Implementing Electronic Government Procurement (e-GP) in Bangladesh:

A study on 10 District LGED Offices

Dissertation Submitted in the Partial Fulfillment of the
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CERTIFICATE

This is my pleasure to certify that the dissertation entitled "Implementing Electronic Government Procurement (e-GP) in Bangladesh: A study on 10 District LGED Offices" is the original work of Tirthajit Roy that is completed under my direct guidance and supervision. So far, I know, the dissertation is an individual achievement of the candidate's own efforts, and it is not a conjoint work.

I also certify that I have gone through the draft and final version of the dissertation and found it satisfactory for submission to the BRAC Institute of Governance and Development, BRAC University in partial fulfilment of the requirements for the degree of Masters in Procurement and Supply Management.

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Declaration

I hereby declare that the dissertation entitled "Implementing Electronic Government Procurement (e-GP) in Bangladesh: A study on 10 District LGED Offices", submitted to BRAC Institute of Governance and Development, BRAC University for the degree of Masters in Procurement and Supply Management (MPSM) is exclusively my own and original work. No part of it in any form, has been submitted to any other university or institute for any degree, diploma or for other similar purposes.

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Abstract

Government procurement in a developing country is often involved with collusive and corrupt practices (Abdallah, 2015; cited in Naeem, 2016). In Bangladesh, the public procurement at local level is also subject to pressure of local powerful personnel and political leaders where the non-political tenderers are often forced not to participate in the tendering process (Abdallah, 2015). The management of public procurement through the application of information technology, called e-GP can address this malpractice. Further, the e-GP promotes competition through participation of local as well as region bidders and government purchases are processed in more efficient, transparent and accountable manner. According to a World Bank study, the e-GP could save more than 15 per cent of the government's procurement costs (Mahmood, 2013). Grounded on these benefits, e-GP was introduced in the Local Government Engineering Department (LGED) in 2010-11 under the auspices of the Second Public Procurement Reform Project (PPRP II). The overall purpose of this study is to assess the implementation of e-GP in selected LGED offices, identify the challenges of implementing e-GP in various stages of procurement cycle in LGED and find out the measures to overcome those challenges. Since most of LGED's procurements are done by the offices of District Executive Engineers of LGED, 10 such offices are randomly selected for data collection. A questionnaire survey has been administered among the officials of these offices. Survey data have been presented using statistical tools and with descriptions. Prior to presentation of anecdotal evidence from survey, the secondary information has been summarized which were collected from various documents and statistics published by LGED, CPTU and other organizations. This study identified key challenges for implementing e-GP in various stages of procurement cycle in district LGED offices and put forward the doable solutions to address those challenges.

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List of acronyms

AA	Approving Authority
ADP	Annual Development Programme
AE	Assistant Engineer
BWDB	Bangladesh Water Development Board
CPTU	Central Procurement Technical Unit
DLI	Disbursement Link Indicators
e-GP	Electronic Government Procurement
e-CMS	Electronic Contract Management System
e-Tender	Electronic Tender
F.Y:	Financial Year
GDP	Gross Domestic Product
HOPE	Head of the Procuring Entity
HQ	Head Quarter
ICT	Information and Communications Technology
IMED	Implementation Monitoring and Evaluation Division
LGED	Local Government Engineering Department
LGD	Local Government Division
MLGRD&C	Ministry of Local Government, Rural Development and Co-operatives
NOA	Notification of Award
PE	Procuring Entity
PD	Project Director
PPRP (II) AF	Public Procurement Reform Project (II) Additional Financing
PPA'06	Public Procurement Act 2006
PPR'08	Public Procurement Rule 2008
RHD	Roads and High Way Department
REB	Rural Electrification Board
Sr. AE	Senior Assistant Engineer
TOC	Tender Opening Committee
TOR	Tender Opening Report
TEC	Tender Evaluation Committee
TER	Tender Evaluation Report
UE	Upazila Engineer
XEN	Executive Engineer

