Role of E-governance in Enhancing Administrative Efficiency and Combating Corruption

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Abstract: Bangladesh public sector has been blamed for its inefficiency since the independence. The initiatives of enhancing the efficiency in the public sector have been taken several times in many ways, i.e., some time restructuring the organigram, sometimes by simplifying the process and by effective monitoring. In this regard as many as 17 Administrative reforms commission/committees have formed in various regimes. With the advent of modern technology now a days the expectations of the citizens has increased rapidly and the definition of the efficiency has changed. Therefore, the adaptation on modern technology is become inevitable. Here the article tried to define the administrative efficiency from service and regulatory perspectives. And it tried to show how the administrative efficiency has increased in the board two sector after introduction of E-government (partially) in Bangladesh and some areas beyond the territory of Bangladesh.

1.0 Introduction

Corruption is one of the mostly talked words in the parlance of public Administration. The donor community, the civil society, the thing tanks around the world is raising voice against it. The national government of the developing countries as well as the developed countries is thinking seriously about controlling the corruptions. They have applied many method for combating the corruption around the world by increasing the salary, restructuring the monitoring mechanism, strengthening the anti corruption commissions/ bodies. But here the article has shown correlations between the modern technology in administration and the corruption and has shown how the online government service reduce corruption at the public service delivery end.

Close yours eyes and Imagine a situation in which all interaction with government can be done through one counter 24 hours a day, 7 days a week, without waiting in lines. In the near future this will be possible if governments are willing to decentralize responsibilities and processes, and if they start to use electronic means such as the Internet.

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Each citizen can then contact the government through a website where all forms, legislation, news and other information will be available. This is the demand of the time at par with the technological advancement world wide. Since the inception of the concept of government and public service, the main focus has been the service delivery to the mass people. Sometimes it may be safeguarding the sovereignty, sometimes it may be the health service, sometimes it means ensuring the law and order and what not. In fact the responsibility of a government encompasses many things. It is evident that with the change of time the expectation of the citizens has been changed. Modern science and technology has taken place and the private sector has flourished world wide. Now a day the private sector becomes the competitor for the public sector and is showing more efficiency compare to the public sector. For that reason the government world wide now is moving towards modern technology to survive in the competition. And on the other hand the reality of the globalization is inevitable. Considering the ground realities, the modern technology based administration and governance system has become popular through out the world irregardless of the regions

2.0 Concept of E-Government

It is the use of ICT by the government in managing its affairs. It is the strategic, coordinated use of ICT in public administration and political decision making commonly referred to as electronic government.

It is defined as the application of electronic means for

---Establishing interaction between government and citizens, government and business, and between different levels of government

---Implementing internal government operations to simplify and improve democratic government and business aspects of governance

2.1 Goals of E-Government:

A paper-less government (or least one that has the majority of its forms, documents, and publications online instead of using an Office of Publication).

A government that is accessible to the people including the impaired, the home-bound, and the rural citizen.

An efficient and productive government that uses online sites to avoid lines and endless phone queues.
Access to small business and minorities by doing business using Electronic Document Interchange (EDI) to announce requests for proposals and receive bids over the Internet.

2.2 Components of E-Government

E-Government has four major components:

1) G2C (Government-to-Citizen) involves interaction of individual citizens with the government. Examples include payment of utility bills or downloading government forms from the Internet. Singapore's e-Citizen Portal is one of the most highly acclaimed G2C sites. The portal features relevant information organized by topic and includes specific entry points for teenagers, working adults, senior citizens, and foreign residents. It also includes mechanisms for citizen feedback and questions.

2) G2B (Government-to-Business) involves interaction of business entities with the government. Examples include corporate tax filing or government procurement through the Internet. A notable success story for online government procurement is Malaysia's e-Prohelan website, which has about 3,500 government procurement centers and about 30,000 suppliers.

3) G2G (Government-to-Government) involves interaction among government officials, including interactions within a particular government office and interactions among various government offices. Examples include the use of email for internal government communication or customized software applications for tracking the progress of government projects. A popular G2G service is the e-Police System in Karnataka, India, which features an electronic database of police records.

