PETTY CORRUPTION, DEVELOPMENT AND INFORMATION TECHNOLOGY AS AN ANTIDOTE

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Introduction

Over the past fifteen or so years inter-governmental organisations, states and civil society organisations have openly acknowledged the threat to development from the corrupt activities of public officials, politicians and multinational companies (MNCs). This link between corruption and development has been underlined by the World Bank thus:

[I]t is not just the financial damage from fraud and corruption that should be of concern to us. It is the fact that corruption sets in motion a chain of events that can wreak havoc on a development project. The money to pay a bribe must come from some part of the project; as a result, prices may be raised, and/ or quality and performance lowered. Less qualified bidders win by bid rigging while qualified bidders become discouraged and stop bidding. In addition, citizen awareness of unchallenged corruption undermines trust in government and public institutions, which leads to acquiescence to poor quality and performance in public services and infrastructure – and to an unwillingness to report fraud and corruption. All of these effects must be considered when we assess the true impact of corruption on publicly financed projects.³

Economists have also highlighted the detrimental impact of corruption on development. According to Mauro⁴ and Shleifer and Vishny⁵ corruption impedes economic growth, which in turn affects development. Dreher and Herzfeld's study also confirms this negative impact of corruption on development. According to their survey 'an increase of corruption by about one index point [on the International Country Risk Guide] reduces GDP growth by 0.13

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³ The World Bank Group *Annual Report on Investigations and Sanctions of Staff Misconduct and Fraud and Corruption in Bank-Financed Projects Fiscal Year 2004* Washington DC: The World Bank, 2004.

⁴ Mauro, P 'Corruption and Growth' (1995) *Quarterly Journal of Economics* 60(3): 681.

⁵ Shleifer, A and Vishny, 'Corruption' (1993) *Quarterly Journal of Economics* 108(3) 599.

percentage points and GDP per capita by 425 US\$'.⁶ The reduction in economic growth means more poverty. A cross-national analysis of 56 countries by Gupta *et al* found that there is poverty alleviation only when there is higher growth.⁷ Given the close link between corruption, economic growth and development, and poverty alleviation it should come as no surprise that the international community sees combating corruption as a key priority. The first step towards combating corruption was (1) the adoption of conventions that would bring about harmonization of anti-corruption laws at a global level and (2) the formulation of soft law instruments promoting responsible behaviour on the part of businesses.⁸

Amongst those engaged in the drafting of the treaties are international and regional organisations such as the United Nations, the Organisation for Economic Cooperation and Development, the Organization of American States, the Council of Europe and the African Union. There are therefore too many anti-corruption treaties⁹ to analyse here in any detail.¹⁰ Instead brief references are made to some of the anti-corruption conventions to provide some idea of their scope. All of them at a minimum require Contracting States to criminalize the giving of bribes thus focusing on the supply side of bribes. The Anti-bribery Convention drafted by the OECD for instance focuses solely on the supply side of bribes since it was primarily drafted to combat the widespread practice of bribing public officials by the private sector to obtain lucrative business contracts abroad. The other conventions go further requiring contracting states to criminalize the demand of bribes (soliciting of bribes), embezzlement, trading in influence and money laundering. The UNCAC covers all these aspects.

An interesting observation however in relation to all of the anti-corruption conventions is that they do not make any distinction between petty corruption or grand corruption and therefore do not require the contracting states to make such a distinction when implementing the convention upon ratification. In other words the conventions do not make a distinction between payment of US\$ 100 as a bribe to a passport officer to obtain a passport quickly (petty corruption) and the payment of US\$ 100,000 as a bribe to a public official for obtaining a lucrative contract (grand corruption). Both these acts are covered by the same offence. These treaties do not view grand corruption and petty corruption differently though much of

⁶ Dreher, and Herzfeld, T 'The Economic Costs of Corruption: A Survey and New Evidence' (2003) available at <http://ideas.repec.org/p/wpa/wuwppe/0506001.html>.

⁷ Gupta, S; Davoodi, H and Terme, RA 'Does Corruption Affect Income Equality and Poverty' (1998) IMF Working Paper 98/76. See also Qubria, M G 'Growth and Poverty: Lessons from the East Asian Miracle Revisited' (2002) Asia Development Bank Research Paper 33 which shows that rapid economic growth in the East Asian economies saw a reduction in poverty.

⁸ See for instance the OECD Guidelines for Multinational Enterprises (available at <http://www.oecd.org/investment/mne/2011update.htm>). These guidelines in Part VII deal with combating bribery, bribe solicitation and extortion. It requires companies to ensure that they do not pay bribes, facilitation payments and to have internal controls and compliance mechanisms, promote transparency, integrity and employee awareness within the institution and not make illegal contributions political parties and political organizations.

⁹ Of the international treaties the United Nations Convention against Corruption 2003 (UNCAC) and the Organisation of Economic Cooperation and Development's Convention on Combating Bribery of Foreign Public Officials in International Business Transactions 1997 (OECD Anti-Bribery Convention) are the most well known and have had a significant impact. The former has received well over a hundred ratifications and could therefore be said to be a truly global convention. The OECD instrument has been ratified by all the OECD member states (consisting of developed nations who are major actors in international business) and also a few emerging economies such as South Africa. However countries like India and Russia have not yet ratified this Convention. The list of anti-corruption instruments which are regional and therefore have limited impact compared to the UN and OECD Conventions include the Organization of American States' (OAS) Inter-American Convention Against Corruption, the Council of Europe Convention on Corruption 1999, the African Union Convention on Preventing and Combating Corruption 2003 and the Southern African Development Protocol against Corruption 2001.

¹⁰ For a more detailed overview of these conventions see Carr, I (2007) 'Fighting Corruption through Regional and International Conventions: A Satisfactory Solution?' *European Journal of Crime, Criminal Law and Criminal Justice* 15(2): 121.

the scholarly writings do. Grand corruption is generally understood to be corruption that takes place at the upper reaches of society involving the political elite, public officials, middle men and the private sector. For instance, corruption in arms deals is an illustration of grand corruption.¹¹ Petty corruption, on the other hand, is normally understood to be corruption faced by citizens and the private sector on a daily basis to receive basic services such as connections to utilities, obtaining passports, school admission and customs formalities. As opposed to grand corruption that involves millions of dollars, petty corruption is ignored largely in corruption related research. This could perhaps be attributed to the belief that it does not impact on development and the provision of infrastructures the way grand corruption does. The scant attention may also be driven by the view that if grand corruption is reduced this in turn would have a knock on effect on petty corruption. As to whether this will be the case is highly debatable. This paper therefore focuses on petty corruption and argues that it also undermines development and examines the use of Information Technology (IT) creatively to reduce opportunities for engaging in petty corruption. Section A examines the nature of petty corruption and the opportunity creating environments. Section B examines the link between corruption and development and Section C focuses on whether IT could be a useful resource in combating corruption. For this purpose, examples from Commonwealth countries in Africa (Kenya, Ghana) and in Asia (India, Pakistan) to illustrate the *modus operandi* of petty corruption. We chose these countries since they figure as highly corrupt in Transparency International's Corruption Perception Index.¹² Further, given India's unique position amongst the emerging economies in the IT sector¹³ it was felt that it would be useful to assess critically their experience of using IT in providing public services through the highly acclaimed Bhoomi project¹⁴.

