers in charge of civil affairs and citizens who have submitted a civil application/signed a contract with Seoul Metropolitan Government in a corruption prone area receive a postcard which they mail back if they have experienced wrongdoing in their dealings. Upon receiving a report card, the Mayor orders an investigation of the reported cases and if corruption has been proven, the Mayor issues appropriate punitive measures, and a reward to the person who reported the problem. The Kenya Urban Bribery Survey is used to assess corrupt practices in urban areas and thereby help inform strategies to increase transparency and accountability at the local level.

Infrastructure of non-governmental anti-corruption organizations

Various global non-governmental anti-corruption organizations have a major role in curbing corruption in the sector; for example *Transparency International* has developed Minimum Standards for Public Contracting provides a global baseline for public contracting rules that meet minimum international standards; *Transparent Agents and Contracting Entities* vets, certifies, and trains intermediaries such as consultants, brokers, sponsors, agents; *Publish What You Pay* calls for business to release information about all payments made to governments to ensure the funds benefit the public rather than corrupt bureaucrats or politicians. Trade or professional association governs the industry that grant professional status to members have a key role in making judgements about the acceptability of conduct on the basis of peer judgment. However reported cases of professional misconduct in relation to corruption are rare. Professional associations are often a source of pressure for major innovations. Professionals can be champions for reform, putting pressures on politicians and policymakers for reform.

Transparency International advocates the use of an Integrity Pact, which commits the authority and bidding companies to refrain from bribery. The Integrity Pact is a tool that has already been successful in reducing

corruption and cutting the costs of dozens of procurement procedures around the world, for example it has been used successfully in Pakistan, Nepal, Indonesia, and in Colombia by the local TI National Chapters. Most recently Integrity Pacts are to be used in the EUR 2 billion development of the Berlin-Brandenburg International Airport in Germany. TI Argentina (Poder Ciudadano) has adapted the Integrity Pact to include public hearings where municipal authorities convene citizens, businesses, experts, and representatives of the opposition to express their objections and suggestions about the planned terms of the contracting. Individual, company or industry-specific codes of business conduct and professional standards are also key in corruption prevention.

Recently, there have been a number of initiatives intended to build awareness and dialogue within the private sector on good business practices, transparency, and accountability for those training and working in the construction industry. *The Wolfsberg Principles* is an effort by private companies to fight corruption by practicing sound business and accepting to submit their social and ethical performance to public monitoring and scrutiny (corporate accountability). *Business Principles for the Construction Sector* is endorsed by 19 leading international construction firms with annual revenues in excess of \$70 billion (the initiative has been facilitated by the WEF, Transparency International and the Basel Institute on Governance) to bolster transparent and ethical business conduct in the industry. An organization which adopts the Business Principles commits: to adopt a "zero tolerance" policy on bribery; development of a practical and effective program of internal systems and controls for implementing its anti-bribery policy.

Institutions supporting freedom of information

Access to information is one of the most effective tools to curb corruption; greater transparency can make a significant contribution to reducing corruption and embezzlement. In the case of education, Anderson et al (2003) found that publicizing the amounts of school grants greatly increased parents' and others' ability to monitor local officials handling of the funds and led to massive improvements in the share of the funds reaching the schools. Public disclosure laws such as The Right to Information Legislation and public hearings have been used to audit government budgets in India (Goetz and Jenkins, 2001). A grassroots organisation called Mazdoor Kisan Shakti Sangathan (MKSS), has triggered civic action against

corruption in the public sector by raising citizens' awareness of the goods and services they should receive and confronting local politicians with discrepancies between policy statements and actual delivery. Participatory public expenditure tracking surveys were carried out in Uganda (1996) to find out why Structural Adjustment Programmes specifically supporting spending on basic services had not improved development outcomes of service delivery. TI Serbia developed the programme "Towards More Transparent Budgeting and Public Procurement in Municipalities in Serbia" in order to increase the efficiency and quality of municipal services, to improve communication and relations between the municipal administration and citizens and to establish a more efficient and transparent budgeting and public procurement system (Steets, 2001).