4) G2E (Government-to-Employee) involves interaction between the government and government employees with respect to services such as salary, pension, and vacation leave. For example, a government may introduce a database-supported personnel data sheet for each government employee that serves as a record of personnel information that can be easily accessed for various applications.
3.0 E-Government and Administrative Efficiency

In the age of globalization E-government is inevitable. E-Government is no longer a matter of choice or debate for Bangladesh or other countries that wish to improve governance standards. Rather, there will come a time in the not-so-distant future when the "e" in E Government will lose its significance, since the primary mode of government service delivery will be E-Government.

The public sector is facing stringent blame for inefficiency. And the expectation of the citizens is increasing day by day because of technological advancement and increased awareness level. Therefore, the public sector is struggling for finding the way towards better efficiency. The introduction of E-Government has open up the horizon for increasing the efficiency at the public as well as in private sector. Before going to measure how the e government is contributing in the process of increasing the efficiency, we need to identify what administrative efficiency stands for.

3.1 Administrative Efficiency

It is really difficult to give a universal definition for efficiency because it is related with the satisfaction of customers which varies with the time and with the advancement of the technology. For example, an efficient service delivery system in 1970s may not meet the demanded efficiency expectation of the citizens in 2009. Still general view of efficiency is "To dispose a certain issue with in an estimated time and minimum cost". Administrative efficiency can be seen from two broad perspectives:

a. Cost perspective.  ➔ Efficiency =input - output = + (positive)

b. Procedural perspective. ➔ Human aspect, social aspect, psychological aspect etc.

3.2 Operational Definition

Here in this article we will confine the sphere of administrative efficiency within the required time of disposal of an administrative issue, the cost effectivity, availability of information and human sufferings (waiting for long time for a decision creates some human sufferings)
3.2.1 Role of E-Government in enhancing Administrative Efficiency

Public sector has to contribute in the welfare activities for the citizens as well as in the regulatory functions. Therefore, state has to intervene in the two board sectors:

a Service Sector

a Regulatory function.

To measure the role of e-government in enhancing the administrative efficiency both the board two sectors need to take into account. And this article will cover all the components of e-government in the evaluation process of e-government in terms of efficiency enhancement.

3.2.2 G to C and G to B Level

Service sector:

It includes interaction of individual citizens with the government. Here the government provides various services to the citizens on line. Let’s compare the pre E-government situation with the E-government situations.

3.3 Pre E-Government situation

a Citizens have to go to the government offices physically for information.

a Citizens have to stand in queue for having services including payments of utility bills.

• For application in any respect citizens had to go to the respective offices for collecting the forms.

a To monitor the progress of a file one needed to go to the offices physically. Etc

a For having a trade license the businessman has to wait for months together.

3.4 E-Government Situation

Every government entity has its own web site which supposed to contain almost all information of the department. Citizens are now able to collect necessary information from the respective web sites.

a Application forms are available on line.

a An application on line for certain services is recognized.
• Payment of utility bills online is recognized.
• Citizen can track the position of file online.
• Having any decisions online without going physically.

All these facilities help to reduce the cost as well as the procedural harassment of the citizens and thus enhance the efficiency in both cost perspective and procedural point of view.

3.5 Process of enhancing efficiency (Analytical framework)

The process under the e-government situation can be figured in the following way:

Pre E-Government Situation:

- In the figure A, B, C, D, E represent the different decision-making stages at the ministerial level.
- In the ministry level decisions are taken at maximum five stages (Assistant secretary to secretary), and each stage consumes time and cost.

3.6 Post E-Government Situation

Figure: Shows the process under manual procedure and after the introduction of E-Government at the ministry level.
3.7 Case Study (Related to service)

E-application and disposal system in foreign training section under ministry of Establishment:

3.7.1 Situation before

A BCS (Admin) cadre officer was on deputation in UK, at London Metropolitan University for a Phd. Program. When he lives country the Ministry gave him two and half year leave. But the officer could not manage to complete the course in time, he requires six months more leave to complete his Phd. He applied by post for his extension of leave but the authority did not accept the application for some grounds. By this time the tenure of his leave has almost come to an end. Finding no other alternative he had to come to Bangladesh and fortunately could manage the extension at last. In the total process he had to spend a lot of money and valuable time. It did give some mental pain as well.

3.7.2 Situation after the introduction of the E-disposal

After the introduction of E-disposal system an officer from Germany has applied on line for his extension of leave. The officer in charge of the foreign training section just after having the application online, process the document accordingly with in 7 days and after the formal approval just scan a copy of official order and send that to the applicant through E-mail. The whole process has saved the time, money and the psychological pressure.