A. Petty Corruption – Its Nature

What is Petty Corruption?

A useful starting for a discussion of the nature of petty corruption is Doig's definition. For

¹¹ In a recent news item the Sunday Times is reported as having evidence to show that BAE Systems was implicated in a multi billion rand arms deal, which involved a South African ex minister. 'New evidence of arms deal corruption – report' available at http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=30710:new-evidence-of-arms-deal-What-corruption-report&catid=54:Governance&Itemid=118. Other items on BAE involvement in corrupt deals see for instance 'Arms chief in cover-up over £6m penthouses' *The Sunday Times* 3 February 2013, available at 'http://www.thesundaytimes.co.uk/sto/news/insight/article1206718.ece'

¹² Ghana is ranked 63 with a score of 46, India 94 with a score of 36, Kenya is ranked at 136 with a score of 27 and Pakistan is ranked at 127 with a score of 28 in Transparency International's Corruption Perceptions Index, 2013. For more on this index see <http://www.transparency.org>. The lower the score the more corrupt the country. By way of illustration Denmark which is ranked 1 (least corrupt) received a score of 91. Of course the rank of a country is relative to other countries and the 2013 CPI included 177 countries and territories. Inevitable there are issue with the methodology used by the CPI. Firstly it is perception based and may not give a true picture. Secondly TI are not directly engaged with the surveys and use other surveys to arrive at their scores and ranking. The number of surveys used for these purposes are not uniform across states in that the 2013 index used 8 surveys for Germany, 9 for the US and 3 for Barbados. Regardless of the issues surrounding the methodology the CPI index is regarded as indicative of perceived levels of corruption within a state.

¹³ See for instance 'Contribution of India's IT Industry to Economic Progress' (available at <http://www.economywatch.com/india-it-industry/economic-progress.html>). According to Federation of Indian Chambers of Commerce and Industry 'by 2015 the IT sector is expected to generate revenues of USD 130 billion (NASSCOM) which will create a transformational impact on the overall economy.' (http://www.ficci.com/sector/21/Project_docs/FICCI_website_content_-IT.pdf). NASSCOM stands for National Association of Software and Services Companies which is a trade association for the Indian IT industry and the Business Process Outsourcing industry.

¹⁴ For more on the e-governance projects in India see International Institute of Information Technology (2005) *Information and Communications Technologies for Development: A Comparative Analysis of Impacts and Costs from India* Bangalore: India Institute of Information Technology.

Doig [p]etty corruption is the soliciting or extortion of small payments by low level officials in order to expedite business by cutting through red tape; or to do what they are supposed to do anyway.¹⁵ The key to this type of corruption is that it tends to involve junior level officials who abuse their position to levy a form of arbitrary 'tax' against those who find themselves in need of various services. It is deemed arbitrary because it is often accepted as a way of life in the obtaining of basic goods and services.¹⁶ These arbitrary taxes are often required to facilitate the hastening of a bureaucratic process.¹⁷ The process may be complex or cumbersome involving many government departments. Small payments often referred to as 'grease', ensures the wheels of service, continue to function properly.¹⁸ Such a description tends to suggest that they are a necessity and part of the fabric of society.¹⁹ We however disagree with this view since petty corruption impacts both the individual and social development.²⁰

At the individual level the victims of petty corruption find themselves engaging with bureaucrats who may assist them with the payment of duties for export, an application for a government benefit, or the filing an appropriate tax return.²¹ These examples from everyday life demonstrate its pervasive character thus affecting almost every citizen in the state, regardless of their class or status. Bureaucrats do not exclude the poorer sections of society from their corrupt practices and in some cases, it seems, the poor pay more than the general population. Paul and Shan's interesting survey in India showed for instance that in Bangalore 33% of the poor paid bribes to public officials for government services compared to 14% of the non-poor. This difference may be due to higher illiteracy amongst the poor and the form-filling that is a core factor in the obtaining of even the simplest government service such as health care. The impact of petty corruption is devastating. This has prompted Riley to suggest that 'we should judge petty corruption from the point of view of the poorest people in poor countries'.²² While in the 1990s petty corruption may have affected only the poor, it has become even more pervasive and affects all classes except that middle and upper middle-income groups may have more resources at their disposal to make the payments to corrupt public officials. Based on a sample of 14,405 respondents from 151 cities and 306 villages of twenty states in India, Transparency International India's (TII) study in 2005²³ estimates that 'common citizens of the country pay a bribe of INR 21,068 crores²⁴ while availing one or more of the eleven public services in a year. As high as 62 per cent of citizens think that the corruption is not a hearsay, but they, in fact, have had first hand experience of paying a bribe or "using a contact" to get a job done in a public office.'²⁵ The survey looked at eleven public services police (crime/traffic), judiciary (lower courts), land administration, municipal services, government run hospitals, electricity (consumers), PDS (ration card/supplies), income tax (individual assesseees), water supply, schools and rural financial institutions (farmers).

TII followed this with another study in 2008, this time focusing on below the poverty line

¹⁵ Doig, A and Theobald, R (1999) 'Introduction: Why corruption?', *Commonwealth and Comparative Politics*, 37: 3, 3.

¹⁶ Larmour, P (2007) *A Short Introduction to Corruption and Anti Corruption*, CIES Working Paper, 3.

¹⁷ Jain, A. K. (2001) 'Corruption: A Review' *Journal of Economic Surveys*, 15:75

¹⁸ http://www.readyratios.com/references/inequality/petty_corruption.html - accessed 29 June 2013..

¹⁹ Some consider corruption as a normative system. See della Porta, D. and Vannucci, A. (2012) *The Hidden Order of Corruption: An Institutional Approach*, Ashgate, Surrey.

²⁰ We consider the connection between petty corruption and development in Section B below.

²¹ Mashali, B (2012) 'Analyzing The Relationship between Perceived Grand Corruption and Petty Corruption In Developed Countries: Case Study Of Iran' *International Review of Administrative Sciences*, 78:778

²² Riley, S P. (1999) 'Petty Corruption and Development' *Development and Practice*, 9(1-2): 189, access to basi 190.