Chapter 1

Introduction

Public procurement in a developing country is often involved with collusive and corrupt practices (Abdallah, 2015; cited in Naeem, 2016). Most of the developing and developed countries' governments would like to implement public e-procurement technology to enhance transparency and accountability in public procurement processes. The basic principle of public procurement is straightforward: to acquire the right item at the right time with the right price. The process should be open, objective and transparent. However, corruption in public procurement processes leads to challenges such as lack of accountability and transparency, lack of political control and auditing, weak professionalization of the bureaucracy and many more. To overcome these concerns relating to corruption in the government procurement, information and communication technology (ICT) can play an important role to reduce corruption by promoting good governance (Bertot, Jaeger and Grimes, 2010), enhancing relationships between government employees and citizens tracking activities, monitoring and controlling the government employees and reducing potentiality of corrupt behaviors. ICT enabled technology especially public e-procurement plays an important role for minimizing the risk of corruption in public procurement processes (OECD, 2008).

In Bangladesh, the public procurement at local level is also subject to pressure of local powerful personnel and political leaders where the non-political tenderers are often forced not to participate in the tendering process (Abdallah, 2015). The management of public procurement through the application of information technology, called e-GP can address this malpractice. Further, the e-GP promotes competition through participation of local as well as region bidders and government purchases are processed in more efficient, transparent and accountable manner. According to a World Bank study, e-GP could save more than 15 per cent of the government's procurement costs (Mahmood, 2013). Grounded on these benefits, e-GP was introduced in the Local Government Engineering Department (LGED) in 2010-11 under the auspices of the Second Public Procurement Reform Project (PPRP II). This study aims to assess the implementation of e-GP in selected LGED offices, identify the challenges of implementing e-GP in various stages of procurement cycle in LGED and find out the measures to overcome those challenges.

This study is organized around five chapters. After this introduction, Chapter Two, by reviewing key literature, summarizes importance of public procurement, problems in procurement management, evolution of e-procurement and its contribution to overcoming procurement related problems and introduction of e-procurement in Bangladesh and particularly in LGED. Chapter Three outlines the sampling strategy and data collection methods. The findings from questionnaire survey have been described with illustrations in Chapter Four. Finally, Chapter Five concludes the study.

Chapter 2
Literature Review

2.1 Importance of public procurement in Bangladesh

There is now very limited doubt among policy makers, managers, professionals and academics about the importance of public procurement in facilitating government operations in both developed and developing countries. Public procurement represents 18.42 per cent of the world GDP (Njoroge and Ngugi, 2016). It plays a significant role in the successful management of public resources.

It is reported that 70 per cent of development outlays are driven by public procurement in Bangladesh)Siddique, 2017(. The Local Government Engineering Department (LGED) is an important implementing agency of the government's development programs and accordingly it has been spending a good amount of development budget over the years. The agency was allocated Tk. 141.29 billion in Fiscal Year (FY) 2016-17 which was Tk. 83.7 billion in FY 2012-13. The allocations were increased by 68.8 per cent during this period. The agency also demonstrated its capacity to utilize the allocated resources ranging from 97 per cent to 99 per cent and this resource utilization by LGED has been higher than the overall rate of national resource utilization. Table 2.1 shows the details.

Table 2.1: Annual Development Program allocations and utilization: LGED and national status

	2012-13	2013-14	2014-15	2015-16	2016-17
LGED					
Revised ADP Allocation (A) (Tk. in billions)	83.70	89.87	108.14	117.76	141.29
Per cent of ADP	16	15	14.4	13	12
Revised ADP Expenditure (B) (Tk. in billions)	82.65	89.05	15.77	115.49	137.46
{Utilization Rate: (B)/(A)} (in per cent)	98.75	99.09	97.81	98.07	97.29

National status					
Revised ADP Allocation (A)	523.66	600.00	750.00	910.00	1192.96
Revised ADP Expenditure (B)	500.26	567.47	685.32	753.95	1065.81
{Utilization Rate: (B)/(A)} (in per cent)	95.53	94.58	91.38	82.85	89.34

Source: Made by author based on GOB and LGED data

Note: The GOB data of 2012-13 to 2015-16 is from Appendix 17 of Bangladesh Economic Review and that of 2016-17 is from Byron, 2017. The LGED data was collected from LGED Annual Report.