3.7.3 E-Billing

After the introduction of e billing and payments for the utility services in Bangladesh the disposal level of the services has been increased and the customer satisfaction has also increased.

3.7.4 Automations of Custom house at Chittagong Sea Port

After the automation of Chittagong port custom house the disposal stages for a custom clearance has decreased up to 36 times. This speed up the Clarence process rapidly. Now the Chittagong custom house takes max 3 days for delivery of an item.

3.7.5 Government Forms Online

Accessing government forms online is made possible by the Prime Minster's Office of Bangladesh though a project funded by UNDP.
Bangladesh. This not only saves time but also the cost and hassles associated with the traveling to the government offices located at a distance.

**3.7.6 Electronic Birth Registration System**

Electronic Birth Registration System was introduced by The Rajshahi City Corporation (RCC) and the Local Government Division of the Ministry of Local Government with technical and financial support from UNICEF. This is probably the best local level e-governance example of Bangladesh where a local government body, in their own initiatives and leadership and with support from a development partner took such a bold step forward. The system also doubles as an immunization management system. Once registered, the system also generates an immunization schedule for every child. To system generated ID is also used to get admission in the public schools of the city. Thus the information needed for various purposes is made available which has increased the efficiency of the public sector.

**3.7.7 Hajj Web Site**

The Ministry of Religious Affairs, GoB introduced the Hajj Web Site in 2002 to service ten and thousands of pilgrims who go to Mecca to perform holy Hajj. During the Hajj, the website also acts as an important information portal for the family members of the pilgrims and other interested persons and organizations. One of the best examples of a Public-Private Partnership project, the site provides timely and reliable information to a large segment of the population.

**3.7.8 E- licensing in Singapore**

In Singapore if a business man wants a trade license, he needs just an application on line in a web portal and e payment of money. Within seventy two hours he will get the license if he is eligible for license.

**3.8 Regulatory Functions**

**3.8.1 Pre E - government situation**

- Law and order based on physical patrol.
- Monitoring and evaluation based on papers and visit..
- Immigration activities based on manual process.
- Verification and cross check by paper documents. etc.
3.8.2 E-Government situation

After the introduction of e-government the whole law and order situation would be under cctv camera which would be centrally monitored. All entry points like the air port, sea port. Land port would be interconnected with the central criminal database of the police or immigration authority thus the efficiency of the police administration would be increased.

3.9 Case study (related to regulatory affairs)

3.9.1 Automation of Internal Processes

Bangladesh Bank (central bank of Bangladesh) began to computerize its functions almost at the same time most government offices started investing in automation. However, the Bank is only among the handfuls that have been successful in integrating ICT into the core business processes of the institute. Today it is one of the most fully computerized public institutions in the country. The current system actually automates most of the Banks operational processes and some of the most important strategic processes including monitoring of commercial bank transactions. Thus it regulates the banking of the country which obviously enhance the efficiency of the central bank

3.9.2 CCTV Camera set up by Dhaka Metropolitan police (DMP)

Recently DMP has set up 155 cctv camera in 59 key points of Dhaka city and it is now monitoring centrally. After the installation of the cctv the crime rate has significantly decreased in those areas.

3.9.3 Financial Management System

On the backdrop of not to successful project such as reforms in the Budgeting and Expenditure Control (RIBEC 1 and RIBEC 2) and somewhat successful RIBEC 2A and then RIBEC 2B, Ministry of Finance has gradually and surely the ministry of Finance now have developed a quality MIS system that is successfully used for budget planning, sensitivity analysis, impact analysis, financial projections and other core processes of the ministry. In terms of budget preparation now the efficiency has increased a lot.

Interstate Computerized Check posts at Gujarat in India:

Ten check posts on interstate highways entering the state of Gujarat in India were computerized with the objective of tightening the inspection of incoining trucks for overloading and validity of
document. The project was implemented in 9 months at a total cost of $14 million, of which construction of roads leading up to the check posts accounted for 70% of the expenditure. The essential components of computerization were: a video camera to capture registration numbers of incoming vehicles; electronic weigh bridge for weighing truck to determine overload; creation of a data base of trucks to retrieve un laden weight of the truck; and installation of a wide circuit video camera based monitoring system. The central office in the capital state of Headband was to receive images from the check posts to monitor the activities. As compared to the manual system where only 2% of the incoming trucks were flagged off the road for overloading, the current system enables a 100% check. The system was expected to reduce corruption by automating the fine levying process on overloaded trucks. There was a substantial increase in the fine collection over 3 years from $19 million to $ 50 million. Judged on the basis of the revenue increase, the application was perceived to be very successful.