An effective media can do much to disseminate information about corruption in the construction sector informing both the public and policymakers and prompting investigations by official bodies. Transparency International Bangladesh (TIB) developed the 'News Scan Database', a database of corruption stories from newspaper archives. This tool is intended not only to measure the nature and extent of corruption in Bangladesh, but also to encourage the media to further investigate and report instances of corruption. Thailand (TT) produced a series of radio shows (in Bangkok and more remote and rural areas of Thailand) dealing with the problems of corruption and the lack of transparency in government and business circles.

www.licitenet.com is an online database created to inform the public about the process of public procurement in Ecuador. It is a joint initiative between the private sector and civil society to create more transparency within public procurement, to allow the public to follow and monitor procurement of relevance to their community and to decrease the discretionary powers of public officials in this area. E-procurement has been recognized the world over as an important instrument for checking corruption and misuse of power. An e-procurement system was introduced in the Republic of Korea in 1998 for purchasing goods and services and arranging contracts for construction projects. All procurement from purchase requests to electronic tendering, and payment is processed on line. Automation has simplified the bidding procedure, improved competition, avoided preferential treatment, and eliminated non-arbitrary behaviour.

Conclusions

This paper has described and defined corruption, examined how corruption affects the way infrastructure services and discussed how accountability can be operationalized in the context of infrastructure services. Many successful institutional innovations, that seek to improve the relationships of accountability between the main actors (service beneficiaries, the state, and providers), show clearly how corruption can be combated in the delivery of infrastructure services worldwide, making it possible to construct, operate and maintain infrastructure on a more sustainable basis.

Multiple institutional channels of accountability have been discussed in this paper— *institutional restraints* (independent and effective judiciary, parliamentary oversight, courts, ombudsman, anticorruption commissions and other watchdog enforcement agencies as well as other forms of prosecution and enforcement); *citizens voice* (community level institutions, shaped by cultural norms and practices, can facilitate improved outcomes for the infrastructure sector and improve services for the poor); *institutional framework for monitoring* (citizens monitoring their infrastructure delivery); *infrastructure of non-governmental anti-corruption organizations* (such as Transparency International, Publish What You Pay, Transparent Agents and Contracting Entities as well as professional bodies and private sector initiatives) ; and *institutions supporting freedom of information* (public disclosure laws, the media and Information Communication Technologies).

Institutional reforms, particularly those based on grassroots public action¹, change power relationships among actors and as such they are political reforms. Thus, institutional reform is risky, “a threat to powerful vested interests” (Freire, 1972); it is aimed at transforming the political and social structures that reproduce, or advance certain interests. White (1996; 14) recognised that if the voiceless gain a voice it should threaten the status quo and those who benefit from it, and this would be expected to bring conflict in

¹ Grassroots public action in the process of social change might be either collaborative, whereby people support government actions, or adversarial, where public demands initiate services (Dreze and Sen, 1989; 259).

society. Although conflict from institutional change is not inevitable; Sen (1992; 275) proposes the co-production of accountable public services whereby, “we can think of people participating along with governments in defining needs, in making choices appropriate to those needs, and in enforcing accountability.”

Thus, in conclusion, just as multiple institutional channels of accountability are required to combat corruption in the infrastructure sector, there is also the need for co-production by the main stakeholders² (service beneficiaries, the state, and providers) if they are to secure better governance for the delivery of infrastructure and to improve both provision and performance of infrastructure services.