2.2 Problems and way out in procurement management globally and in Bangladesh

An efficient public procurement system is an important necessary condition for ensuring efficient public investment and hence, economic growth. However, the management of public procurement is vulnerable to mismanagement and corruption. Corruption in public procurement manifests in various forms such as misappropriation of funds, bribery or kick-back, nepotism, and fraud (Islam, 2010). Many countries have thus instituted efforts to reduce such vulnerabilities such as integrating procurement in a more strategic view of government efforts. As part of the efforts to adopt a long term and strategic view of their procurement needs and management, most countries have resorted to turning to their annual procurement plans as a possible 'problem-solver' (Mahmood, 2010). A good number of countries have adopted an electronic procurement system. Whether such electronic system has any impact on efficiency of the public procurement process remains to be an open, empirical question.

The traditional public procurement system has a few problems, especially in a developing country context. Typically, the system is plagued with various types of collusive activities and corruption. For example, bidders often collude with each other and manage to keep winning contract price high. Procuring entities may procure goods directly from a vendor without advertisement, leaving ways to collude and over-invoice procured items, hence illegal activities results into higher prices of procured goods or works. In addition, an inefficient bidder may win the contract resulting into poorer quality output, delays in project completion and cost overrun.

More specifically, in Bangladesh political pressure at the local level influences the procurement process. Influence often takes the form of blocking non-political contractors from physically participating in bid process. Since the local law and order administration are captured as well, many bidders therefore either fail to participate or shy away from submitting bids. This paves the way for the politically connected bidders to collude with each other. With lower participation and competition from non-political bidders and higher opportunity to collude at procurement process, it is expected that the procurement price is high. Had there been no such influences, the price should have been lower (Naeem, 2016).

A more transparent and IT based electronic procurement system may play an important role in curbing this sort of political influences and increase competition. First, an electronic procurement system allows more bidders to participate in the bidding process. Since cost of participation is minimal, bidders from outside the procuring district can also apply and win, resulting into greater competition and lower price. Second, it may reduce the political influence of the type mentioned above by letting a bidder place a bid online from office or a remote location instead of going physically to the procuring entity's office. This will also raise competition and reduce price (Abdallah, 2015).

The idea of a virtual bidding process could also save more than 15 per cent of the government's procurement costs, according to a World Bank study (Mahmood, 2013). e-GP would also connect the government body and the national and international contractors on an online platform, which automates the entire government's procurement process by introducing centralized registration of contractors, e-tendering, e-contract management system, e-payments, e-signature and e-security. In around 50 countries, e-GP has been proved as an effective tool in the fight against corruption, the promotion of integration and the stimulation of greater productivity not only at government level, but also in small and medium enterprises.

2.3 Defining e-procurement and its evolution globally

In this respect, e-Procurement is defined as a subset of e-Business concerning e-Commerce between private sector and public institutions where e-Commerce is intended as the activity of exchanging goods and services with some kind of payment by means of ICT. From this point of view, it is possible to make many definitions for e-Procurement (Joarder, 2015). Briefly, e-

Procurement is "the electronic management of all the procurement activities. As a system, e-Procurement is a web-based purchasing system that offers the functionality of electronic ordering, electronic payment and enhanced administrative utilities to the public institutions. The World bank Procurement and Services Group (2003) defined e-GP as the use of ICT (especially internet) by governments in conducting their procurement relationships with suppliers for the acquisition of goods, works, and consultancy services required by the public sector. Moreover, it is the use of electronic means for publishing, processing, exchanging, and storing all of the information related to institutional purchases in public organization (Asser and Boughzala, 2008).

The republic of South Korea is one of the most successful implementers of e-procurement system among the developing countries. The main characteristics of this system processes the entire procurement procedure through the four-major e-procurement subsystems namely, e-bidding, e-contracting, e-payment, and the online shopping. In 2010, over 60 per cent of Korea's total public procurement (124 billion USD) was conducted through e-procurement system (Chang, 2011 cited in Bwalya, 2014). e-procurement has been highly adopted by other developing countries as well such as Costa Rica, Hong Kong, Vietnam, Pakistan, and Sri Lanka. Furthermore, the Government of Andhra Pradesh in India is another best example of how the government provides different work and services through e-procurement and reduces the opportunities for corrupt parties.