²³ TII (2005), *India Corruption Study*, New Delhi, Transparency International India.

²⁴ One crore is a South Asian term for ten million (10,000,000).

²⁵ TII (2005) p, 3.

(BPL) households.²⁶ The survey with a sample size of 22,728 randomly selected across the States found for instance that 40% of the households who had approached police services and land and housing services had paid a bribe. The study estimates the total bribes by BPL households paid to the eleven services in the previous year at INR 8,830 million.

This high level of petty corruption faced by the citizens to access public services is not peculiar to India. Surveys relating to Ghana and Kenya also indicate a high percentage of citizens paying bribes to avail themselves of public services. According to a survey in Ghana conducted in 2011, 78.8% of the respondents had to pay a bribe for utilities such as water and electricity and 64.8% paid a bribe for accessing health services and education.²⁷ A similar trend is also reported from Kenya which reports that 36.1% of those seeking public services were solicited for a bribe and of these 41% paid the bribe.²⁸ A survey conducted by TI Kenya in 2013 also reports the high percentage of bribe paying and states that between 50-74.9% of the respondents had paid bribes in the previous year.²⁹

What emerges from these surveys is that corruption is a serious issue faced by citizens in everyday life thus affecting both their quality of life and rights. The poor fare worse in this context since they cannot afford to access to basic rights such as water and health (guaranteed by the Constitution of their State) due to their inability to pay bribes. In these situations the State instead of being a protector becomes a predator. So what causes petty corruption and are there any shortcomings in the public administration system that could be corrected, improved to lower its incidence?

Causes of Petty Corruption

According to Poeschi and Ribiero petty corruption is more frequent in less developed countries.³⁰ The key cause appears to be where those who are appointed to these low level bureaucratic roles are underpaid and find themselves able, due to opportunity, to exercise this power over citizens in their securing of basic services. Bureaucracy has historically been seen as a tool for good and certainly a necessary remedy for corruption. The Weberian ideal, which fixed the terms for recruitment and employment in office holding, along with ensuring satisfactory levels of pay, arguably minimizes the incidence of petty corruption because the prospect of loss deters those who might consider it as a feasible course of action.³¹ However it seems in many countries that have adopted the Weberian bureaucratic model petty corruption is still an every day occurrence and this is probably because they do not meet all the conditions within the Weberian model, the prominent one being satisfactory wages. The Weberian model assumes that states have the capacity to pay good wages to their bureaucrats and monitor their performance. In developing countries this is certainly not the case and it should come as no surprise that low level officials demand informal payments from citizens for the provision of public services. States also seem to turn a blind eye to such practices. This may be either due to corruption (political corruption) at the higher levels of the state

²⁶ TII(2008), *India Corruption Study*, New Delhi, Transparency International.

²⁷ Ghana Integrity Initiative (2011) *The "Voice of the People" Survey*, Accra: Global Integrity Initiative, p, 10.

²⁸ EACC (2012) *National Corruption Perception Survey (2011)* Nairobi: EACC.

²⁹ The question was: *In the past 12 months, when you or anyone living in your household had a contact or contacts with one of eight services (utilities, tax, education, medical, land, registry, judiciary, police), have you paid a bribe in any form?* See Transparency International's Global Corruption Barometer 2013 <http://www.transparency.org/gcb2013>, p 10.

³⁰ Poeschi, G and Ribiero, R (2012) 'Everyday Opinions on Grand and Petty Corruption: A Portuguese Study' Working Paper, OBEGEF, 8.

³¹ See Becker, G and Stigler, G (1974) 'Law enforcement, Malfeasance, and the Compensation of Enforcement' *Journal of Legal Studies*, 3:1 and Weber, M. (1978) *Economy and Society*: G. Roth and C. Wittich (eds) Berkeley: University of California Press quoted in Dahlstrom, C. (2012) 'Bureaucracy and the Different Cures for Grand and Petty Corruption' University of Gothenburg, QOG, Working Papers, Number 30 pp 3-5.

machinery or as Sundell states lawmakers may tolerate 'informal payments to bureaucrats since it is one way of financing the state'. Using the 19th century as an illustration he shows that informal payments over time were standardized thus imparting predictability for citizens. Over time these directed payments were substituted with 'fixed salaries for bureaucrats, financed by user fees'.³² These user fees normally in the form of stamp tax were subsequently replaced by income tax. The idea of formal user fees as a means of curbing corruption has found some favour in recent times.³³ The results are mixed. According to Barber, Bonnet and Bekedam user fees introduced in the Cambodian health service increased the utilization of the services and curbed the practice of 'under-the-table-payments'.³⁴ However the experiences in Africa are different and indicate under utilization of the services by the poor.³⁵

Conducive Circumstances for Petty Corruption

To combat petty corruption it is important not only to understand the causes of corruption but also the circumstances that are conducive to this activity. A study of the cases provided by surveys suggests that complex or cumbersome bureaucratic structures, geographical conditions, monopoly and lack of alternative solutions and poor governance create the necessary climate for engaging in corruption. We pick on a few illustrations below to show how petty corruption takes place in practice.

The transport sector is highly prone to corruption due to the presence of numerous checkpoints on the highways and border controls where there is inter-state or international transportation of goods. A study by Foltz and Bromley³⁶ examined petty corruption in West African trucking, in particular the use of highways between Mali, Burkina Faso, Togo and Ghana to deliver basic goods to these countries. Since Burkina Faso and Mali are landlocked and Togo and Ghana only have sea borders to the south traders are dependent on the highways. The roads have regular checkpoints and barriers, which require the drivers to stop. At these stops an official or officials control the destination of the goods on the truck thus placing these officials in a powerful and monopolistic position. The driver is required to hand over their relevant documents (usually their driving licence) and it is at this juncture that the opportunity for a bribe emerges. The official may decide to prevent or delay onward carriage of the goods unless a bribe is paid.³⁷ Foltz and Bromley note that there were over 1,000 truck trips in 4 countries for the period 2006 to 2009. There were 27,990 useable stops for 919 drivers during these trips. Their data shows that 90% of the stops led to a bribe payment suggesting some of the locations represented a 'captive market'.³⁸ It is clear that the bureaucratic process consisting of many checkpoints, the checking of licences by those manning the checkpoints, and the lack of alternative means of carrying the goods to the countries involved provide the right environment for demanding bribes.

³² Sundell, A (2012) 'Legalize It: An Argument for Formalizing Petty Corruption when State Capacity is Low' Working Paper Series 2, QOG Quality of Government Institute, University of Gotheburg, p.4

³³ Ensor, T (2004) 'Informal Payments for Health Care in Transition Economies; *Social Sciences and Medicine* 58:237.