3.10 G to G Level

Government has to do many works within and among the government departments. With the advent of e-government the level of efficiency has increased in term of correspondences.

3.10.1 Pre E- government situation

- files goes to one department to another physically
- letter goes from one department to another for opinion / verification
- Inter department1 inter ministerial meetings (Physical existence is required)
- Monitoring and evaluation based on paper.

3.10.2 E -Government Situation

If inter connectivity is prevailing among the departments and if LAN is available within the department, the time and the cost to dispose an issue or to provide a service will significantly reduce.

For example, if home minister want to have a meeting with the law and order committee of Bagerhut, it is just a matter of few minutes through video conferencing. It will increase the effectively of decisions and save the valuable money of the republic.
Again, if a file of ministry of establishment requires Prime Minister Signature, under the effective e government situation it will be just a matter of few clicks which in fact bring efficiency in administration.

Analytical frame work:

The straight line (black line) shows the physical distances and the arrow line in blue shows the interconnectivity which in fact makes everything easy, it is also cost effective, and time is saved by the system.

Figure 2: Figure shows how the physical distances can be minimized by E Government.

3.11 G to E Level

In case of personnel matters with in and among the departments or offices E-Government can enhance speed of disposal as well as the confidence of the employees. The application for leave, transfer, posting, pension if disposed through on line than the operational efficiency of the human resources division will increase.

For example, in Bangladesh the ministry of establishment is now providing on line services to the officers staying aboard on leave or deputation. This E- disposal system reduces cost as well as increase efficiency and gives the motivation to the employee.

4.0 E-Government and Corruption

Government and corruption is running hand to hand since the inception of the concept of corruption and government. Even the great Indian philosopher Koutilay has identified the relation in the ancient time.
Several case studies of e-government applications from developing countries report some impact on reducing corruption. Many governments have chosen to go on-line in departments such as customs, income tax, sales tax, and property tax which have a large interface with citizens or businesses and are perceived to be more corrupt. Procurement by government is also seen to be an area where corruption thrives. The very process of building an on-line delivery system requires that rules and procedures are standardized across regions and made explicit (amenable for computer coding). This reduces the discretion and opportunity for arbitrary action available to the civil servants in dealing with every applicant on a case by case basis. E-government can be used as an entry point for simplification of rules and reengineering processes. E-government can lead to centralizes data which can be used for improving audit and analysis. Unbiased sampling procedures can be applied for audit purposes. Integration of data across applications can provide improved intelligence. E-government can make decisions traceable. As the possibility of exposure of wrong doing gets enhanced, the fear of consequent embarrassment can be a deterrent to corrupt practices. By providing an alternate to a departmental channel for service delivery, e-government introduces competition which improves service levels and lowers corruption. Web publishing of Government information builds accountability by providing documentation to citizens to substantiate their complaints against corrupt practices. However, benefits from e-government such as reduction of corruption opportunities are often incidental and not part of the design objectives. To extract maximal benefit from such applications, some features that can lead to greater transparency and accountability need to be consciously built in the design objectives. There is an implicit hierarchy and sequence of objectives on which e-government applications must focus to reduce corruption. Increasing access to information, presenting the information in a manner that leads to transparency of rules and their application in specific decisions, increasing accountability by building the ability to trace decisions/actions to individual civil servants represent the successive stages in the hierarchy.

All these objectives in tandem can curb corruption significantly, and ignoring some of them can defeat the whole purpose. For example, numerous web sites created by Government departments are ineffective because they tend to focus on the single objective of
providing electronic access to information. Not enough effort is made to ensure that transparency and accountability are increased.

4.1 Definition of corruption

Corruption is a complex set of process involving human behavior and many other variables, some of which are difficult to recognize or measure. (Almas, 2000:5). Even through corruption manifests itself as a force on its own and often generates its own momentum, it is linked to many other factors, and it is by understanding these factors that we can hope to understand corruption. The term "corruption" is used as a shorthand reference for a large range of illicit or illegal activities. Although there is no universal or comprehensive definition as to what constitutes corrupt behavior, the most prominent definitions share a common emphasis upon the abuse of public power or position for personal advantage (ADB, 1998).