2.4 e-GP in Bangladesh and its current status

Within the legal framework of the Public Procurement Act 2006 and the Public Procurement Rules 2008, the Government of Bangladesh introduced e-GP in June 2011 under the auspices of the Second Public Procurement Reform Project (PPRP II), funded jointly by the Government of Bangladesh and the World Bank. Central Procurement Technical Unit (CPTU) of Implementation, Monitoring and Evaluation Division (IMED), Ministry of Planning was the implementing agency of the project. The project had four components: 1. Furthering policy reform and institutionalizing capacity development, 2. Strengthening procurement management at sector level and CPTU, 3. Introducing e-Government Procurement (e-GP) and 4. Behavioral change, communication and social accountability. The Project was implemented during 2008-2016 (Abdallah, 2016).

In the beginning, e-GP was introduced in four agencies namely, Local Government Engineering Department (LGED), Roads and Highways Division (RHD), Bangladesh Water Development Board (BWDB), and Rural Electrifying Board (REB). Based on the learning from these pilot agencies this system was planned to be rolled-out across all the procuring entities in phases. CPTU is responsible to assist the procuring entities to successfully implement e-GP. In addition, CPTU has developed national e-Government Procurement (e-GP) portal (i.e. https://www.eprocure.gov.bd) in order to provide an on-line platform to carry out the all procurement activities by the public agencies –procuring agencies (PAs) and procuring entities (PEs). The e-GP system is a single web portal from where and through which PAs and PEs will be able to perform their procurement related activities using a dedicated secured web-based dashboard. It is hosted in the e-GP Data Center at CPTU. The web portal is accessible by the PAs and PEs through internet for their use. This online platform also assists them for ensuring equal access by the bidders in the public procurement process in Bangladesh.

In coordination with CPTU, the target agencies will be responsible for implementation of e-Government Procurement (e-GP) system and social accountability activities in phases. Each target agency has designated a full-time Procurement Monitoring Coordinator (PMC). In similar way Technical Working Group is formed. Besides that, CPTU has fielded Procurement Implementation Support Consultants in these 4 target agencies.

Under the PPRP-II LGED is making a pivotal role in implementing e-GP among other three organizations. To implement e-GP, LGED has to achieve a milestone for each year. The project is designed such a way that financing only depends based on the performance in e-GP implementation. It was anticipated that LGED would execute 4000 procurement contracts every year. First year (Fiscal Year 2012-13) was considered as pilot year where milestone was fixed up to execute 100 tenders. After that, within the next three years, LGED needs to execute the fixed percentage of tenders in e-GP as 35 per cent, 60 per cent, and 80 per cent respectively. As such, achieving these targets had become very much challenging to the organization. Since the project would be ended at the end of Fiscal Year 2015-16, all the target agencies including LGED committed that on fifth year (FY 2016-17) all the tenders (100 per cent) would be invited through e-GP portal and it would be continued (Joarder, 2015).

The e-GP implementation is progressing at a faster rate despite its slow start. The number of registered bidders/suppliers rose exponentially from 294 in June 2012 to 39,628 in November 2017. The number of bid invitations using e-GP jumped from 14 to 143,299 and the total amount of bid invitations also increased from US$ 2.95 million to US$ 5842 million up to May 2016 (Aide Memoire, 2016). The level of awareness among bidders about public procurement act and rules and e-procurement has increased sharply. The e-GP implementation trend is presented in Figure 2.1 and Figure 2.2.

Source: Aide Memoire, PPRP II, 16th implementation support mission, (May 29-June 6 2016)

The performance in relation to implementation of e-GP by various agencies is shown in Table 1 below. The overall activity levels in implementing e-GP are significantly in advance of target and growing at a satisfactory rate. It shows that all four agencies are ahead of the targeted rate of implementation, and LGED is ahead of all four agencies.

Table 2.2: e-GP implementation performance by major agencies

Agencies	July 1 - December 31, 2013		July 1 - December 31, 2016		
	Target	Actual	Target	Actual	Progress in per cent
RHD	400	776	3200	3302	103
LGED	400	2612	3200	15526	485
BWDB	120	279	960	1617	168
BREB	15	21	128	414	323

Source: Aide Memoire, PPRP II, 16th implementation support mission (May 29 – June 6 2016)

It is worth examining identifying challenges and corrective measures to continue this current trend and escalate the implementation of e-GP in public sector, specifically in LGED.