³⁴ Barber, S, Bonnet, F and Bekedam, H (2004) 'Formalizing Informal payments for Health Care: The Example of Bulgaria' *Health Policy* 62:243.

³⁵ Gilson, L (1997) 'The lessons of user fee experience in Africa' *Health Policy and Planning*, 12: 273.

³⁶ Foltz,JD and Bromley, DW (2012) 'Highway Robbery: The Economics of Petty Corruption in West African Trucking', *Staff Paper Series of University of Wisconsin, Agricultural and Applied Economics*. P 1.

³⁷ Freund C and Rocha N (2009) 'What Constrains Africa's Exports?' *World Bank Policy Research Paper* No. 5184

³⁸ Foltz JD and Bromley DW (2012) 'Highway Robbery: The Economics of Petty Corruption in West African Trucking', *Staff Paper Series of University of Wisconsin, Agricultural and Applied Economics*. P 6.

The utilities sector is another area where citizens face high levels of corruption. The review of corruption in the water sector by Butterworth and de la Harpe³⁹ shows how monopoly, low-paid front level staff and poor contract management in Kenya, for instance, result in over invoicing or under reporting of daily sales to water vendors, tampering with water meters and illegal connections.⁴⁰

One of the clearest examples of petty corruption in action comes with the administration of land in India, which may involve more than one government department. TII have recently suggested that bribery in land services is particularly prevalent where one in five people have reported that they have had to pay a bribe for a land service.⁴¹ In India land titles have to be registered to allow for the obtaining of credit and for the effective use of land. This process of registration is managed by each Indian state and is handled directly by the revenue and registration departments. At a number of bureaucratic levels the opportunity for bribery is apparent⁴² because the wide-ranging uses of land, including sale, purchase, registration and partition can require a visit to both the registration and revenue departments. TII's study of corruption in 2008 indicates that of the 18% of the group identified who visited the Department of Registration, 51% experienced corrupt practices. Interestingly the levels of corruption were deemed unchanged or worse in 88% of the respondents who felt they had experienced some form of corruption.

The experiences of a farmer, Dhaula Ram, cited in the TII study provides a typical example. The farmer owned a small agricultural holding in Shai Pur who wished to obtain a bank loan to increase productivity on the farm. For this he had to obtain the land record document. He visited the revenue office four times and it was only on the fifth occasion when he paid a bribe was he able to obtain the record, some two hours later.⁴³ This and other stories are vividly considered in this survey and it becomes apparent, when looking at service providers' perspectives, the existence of two separate departments (revenue and registration) to deal with land queries appear to provide a duplication of opportunity for corrupt practices.⁴⁴

Most of the surveys we have cited in this article also indicate that law enforcement is a key area for bribery.⁴⁵ Ahmed and Ahmed who undertook a case study of slum areas in Karachi⁴⁶

³⁹ Butterworth J and de la Harpe J 'Not so Petty: Corruption Risks in Payment and Licensing System for Water', U4 Brief, International Water and Sanitation Centre at: <http://www.u4.no/publications/not-so-petty-corruption-risks-in-payment-and-licensing-systems-for-water/>

⁴⁰ See Transparency International Kenya (2006) *Nairobi Water and Sewerage Company Limited: A Survey, April-May 2005*. Nairobi TI Kenya. According to this study 66% of the respondents had faced water related corruption. See also National Water Integrity Study at: www.tikenya.org/index.php?option=com_docman&task=doc... and see: <http://tikenya.wordpress.com/2012/11/08/transparency-accountability-and-participation-revolutionise-water-service-provision-in-nanyuki/>

⁴¹ See Transparency International's Global Corruption Barometer 2013 at: <http://www.transparency.org/gcb2013>

⁴² See TII (2008), also available at http://www.transparencyindia.org/resource/survey_study/India%20Corruptino%20Study%202008.pdf

⁴³ Ibid, p 124. The story of Dhaula Ram is not taken up after the obtaining of the land record. Most of the agricultural loans are given by public sector banks and corruption is not unknown within these entities. See for instance, 'Fraud at public sector banks - A rampant occurrence?' available at http://www.business-standard.com/article/finance/fraud-at-public-sector-banks-a-rampant-occurrence-113112700132_1.html.

⁴⁴ Ibid, p 128.

⁴⁵ According to TI's Global Corruption Barometer bribery in law enforcement is prevalent. The average percentage, across 95 countries, of people who paid a bribe in law enforcement was 31%, which was the highest in that particular question. The question was: *In the past 12 months, when you or anyone living in your household had a contact or contacts with one of eight services (utilities, tax, education, medical, land, registry, judiciary, police), have you paid a bribe in any form?* See Transparency International's Global Corruption Barometer 2013 at: <http://www.transparency.org/gcb2013>, p 11.

⁴⁶ Ahmed, R. and Ahmed, Q.M. (2012) 'Petty Corruption in the Police Department, A Case Study of Slum Areas of Karachi' *Developing Country Studies*, 2(6): p 78.

indicate that police corruption is highly prevalent. Historically, the police mechanism is described by the researchers as ‘well organised, competent, proficient and honest’⁴⁷ but in the last ten years the police have remained at the top of the ladder of corruption in various perception studies.⁴⁸ According to their survey 45% of the 485 respondents claimed to have visited their local police station. And of these, 78% said they had experienced some form of corruption. Their study examines the different levels of corruption through the different hierarchies of the police force. They suggest that the duty police officer is the most corrupt office within the police where nearly forty three percent of the respondents claimed they had to pay a bribe. The verification officer would appear to be the least corrupt with the traffic police and investigating officers coming somewhere in between. The data from this study suggests that the highest amount of monies were paid to avoid false arrest and to get released from false arrest.⁴⁹ When considering the reasons for corruption the respondents stated that a lack of accountability and a lack of transparency were the overriding factors here. The actor directly involved nearly always demands the bribe.⁵⁰

Transparency or the openness of procedures and the decision making processes within public services is widely recognized as central to reducing corruption. The reason for promoting transparency is that it leaves little room for the public official to exercise his discretion without clarifying or justifying his decisions thus bringing with it accountability. Both transparency and accountability are therefore important factors to make inroads into fighting corruption.

As stated early poor wages in the public sector is also a contributory factor. The question of poor wages however is a factor that is entirely dependent on affordability and is closely related to economic prosperity. Part of the reason for poor wages in some countries (mostly developing) is lack of public funds, and this lack is attributable due to a number of factors ranging from poor tax administration (due to corruption at both the petty and grand level), a thriving shadow economy,⁵¹ to misuse of development funds by the political elite and the resulting lack of infrastructure. As for the simplifying the bureaucratic structures and introducing transparency and accountability the use of Information Technology (IT) has been heralded as the panacea. The surveys from India and Ghana that we have cited in this paper see IT as a means of introducing transparency and accountability in the public services thus helping towards reducing petty corruption. Before we consider IT as an antidote to corruption in the following section we would like to briefly consider the impact the link between petty corruption and development in order to show that petty corruption also affects development just as grand corruption.