² linked by relationships of accountability

References

1. Abers, R. (1998) 'Learning democratic practice: distributing government resources through popular participation in Porto Alegre, Brazil' pp.39-65 in Douglass, M., Friedmann, J. (ed.) *Cities for Citizens*. West Sussex: John Wiley and Sons.
2. Anderson, J, Kaufmann, D and Recanatini, F (2003) *Service Delivery, Poverty and Corruption—Common Threads from Diagnostic Surveys*. Background paper for 2004 World Development Report, Washington DC: World Bank. June
27.www.worldbank.org/wbi/governance/capacitybuild/d-surveys.html.
3. ASCE [American Society for Civil Engineers] (September 30, 2004) Press Release: *Civil Engineers Call For Global Standards to Curb Trillion Dollar Worldwide Corruption*.
http://asce.org/pressroom/news/display_press.cfm?uid=1711
4. Bardhan, P. (1989) 'The New Institutional Economics and Development Theory: A Brief Critical Assessment', *World Development*, Vol. 17 (No. 9), pp.1389-1395.
5. Beall, J. (1997) 'Assessing and Responding to Urban Poverty: Lessons from Pakistan', *IDS Bulletin*, Vol. 28 (No. 2), pp.58-67.
6. Bo Dal. E. and Rossi M. A. (2004) *Corruption and Efficiency: Theory and Evidence from Electric Utilities*. Mimeo, University of California, Berkeley, and University of Oxford.
7. Cavill, S. and Sohail, M. (2005) Improving public urban services through increased accountability. *Journal of Professional Issues in Engineering Education and Practice*, American Society of Civil Engineers.
8. Commission for Africa (2005). *Our Common Interest: Report of the Commission for Africa*.
<http://www.commissionforafrica.org/english/report/introduction.html>
9. Considine, M. (2002) 'The End of the Line? Accountable Governance in the Age of Networks, Partnerships and Joined up Services', *Governance*, Vol. 15 (No. 1), pp.21-40.
10. Davis, J. (2004) Corruption in public service delivery: experience from South Asia's water and sanitation sector. *World Development*, 32 (1), 53-71.
11. Deininger, K. (2003) Does cost of schooling affect enrolment by the poor? Universal primary education in Uganda, *Economics of Education Review*, 22, 291–305.
12. DFID [Department for International Development] (2002) *Making Connections: Infrastructure for Poverty Reduction*. www.dfid.gov.uk/pubs/files/making_connections.pdf
13. Dreze, J., Sen, A. (1989) *Hunger and Public Action*. Oxford: Clarendon.
14. Estache, A. (1994) 'Making Public Entities Commercial', *Finance and Development*, pp. 22-5.
15. Estache, A. and Kouassi, E. (2002) *Sector organization, governance, and inefficiency of African water utilities*. The World Bank Institute, World Bank Policy Research Working Paper No. 2890.
16. Friere, P. (1972) *Pedagogy of the Oppressed*. Harmondsworth: Penguin.
17. Gelb, A., Knight, A.JB., Sabot, RH. (1991) 'Public Sector Employment, Rent Seeking and Economic Growth', *The Economic Journal*, Vol. 101 (No 408), pp.1186-99.
18. Girling, J (1997) *Corruption, Capitalism and Democracy*. London; Routledge.
19. Goetz, AM., Jenkins, R. (2001) 'Hybrid Forms of Accountability: Citizen Engagement in Institutions of Public Sector Oversight in India', *Public Management Review*, Vol.3 (No. 3), pp.363-383.
20. Grindle, M., Thomas, J. (1991) *Public Choice and Policy Change*. Baltimore: John Hopkins University Press
21. Hardin, G. (1968) 'The Tragedy of the Commons', *Science*, Vol. 162, pp.1243-8.
22. Klitgaard, R (1988) *Controlling Corruption*. Berkeley; University of California Press.
23. Lam, WF. (1996) 'Institutional Design of Public Agencies and Co-production: A Study of Irrigation Associations in Taiwan', *World Development*, Vol. 24 (No. 6), pp.1039-1054.
24. Moore, M., Putzel, J. (1999) *Thinking Strategically About Politics and Poverty*. Brighton: IDS Working Paper 101.
25. Narayan, D, Chambers, R, Shah, M K, and Patesch, P (2000) *Voices of the Poor: Crying out for Change*. Oxford: Oxford University Press.
26. North, D. (1990) *Institutions, Institutional Change and Economic Performance, Political Economy of Institutions and Decisions*. New York: Cambridge University Press.