Corruption is in its simplest term, the abuse of power, most often for personal gain or for the benefit of a group to which one owes allegiance. It can be motivated by greed, by the desire to retain or increase one's power, or perversely enough, by the belief in a supposed greater good.

United nation's Dictionary of social science define as "corruption in public life is the use of public power for private profit, preferment of prestige or for the benefit of group or class, in a way that constitutes a breach of law of standards of high moral conduct" (1978:43-).

Klitgaard, (1996) has developed a simple model to explain the dynamics of corruption, which is as follows:

In other words, the extent of corruption depends on the amount of monopoly power and discretionary power that official's exercise and the degree to which they are held accountable for their actions. Form above on the discussions of corruption may be defined broadly to include misuse of public funds and evasion of public laws that result in unfair private gains.

4.2 Operational Definition:

Here in this article corruption will be seen as misappropriation of funds, lack of transparency, Bribe taken by the officials and middle man, application of over discretionary authority by the officials, over time consumption for disposal etc.
4.3 Role of E-Government in controlling Corruption:
Corruption can be viewed from two board perspectives
- Service point of view.
- Regulatory functions point of view.

4.3.1 Service point of view
If the citizens can enjoy services online without manual intervention and if every necessary information becomes available online than the scope of giving and taking bribe will decrease and at the same time the transparency will increase at all level. Let's see how corruption can be prevented through E-Governance: comparing the two figure we understand the role of E-government in corruption control.
4.3.2 Process of controlling corruption (Analytical framework)

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Table 1 presents the type of information where greater transparency can be enabled through E-Government

4.4 Some E-Government (Service related) initiatives which help to control corruption

4.4.1 E-procurement

In this procurement system all the information regarding purchase is available online therefore, it is transparent. Moreover it is done in the
e-marketplace so on manipulation is possible. As it is transparent and no manipulation is possible, the scope of corruption is minimal here in this system.

4.4.2 E-tendering

As tender process from invitation of tender to issue of work order is done through e-process, it ensures transparency and cost maximization. Therefore, corruption has no chance.

Computerization of land records, Karnataka, India

The Bhoomi (meaning land) project of on-line delivery of land records in Karnataka (one of the 26 states of India) demonstrates the benefits of making government records more open so that citizens are empowered to challenge arbitrary action. It also illustrates how automation can be used to take discretion away from civil servants at operating levels. The Department of Revenue in Karnataka has computerized 20 million records of land ownership of 6.7 million farmers in the state. In the past, under the manual system, land records were maintained by 9,000 Village Accountants, each serving a cluster of 3-4 villages. Farmers had to seek out the Village Accountant to get a copy of the Record of Rights, Tenancy and Crops (RTC) -- a document needed for many tasks such as obtaining bank loans. Village Accountants' were not easily accessible, as their duties entailed traveling. The time taken by Village Accountants to provide RTCs ranged from 3 to 30 days depending upon the importance of the record for the farmer and the size of the bribe. A typical bribe for a certificate could range from Rs.100 ( $1= Rs 50) to Rs.2000. If some details were to be deliberately written in an ambiguous fashion, the bribe could go up to Rs.10,000. Land records in the custody of Village Accountants were not open for public scrutiny. Mutation requests to alter land records (upon sale or inheritance of a land parcel) had to be filed with the Village Accountant. The Village Accountant is required to issue notices to the interested parties and also paste the notice at the village office. Often neither of these actions was carried out, and no record of the notices was maintained. If no objections were received within a required 30-day period, an update to the land records was to be carried out by a Revenue Inspector. In practice, however, it could take 1-2 years for the records to be updated. Bhoomi has reduced the discretion of public officials by introducing provisions for recording a mutation request online. Farmers can now access the database and are empowered to follow up. In the Bhoomi project, a printed copy of the
RTC can be obtained online by providing the name of the owner or plot number at computerized land record kiosks in 180 taluk offices, for a fee of Rs.15. A second computer screen faces the clients to enable them to see the transaction being performed. A farmer can check the status of a mutation application on a Touch Screen provided on a pilot basis in three of the computerized kiosks. Operators of the computerized system are made accountable for their decisions and actions by using a bio-login system that authenticates every log-in through a thumb print.