B. Petty Corruption and Development

As stated in the introduction petty corruption remains an under researched area even though there are numerous in-depth studies on corruption in the past ten years written by economists, political scientists and lawyers. Most of these studies concentrate on grand corruption, that is corruption between the private sector (mostly multi—national corporations (MNCs)) and high-ranking public officials and the political elite. This may be because it is commonly

⁴⁷ Ibid. p 79.

⁴⁸ See Transparency International Pakistan 2010.

⁴⁹ Ahmed R and Ahmed QM (2012) ‘Petty Corruption in the Police Department, A Case Study of Slum Areas of Karachi’ *Developing Country Studies*, 2(6): 83.

⁵⁰ Ibid. p 83.

⁵¹ See ‘Exploring the Relationships between Corruption and Tax Revenue’ available at <http://www.u4.no/publications/exploring-the-relationships-between-corruption-and-tax-revenue/#sthash.WBKU0fYN.dpuf>

believed that the small amounts of money involved in petty corruption and the effect felt by the common man is unlikely to make an impact on development. This belief can be criticized immediately. First, widespread petty corruption undermines the quality of public services in the state and this in turn affects living standards and human development. According to Behórquez and Devrim ‘a well functioning delivery of quality public services, consistent with citizen’s needs and preference is crucial for a high level of human development, for the effectiveness of public expenditure as well as to maintain citizen’s trust in public institutions’.⁵² Whilst petty corruption may involve small amounts if one were to aggregate the amounts they run into millions. For instance, TII in their 2008 survey estimated the cost of petty corruption in BPL households in the previous year to be INR 8,830 million. This is a huge monetary cost and if the costs of petty corruption to the non-poor are added then this makes a huge dent that is likely to impact on development of local communities and states. It can also be said that petty corruption is a kind of ‘taxation’ on those seeking services which ultimately does not reach the state and instead enters the shadow (underground) economy thus undermining the nation’s GDP.

What is also not realized by those studying corruption and economic development is that petty corruption can deter foreign investors. Support for this view comes from the studies that have focused on petty corruption. Foltz and Bromley,⁵³ in their study of trucking in Ghana considered in the previous section, explain that whilst there is no data for the destination of the bribe received what does become apparent though is that there tends to be a reduction of 1-2% in trade and this in turn deters foreign direct investment (FDI).⁵⁴ The review of petty corruption in the water sector recognizes that incidences of bribery, embezzlement and theft and the abuse of discretion that feature in what are seen as a ‘type of corruption that pervades developing countries with weak governance systems.’⁵⁵ do ‘dampen donor confidence’⁵⁶ thus impacting upon investment in the sector. So, it seems that it is not just grand corruption that impedes economic investment by foreign investors in a country. Petty corruption (which does not share the trappings of grand corruption in monetary exchange or status of the actors involved) also contributes to poor economic and human development.⁵⁷ Against this context our view is that it makes good sense to study the phenomenon of petty corruption alongside grand corruption to enable and promote economic development within a state.

C. IT as an Antidote

The reason for the promotion of IT is that it is perceived as having the potential to introduce transparency and remove the element of discretion that public officials have. This suggested use of IT in the context of fighting corruption sits within the broader framework of Information and Communications Technology for Development (ICT4D). Like the Industrial Revolution,⁵⁸ IT is viewed as an enabler of social transformation for the better⁵⁹ and as

⁵² Behórquez E and Devrim D (2012) ‘Cracking the Myth of Petty Bribery’ *Noted Internacionales CIDOB* 51, March:1.

⁵³ Foltz JD and Bromley DW (2012) fn 36, p.1.

⁵⁴ Ibid. p. 16.

⁵⁵ Butterworth J and de la Harpe J , fn 39.

⁵⁵ Ibid, p 3.

⁵⁶ Ibid, p 24.

⁵⁷ See Asiedu E and Freeman J (2008) ‘The Effect of Corruption on Investment Growth: Evidence from Firms in Latin America, Sub-Saharan Africa and Transition Countries’ available at <http://www2.ku.edu/~kuwpaper/2008Papers/200802.pdf>; Freckleton M, Wright AS & Craigwell R (2010) ‘Foreign Direct Investment, Economic Growth And Corruption In Developing Economies’ available at http://www.ccmf-uwu.org/files/publications/conference/2010/8_1-Freckleton_Wright_Craigwell-p.pdf.

⁵⁸ Refers to the period 1760 – 1850 when fundamental changes in the manufacturing processes took place as result of new technologies and techniques that brought about increased productivity and

playing a major role in all aspects of human life from managing manmade disasters, strengthening human security, building resilience, commerce, education and health to empowerment of women and inevitably citizen-state relationships and transactions (often termed e-governance). Of course all this assumes that the state has the necessary technical and legal infrastructure to take advantage of the many opportunities that IT may provide of engaging and serving the citizens and that there is a high level of general literacy and IT literacy amongst the population. These are pending problematic issues but it is beyond the scope of this paper to delve deeper into these problematic aspects and possible solutions.⁶⁰

In the context of public services it makes sense to use IT to make available various application forms for services such as passports, visa, utilities and taxes and other information relating to processes and procedures to be followed to obtain the public services. Using technology in this way has the immediate effect of reducing opportunities for petty corruption that manifests itself at the very first stages of accessing services. This, in practical terms, means that they do not have pay bribes to public officials to obtain the forms or to even establish which department or section within a ministry deals with the services required by the citizen. Bhatnagar in his Report on the economic and social impact of e-governance states that IT introduces transparency at every level, from access to rules and procedures through to decisions and actions and removes the discretion element away from the bureaucrats thus taking away the enabling feature for soliciting bribes.⁶¹

The surveys conducted by TII and Ghana Integrity Initiative also are of the view that IT can improve governance and thus reduce corruption. The TII survey recommends e-Governance 'to provide SIMPLE, MORAL, ACCOUNTABLE, RESPONSIVE and TRANSPARENT, i.e., SMART⁶² Government. The resulting benefits are less corruption, transparency, paperless offices, greater convenience, revenue growth and/or cost effectiveness'.⁶³ They define e-governance as 'an electronic delivery of government services to citizens, business and other external consumers of such services in a reliable, timely and transparent manner, rather than computerization of one department or the other.'⁶⁴ The Ghana survey also recommends that 'the use of Information, Communications and Technology (ICT), including biometric and online processing of documents such as taxpayer registration and payment of taxes, business registration, passport processing, etc. will further enhance the fight against corruption as it reduces human contact and speeds up things.'⁶⁵ The recommendations see transparency as an important characteristic of the use of IT in the provision of public services.