Chapter 3

Methodology

As stated earlier, this study aims to identify the challenges of implementing e-GP in various stages of procurement cycle in LGED and find out the measures to overcome those challenges. Accordingly, the study is around addressing the following objectives:

1. To assess the implementation of e-GP in selected LGED offices

2. To identify the challenges of implementing e-GP by LGED in various stages of procurement cycle

3. To find out ways to address the challenges emerged in the implementation of e-GP

Survey respondents:

Since most of LGED's procurements are carried out by the offices of District Executive Engineers of LGED, 10 such offices are randomly selected for data collection (Annex 1 for details). From each slected District LGED Office three enginners namely, Executive Engineer, Senior Assistant Engineer and Assistant Engineer are requested to participate in survey. Survey invitation letters were first sent to them. All of them accepted the invitation and participated in the survey. Among these 30 participants, 10 of them are Executive Engineers, 10 of them are Senior Assistant Engineers and 10 of them are Assistant Engineers. All of the Executive Engineers have at least 20 years' experience in public procurement. Data was collected in November 2017. Though it is better to collect data by face to face interview, but for time and resource constraint it was not possible to visit all over Bangladesh to collect data; instead, survey questionnaire was sent them through e-mail, but the respondents were communicated via telephone for clarification of questionnaire and/or overall survey.

Survey questionnaire:

Following steps were undertaken for finalizing survey questionnaire:

Firstly, a questionnaire was prepared based on researcher's knowledge and work experiences and various studies on e-GP and in consultation with the supervisor.

Secondly, the drafted questionnaire was sent to similar respondents; but out of sampled districts in order to test its applicability and accuracy.

Thirdly, based on pilot learning, the language of questionnaire was further edited and some questions were dropped to run it smoothly.

Finally, the corrected questionnaire was sent to the respondents to record their responses. The questionnaire consists of both open and close-ended questions.

The final questionnaire is given in Annex 2.

Data analysis and presentation

Survey data input has been done in MS Excel, cleaned and analyzed using statistical tools and presented with illustrations. Both open and close responses have been codified and described in Chapter 4.

Chapter 4
Data Analysis and Findings

4.1 Respondents' profile

Gender

In total 30 respondents were interviewed for this study. Among them 29 were male and only one respondent was female. It shows that LGED's district offices are dominated by male engineers. In fact, there are fewer female engineers working in LGED and those who joined this agency are mostly positioned at Headquarters.

Educational background

The respondents were asked to mention their last degree obtained. It was revealed that approximately 87 per cent respondents had Bachelor in Engineering compared to 13 percent having Master's degree. Details are demonstrated in Table 4.1.

Table 4.1: Educational background of respondents

Education	Respondents (No.)	Respondents (per cent)
M.Sc.	4	13.3
B.Sc.	26	86.7

Respondents' ICT knowledge and training on e-GP

Of 30 respondents only 1 was found who was not using computer in performing official responsibilities and the remaining officials were found to be using computer. However, all the surveyed respondents reported internet browsing. The respondent who did not use computer might be browsing internet on other devices such as smart phone. However, all the surveyed respondents received training on e-GP.

Length of using computers by respondents (in years)

The respondents were asked about their length of using computers. Figure 4.1 shows that 62 per cent respondents have length of using computer between 10-15 years. 24 per cent respondents have length of using computer between 16 and 20 years. 7 (seven) percent respondents have

length of using computers less than 10 years. Another 7 (seven) percent respondents have length of using computers is more than 20 years.