**Electronic procurement in Chile**

An electronic procurement system increases transparency and probity by keeping a traceable electronic record of government transactions on-line. A comprehensive e-procurement system includes three components: information and registration; e-purchasing, and e-tendering. The Chilean system has focused on the first component of adequate public notification and oversight. Unlike many other countries, the Chilean system is operated by a private company. Following the introduction of the system in 1999, companies that wish to do business with the public sector do not need to search through newspapers or the Web for information about bidding opportunities. Instead, they need only register a single time, indicating the areas in which they do business (e.g., office furniture, construction services, IT consulting, etc.). Whenever a public agency needs to purchase goods or contract a service, it fills out a request in the electronic system, specifying the kind of operation and including all the documentation and information associated with the request. The system automatically sends an e-mail to all the private companies registered in that selected area, minimizing response time and providing an equal opportunity to all firms to submit a bid. The system also provides, on-line, all the information related to procurement operations, including the public organization's full contact details and the position of the public officer in charge of the operation. At the conclusion of the bidding process, the e-system provides the results: who participated, the proposals, the economic and technical scores, and, lastly, who won the bid or obtained the contract. Historical information about the public organization's purchases and contracts is also made available. The e-system, entirely Internet based, was launched at [www.compraschile.cl](http://www.compraschile.cl) in October 1999. A new Presidential Act was passed to allow e-commerce transactions, creating a new and common legislative framework, and replacing the DAE (Direction de
Aprovisionamiento del Astado) the main purchaser of the public sector with a smaller agency. The new purchasing agency supervises the system, provides technical assistance and, for some commodities, negotiates aggregated contracts. In the first phase, 454 suppliers (in 75 different business areas) and public agencies were registered in the e-system. By June 2001 nearly 4000 firms were registered with the site12. Even though the participation in the e-system was expected to be mandatory for all public organizations, after two years of operation less than 18% of public procurement is notified on the web site. This was attributed to weakening of political support and resistance from labor in DAE. In the absence of a systematic study, it is difficult to quantify the impact on corruption. Savings ranging from 7 to 20% have been reported on public sector procurement done through the site.

4.5 Regulatory functions

Regulatory functions of the government have strong inter-linkage with corruptions. Let's see how E-government helps to reduce corruption:

4.5.1 Law and Order

If the key points for crime will be under the E-monitoring system, the right criminal can be identified easily and thus the harassment of the innocent people will decrease. Therefore, the scope of corruption will decrease.

4.5.2 Financial Aspect

If a comprehensive database is existed which has inter connectivity with national board of revenue, Central bank and all other commercial banks operating in a country, there will be less chances for more tax defaulters and loan defaulters.

4.5.3 Political aspect

If the databases of tax defaulters, loan defaulters are connected with the Election commission, then no tax defaulters or loan defaulters can take the chance to take part in the elections.

If political party disclose their budget and source of income online and collect opinion on an issue online, the level of political corruption will decrease.
4.5.4 Social aspect

If everything become transparent i.e. transactions, movement of file, the database of criminals, are available online, there will be a psychological pressure on corruption minded people. Thus it may reduce the rate of corruption.

5.0 Challenges for E-Government

- Lack of Legal Framework.
- Cyber crime (Hacking)
- Lack of political and bureaucratic commitment.
- Lack of sufficient IT literate people.
- High Digital divide.
- Lack of infrastructure.

5.1 Way forwards

To make the E-Government effort a comprehensive success first of all the over all literacy rate need to increase. Along with this IT literacy is an essential component. Government should enact laws which will facilitate the E-Government process. And it is not possible for the government only to make the process a success, it needs public-private partnership for accomplish the mission.

6.0 Conclusion

E-Government is the demand of the day. It is a very effective tool for ensuring efficiency as well as transparency. Therefore, it will act as a tool for curving the corruption in both the public and private sector. No developing country is likely to be fully ready to embrace a comprehensive program of e-government. However in many areas applications can be developed which e-enable a large part of government services and deliver significant benefits in reducing corruption. Rather than wait for total readiness, an approach of learning by trial and consolidating small gains is recommended.
References

IICD Research Brief - No 1, March 2001, E-governance in Developing Countries


Web sites
http://www.transparency.org/policy_research/surveys_indices/cpi