27. O' Donnell, G.O. (1999) 'Horizontal Accountability in New Democracies', Schedler, A., Diamond, G.O., Plattner, M.F. (eds.) *The Self Restraining State: Power and Accountability in New Democracies*. London: Lynne Rienner.
28. OECD Anti-Bribery Convention Against Bribery of Foreign Public Officials in International Business Transactions (1997)
29. Olson, A.J. (1965) *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.
30. Ostrom, E. (1996) 'Crossing the Great Divide: Co-production, Synergy and Development', *World Development*, Vol. 24 (No. 6), pp.207-234.
31. Ostrom, E., Schroeder, L., Wynne, S. (1993) *Institutional Incentives and Sustainable Development: Infrastructure Policies in Perspective*. Boulder: Co-Westview Press.
32. Paul, S (1992) 'Accountability in Public Services: Exit, Voice and Control', *World Development*, 20(7), 1047 – 1060.
33. PricewaterhouseCoopers' (2003) Global Economic Crime Survey
34. Putnam, R. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
35. Reddy, S. (1995) 'Strategies of Social Provision: Key Design Issues'. Chapter 5 in Mwambu, G. (1995) *New Patterns of Social Service Provision in Low-Income Countries*. UNU/ WIDER.
36. Rodriguez, D., Waite, G. and Wolfe, T. (eds.) (2005) *The Global Corruption Report 2005* London; Pluto Press. <http://www.globalcorruptionreport.org>
37. Schedler, A. (1999) 'Conceptualising Accountability', pp. 14-17 in Schedler, A., Diamond, G.O., Plattner, M.F. (eds.) (1999) *The Self Restraining State: Power and Accountability in New Democracies*. London: Lynne Rienner.
38. Schedler, A., Diamond, G.O., Plattner, M.F. (eds.) (1999) *The Self Restraining State: Power and Accountability in New Democracies*. London: Lynne Rienner.
39. Sen, G. (1992) 'Social Needs and Public Accountability; the case of Kerala'. Chapter 10 in Wuyts, M., Mackintosh, M., Hewitt, T. (eds.) (1992) *Development Policy and Public Action*. Buckingham: Open University.
40. Shadrach, B. and Ekeayanwu, L. (2003) Improving transparency, quality and effectiveness of pro-poor public services using the ICTs: An attempt by Transparency International, paper presented at the 11th International Anti-Corruption Conference Seoul 25-28 May 2003.
41. Stansbury, N. (2004) Exposing the foundations of corruption in construction. In *Global Corruption Report (2005) Special Focus: Corruption in Construction and Post Conflict Reconstruction*.
42. Steets, J. (2001) *Serbia: Budgeting and Public Procurement*. Transparency International
43. Tendler, J. (1997) *Good Governance in the Tropics*. Baltimore: The Johns Hopkins Press.
44. The Economist (2003). *France's Battle for Reform: is it a turning point?* 28th June: pp.5.
45. Uphoff, N. (1986) *Local Institutional Development: Analytical Sourcebook*. Kumarian Press.
46. Walsh, K. (1995) *Public Services and Market Mechanisms: Competition, Contracting and the New Public Management*. Basingstoke: Macmillan.
47. White, S.C. (1996) 'Depoliticizing Development: the Uses and Abuses of Participation', *Development in Practice*, Volume 6 (No 1), pp.6-15.
48. World Bank. (1994) *World Development Report, Infrastructure for Development*. Washington DC: World Bank.
49. World Bank. (2004) *World Development Report: Making Services Work for Poor People*. Washington DC: World Bank.