However for e-governance projects to succeed, according to Patnaik *et al*,⁶⁶ people, process

greater efficiency. For more on the Industrial Revolution see Trinder B (2013) *Britain's Industrial Revolution* Lancaster: Carnegie Publishing.

⁵⁹ Freeman C and Louçã F *As Time Goes By: From the Industrial Revolutions to the Information Revolution* 2002 Oxford University Press, USA, 2002

⁶⁰ For an exploration of some of the problematic aspects see for instance Subramaniam R & Katz E (eds) *The Global Flow of Information: Legal, Social and Cultural Perspectives* 2011 New York: NYU Press; Rajesh M (2003) 'A Study of the Problems Associated with ICT Adaptability in Developing Countries in the Context of Distance Education' *Turkish Online Journal of Distance Education – TOJDE* Volume 4 No 2 available at <https://tojde.anadolu.edu.tr/tojde10/articles/Rajesh.htm>.

⁶¹ Bhatnagar, S (2003) 'The Economic and Social Impact of E-government' available at <http://www.iimahd.ernet.in/~subhash/pdfs/UNDESAeGovReport.pdf>.

⁶² See Heeks, R (2001) 'Building Governance for Development: A Framework for National and Donor Action' i-Government Working Paper Series No 12 published by Institute for Development Policy and Management available at http://www.sed.manchester.ac.uk/idpm/research/publications/wp/igovernment/igov_wp12.htm.

⁶³ TII (2005) p, 207.

⁶⁴ Ibid.

⁶⁵ Ghana Integrity Initiative (2011) *The "Voice of the People" Survey*, Accra: Global Integrity Initiative, p, 20.

⁶⁶ Patnaik P, Das RK & Patra MR (2008) 'Key Characteristics of Indian e-Governance Projects: A Special reference to "Bhoomi"' in Ojha A *E-Governance in Practice* New Delhi: Gift Publishing (also available at <http://www.iceg.net/2008/books/3.pdf>)

and technology are equally important. Technology of itself is insufficient for e-governance success.⁶⁷ According to these researchers the successful execution of an e-governance project needs to address the following factors:⁶⁸

(a) Application characteristics – that takes into account the working style of the government and department, language (especially in a multi-lingual nation), target groups and mission critical application⁶⁹.

(b) System characteristics – that takes into account rigidity/flexibility (since government functions cannot be easily modified), tightly defined user-specifications and integration of multiple systems (software, hardware etc.) across and within department(s) government to ensure homogeneity. Adaptability to challenges posed by new technology is also an important factor to be considered. Further automation of all offices within the department from the lowest to the highest is also required to capture all data thus reducing the possibility of human intervention errors.

(c) Project management – covering cost, resources and uncertainties created by changes in technology from the planning to execution of the project.

(d) Personnel characteristics – to include political leaders, administrators/bureaucrats, consultants/vendors, developers, user departments and citizens.

(e) Risk management – addressing both controlled risks (such as technological, managerial, political and economical) and uncontrollable risks (such as global challenges).

India has embraced e-governance with enthusiasm and over the past ten years a number of e-governance schemes have been set up by different states. They are too numerous to deal with here but the one that stands out and widely cited as showing a high level of success (in the sense of reducing corruption) is the Bhoomi project.⁷⁰ The project was initiated in 1999⁷¹ in the southern Indian state of Karnataka and focuses on simplifying the process for obtaining land records. As stated earlier land records are essential for farmers to obtain loans and receive agricultural related subsidies for seeds and fertilizers. This project automated around 20 million land titles belonging to 6.7 million farmers. Kiosks were set up to access these records and the farmer can now obtain the Record of Rights, Tenancy and Crops (RTC) online by paying a sum of INR 15. This in contrast to the past when it took between 3-30 days to get the certificate, which was dependent on the amount of bribes paid. According to Pathak and Prasad 'the cost to farmers have come down considerably as 84% of the users had to make only one visit to get the serviceThe most important benefit is that corruption had come down from 66% to less than 3%. The Bhoomi project saved the farmers INR 804

⁶⁷ Ibid p, 35.

⁶⁸ This is a brief summary. For more discussion of these characteristics and details such as networking see Patnaik, P, Das, RK & Patra M R (2008) fn 66, pp 35-9.

⁶⁹ E-governance projects are regarded as mission critical since they are critical for the functioning of the Government. So failure of an e-governance project would greatly affect the functioning of the Government

⁷⁰ For more on the Bhoomi project <http://www.bhoomi.karnataka.gov.in/landrecordsonweb/about.htm>. The Bhoomi project was preceded by pilot projects in the early 1990s. There are also other schemes such as Saukaryam (in Andhra Pradesh) relating to municipal services for citizens, which can be accessed via kiosks in civic centres or through websites. It covers all municipal services such as birth and death certificates, applying for building plan approvals and checking tax dues and payment of these online. It is said have benefited the citizens greatly by removing corruption and have also helped the municipal corporation in the collection of taxes (see Pathak, R D and Prasad, RS (2005) 'Role of E-Governance in Tackling Corruption and Achieving Societal Harmony – Indian Experience' Beijing: Network of Asia-Pacific Schools and Institutes of Public Administration and Governance (NAPSIPAG) Annual Conference, (no p no.)). Further details of the project can be found on can be found on <http://www.saukaryam.org>.

⁷¹ It is reported that it was implemented successfully.

million in bribes and INR 66 million in wages annually'.⁷²

The above seems an encouraging story in combating petty corruption and improving the quality of public services. Patnaik *et al* also state that Bhoomi is an illustration of successful governance and they attribute this success to the project meeting all the characteristics outlined above. Table 1 below lists how these characteristics were reflected in the Bhoomi project. They are also of the view Bhoomi benefitted the citizens greatly since the characteristics were taken care of directly and indirectly. According to them post Bhoomi it takes only 5-30 minutes to obtain an RTC whereas under the old manual system it took 3 – 30 days. Similarly the speed of service for obtaining mutation⁷³ is fast, it now takes 35 days under the current system whereas in the old system it took 200 days. While the number of land records were very low in pre-Bhoomi days post Bhoomi 14 million records were distributed. There has also been a phenomenal increase in the number of mutations, from very low figures to 1.6 million due to the Bhoomi Project.⁷⁴

Table 1: Bhoomi Project Characteristics, derived from Tables 1, 2, 3, 4 & 5 in Patnaik *et al* (citing Chethana 2007)

Characteristics for Successful E-Governance	Bhoomi Project
<u>Application Characteristics</u> <ul style="list-style-type: none"> Unique Working Style Language Target group Mission Critical Application 	<ul style="list-style-type: none"> Unique for Karnataka; will require customization for use in other states. Regional language, Kannada, used All citizens Land records very sensitive and critical application
<u>System Characteristics</u> <ul style="list-style-type: none"> Rigidity User specification Integration needs Challenges (Technology) Architecture 	<ul style="list-style-type: none"> Strict following of land records procedures, manuals and statutes Closely followed 3 months for integration Hardware and Networking, Software development and digitization of 20 million records 177 Taluks (ie groups of villages organized for revenue purposes) and 203 kiosks developed Multi tier (n-tier) architecture used for client-server architecture
<u>Project Management</u> <ul style="list-style-type: none"> Time Cost 	<ul style="list-style-type: none"> 2 years (20000 man months) INR 200000000
<u>Personnel Characteristics</u> <ul style="list-style-type: none"> Political Leaders Administrators Officials Developers Citizens 	<ul style="list-style-type: none"> Chief Minister of Karnataka & Union Minister for IT Commissioner of land Records & Administrators of Revenue Department 2000 officials and 10000 Village Assistants Software Development Team Public
<u>Risk Management</u> <ul style="list-style-type: none"> Technical Risk 	<ul style="list-style-type: none"> Paper records in poor condition, volume and

⁷² Pathak, R D and Prasad, RS (2005) fn 70; see also Lobo, A & Balkrishnan S (2002) *Report Card on Service of Bhoomi Kiosks – An Assessment of Benefits by Users of the Computerized Land Record System*, Bangalore: Public Affairs Centre, available at

<http://www1.worldbank.org/publicsector/bnpp/Bhoomi.pdf>, Chawla M and S Bhatnagar (2004) 'Online Delivery of Land Titles to Rural Farmers in Karnataka, India' available at

<http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan042925.pdf>.

⁷³ Mutation refers to the change of ownership title when property is sold or transferred.

⁷⁴ See Patnaik *et al* (2008) fn 66, p, 40.

<ul style="list-style-type: none"> • Managerial Risk • Political Risk • Behavioural Risk 	<p>sensitive nature of data and using biometric finger print</p> <ul style="list-style-type: none"> • Complexity of project and number of people involved • Both internal and external politics involved • Initial reluctance of village accountants
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The picture painted by the various studies on the Bhoomi project referred to in this paper imparts a warm glow of having resolved the inconveniences and petty corruption faced by the ordinary citizens of Karnataka. If this were really the case then it must be applauded for being a resounding success in combating corruption. But there is dark side to this story of success as the following study shows.

Benjamin *et al*⁷⁵ based on their fieldwork⁷⁶ are of the view that Bhoomi has not improved efficiency or transparency and is indeed it is a breeding ground for corruption and exploitation of the small farmers by the political and business elite. Pre Bhoomi obtaining an RTC⁷⁷ or a mutation took 2-3 days. Now it takes longer since they are not available at the village level through village accountants (VAs). According to one small farmer ‘the work could be “fast and efficient” in an emergency’ with local VAs. After Bhoomi, all categories of landowners feel that any significant change like a mutation takes 3-4 months. This becomes all the more problematic due to the dependence of the farmers on agents. Often, if farmers visit the taluk⁷⁸ office (and lose their day’s work), they may find that either the computer is down or that there is a power cut.⁷⁹

Benjamin *et al* also highlight that that a lot of complications arise also due to the misspelling of names on the register. This is likely to have happened when entering details onto the computer system. To rectify the information (known as khata⁸⁰ change) many visits to the taluk office are required which the farmers can ill afford time wise thus enabling the return of middlemen (agents) in the process and creating the opportunities for bribes. Many of the farmers interviewed in this study indicated that bribes had increased substantially, this in spite of the preventive First In First Out (FIFO) measure built into the system. The FIFO places the applications in a queue that have to be cleared in sequence. If the application is not cleared within the time limit allocated the application moves up to higher officer. The intention behind this mechanism is to prevent bribes. According to Benjamin *et al* local officials did not find FIFO a great hindrance. For instance, the study cites a case where the mutation process only took under an hour despite ‘time limits for “public display and information”’ due to the powerful interest behind the mutation.⁸¹ Given their findings which goes against the hitherto positively glowing reports on reduction of petty corruption due to the Bhoomi the researchers following their initial survey decided to survey a further two taluks. While mainly rural, one of the taluks was known for better quality agricultural land and horticulture and the other was economically depressed with the exception a large auto-manufacturing plant set up by an MNC. The findings were no different in these taluks. Bribery was still an issue. Interestingly the interviewees thought that increased corruption was attributable to the centralization of the functions brought about by digitization. Previously they could engage with local officials at the village level like the VA and as a community

⁷⁵ Benjamin S, Bhuvaneshwari R, Rajan P & Manjunatha (2007) ‘Bhoomi ‘E-Governance’, Or, An Anti-Politics Machine Necessary to Globalize Bangalore’ A CASUM-m Working paper available at <http://casumm.files.wordpress.com/2008/09/bhoomi-e-governance.pdf> .

⁷⁶ This fieldwork was conducted in eight taluks in the Bangalore rural district. Intensive interviews were conducted in seven villages. The selection of taluks with characteristics ranging from economically depressed to those that were development hot spots. Ibid. p, 14.

⁷⁷ Known also as *Pahani*.

⁷⁸ Refers to villages grouped together for revenue purposes.

⁷⁹ Ibid. p, 15.

⁸⁰ A document showing a property’s owner who has an account with the municipality for paying taxes.

⁸¹ Benjamin et al fn 42, p, 16.

could exercise pressure on the local officials and also negotiate the bribes to be paid to an affordable level driven by local relationships and dynamics. However with the move of the land services from the village to the taluk level this is not possible since ‘the process involves four administrative layers, or ‘tables’ as they termed it: the VA, the RI [Revenue Inspector], the [administrative officers in charge of revenue collection] Siresdhar, and the Thasildar/⁸²Computer centre ... In the post- Bhoomi period, ... the process is dominated by a network and system of various ‘agents’ who have set a ‘market rate’, and systematized bribing to make it all pervasive, especially in taluks experiencing rapid development’.⁸³

Benjamin *et al* provide a useful table which sets out the time taken for RTC, Mutation and Rectification (Katha change) and the bribes to be paid which varies according to the economic characteristics of the taluk. It is not possible to go through the extensive table in detail here.⁸⁴ By way of illustration, in villages belonging to a relatively less urbanising taluk in pre-Bhoomi days the cost of a RTC was INR 5 to 100 and the services were provided immediately. The service post-Bhoomi takes 2-3 months and costs INR 15+35 and expenses of INR 100 for agent to visit the taluk office. Bribes are on a transaction basis. In an urbanized taluk in pre-Bhoomi days the cost for an RTC was INR 3-50 and the services were provided immediately whereas post-Bhoomi it is INR 15 and INR 100 for processing by an agent. It can go up to INR 300 where a correction is required. The bribes are on an acre basis and the land market is dominated by investors from neighbouring states and large developers that cater to Non-Resident Indians (NRI) and IT firms. In some areas, bribes vary depending on whether the service is required by a local or an outsider. For instance, to obtain a *khata* change post-Bhoomi in a taluk with high value horticulture the bribes range between INR 1 – 2,000 and for an outsider between INR 6-7,000. As is obvious from these few illustrations that the dynamics of the bribe transaction are quite complex and reflect various factors, from the perceived affordability of the bribe-giver to the status of the applicants.

There is another disturbing finding highlighted by the researchers. It seems that the centralization of records is being utilized by the powerful for their own benefit and to the detriment of the small farmer. Small farmers interviewed reported that ‘the centralization of and computerization of records had allowed their survey numbers to be used by large and middle level farmers to access government schemes and benefits like “small farmer” subsidies, seeds, fertilizers and pesticides and plants’.⁸⁵ Further the power dynamics between administrative and political players affect the titles of small farmers largely aided by the centralization process. Benjamin *et al* state that ‘since the late 1990s, large players have dominated the peripheral land marketsSuch players are able to draw on their links to the judicial and administrative elite, often in the form of “partnerships”, to consolidate land belonging to small and marginal farmers and to regularize titles in their favor. In light of these structural issues, not only does the question of bribes or time taken fade into relative insignificance, but management efforts such as FIFO are hardly effective, and the Bhoomi kiosk, and its back office, hardly presents a hurdle. Likewise, given the ‘turn-key’ nature of processing carried out by skilled lawyers with administrative and political backing, a ‘technical fix’, or hardware and software updates, is unlikely to resolve the issue. On the contrary, our respondents mentioned that the relative ease with which information is now centrally available via the Bhoomi program only facilitates the process. To the extent that information is available centrally, there is loss of information locally, and with it is rendered ineffective the claiming process by small and marginal farmers.’⁸⁶

⁸² These refer to gazette officers dealing with land revenue and tax matters.

⁸³ Ibid. p. 16.

⁸⁴ Ibid. Table 1: Whose “Transparency and Efficiency”?

⁸⁵ Ibid. p. 15. See also Acharya, K (2003) ‘The Case of Bhoomi’ *Deccan Herald* 17th October, available at <http://archive.deccanherald.com/deccanherald/oct17/spt2.asp>.

⁸⁶ Benjamin et al, pp 26-7.

What is made clear from the Benjamin *et al* study is that Bhoomi has not been successful. Instead of solving the petty corruption problem it may have created more opportunities for public officials and the powerful elite to obtain undue benefits adding to the woes of the small farmer who is dependent on his small landholding for his livelihood. So digitization and technical fixes such as FIFO to prevent corruption have not made the kind of inroads expected of them. While FIFO may have targeted the corrupt officials it seems they have found ways of getting round the mechanisms and to use digitization in a manner that would benefit them personally. At the end of the day the attempt to remove the element of discretion and bring in greater transparency and efficiency to a system through the use of IT does not seem to have achieved the intended objective.

One must also question whether IT can live up to the high expectations especially of it in countries with a low literacy level. This is particularly pertinent to developing countries. Low levels of literacy means low levels of digital literacy. In these circumstances, more often than not citizens will require the services of middlemen (agents) with close relationships to public officials thus promoting corrupt practices. Alternatively the citizen may turn to the public official for help to access the public service thus creating opportunities for bribery. To prevent corruption it is essential for states to also focus on increasing literacy levels amongst the poor by ensuring that all have access to education including the use of digital technology for accessing basic services. This inevitably will take time.

So apart from educating the public what else is required to prevent petty corruption? An important factor that is omitted in most of the anti-corruption literature is the education of public officials that instill basic values that would make them aware of the detrimental impact of corruption on the infrastructure and their own contribution to this detrimental impact through their participation in soliciting bribes and taking bribes. Equally there needs to be a firm commitment on the part of politicians and the private sector to not engage in corrupt behaviour. Equally citizens will have to also commit themselves to refrain from paying petty bribes and not view it as a necessary 'informal' tax for obtaining public services. It must be pointed out that the UNCAC in Art 7(d) requires States Parties to 'promote education and training programmes to enable them to meet the requirements for the correct, honourable and proper performance of public functions and that provide them with specialized and appropriate training to enhance their awareness of the risks of corruption inherent in the performance of their functions.' As to how far these are implemented by the States Parties is unclear. Article 13 of the UNCAC also places emphasis on participation of society and in para (c) promotes 'undertaking public information activities that contribute to non-tolerance of corruption, as well as public education programmes, including school and university curricula.' Civil Society Organisations across the world continuously engage in this process using various methods such as hotlines for anonymous reporting of bribery, songs and street theatre. In the context of the states of South India the work of a CSO named 5th Pillar has been gathering popularity. Known as the Zero Rupee Note movement it encourages citizens to show their Zero Rupee Note⁸⁷ (issues and distributed by 5th Pillar) when a public official demands a bribe thus 'making a strong statement condemning bribery'.⁸⁸

⁸⁷ See Figure 1 below.

⁸⁸ For more on the 5th Pillar see <http://www.5thpillar.org/programs/zero-rupee-note> .

Figure 1: Zero Rupee Note (for use in Karnataka) as issued by 5th Pillar.

As for IT, without question, it has the potential to make services efficient and transparent to some degree. However the change for the better (lowering petty corruption) will happen only when the people change their ways of dealing and that requires a change in their conduct. We cannot expect IT to bring about this change without honest human participation and their desire to bring about changes in their transactions for the benefit of society as a whole. We have started engaging with this process through a variety of measures ranging from changes in legislation and raising awareness to introducing transparency in public services through the use of IT. However for integrity to firmly take root in a society we need to instill the value of acting for the greater good of society in all.

Conclusion

This paper focused on the under researched phenomenon of petty corruption involving low level public officials and citizens who access public services such as utilities, schools, health care. Using illustrations we showed how bureaucratic procedures can provide opportunities for petty corruption and how IT has the potential to infuse transparency into bureaucratic processes. We focused on a much acclaimed e-governance project in India, Bhoomi, and based on surveys of the project concluded that it has not been a success. The lack of success is not because of the technology. It can without doubt introduce transparency and efficiency. It is the people part e-governance that lets the project down. As long as public officials are motivated by private gain and abuse their public office, solicitation of bribes and the giving of bribes will continue. This is not the fault of IT.