Figure 4.1: Length of using computers by respondents
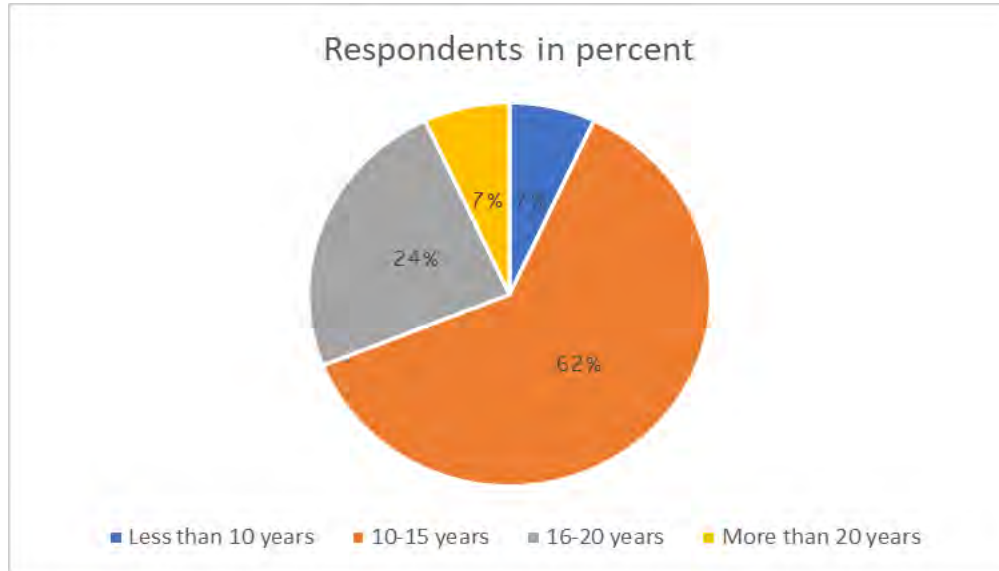
Length of browsing internet by respondents (in years)

The respondents were asked about their length of browsing Internet. Figure 4.2 demonstrates that 41 per cent respondents have length of browsing internet less than 10 years. Another 41 per cent respondents have length of browsing internet between 10 and 15 years. Only 18 per cent respondents have browsed internet more than 15 years.

Figure 4.2: Length of browsing internet by respondents (in years)
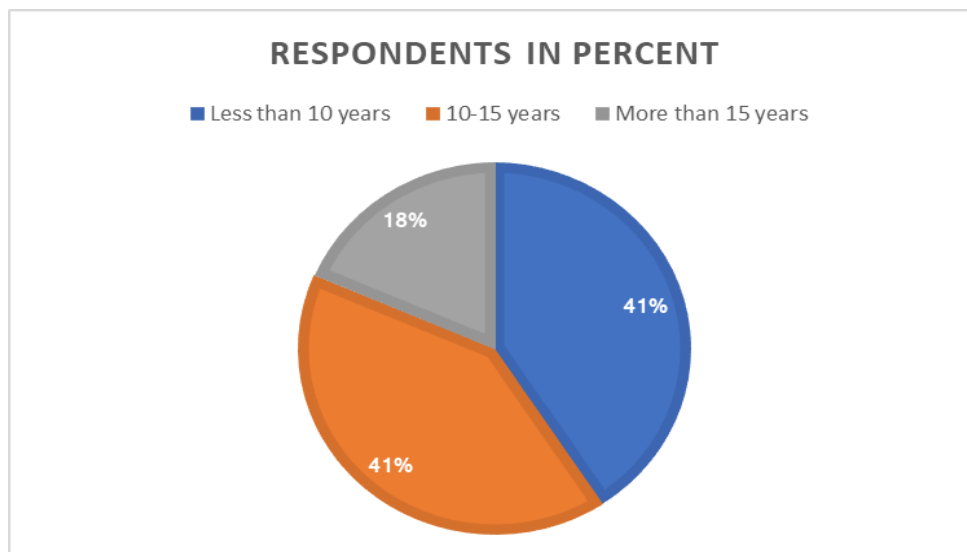
Total training duration on e-GP received by respondents (in days)

The respondents were asked about their total training duration on e-GP received. Figure 4.3 shows that 48 per cent respondents have received 4-5 days training on e-GP. 24 per cent respondents have received total 6-7 days training. 21 per cent respondents have received 1-3 days training on e-GP. Only 7 (seven) per cent respondents have received more than 7 days training on e-GP.

Figure 4.3: Total training duration on e-GP received by respondents
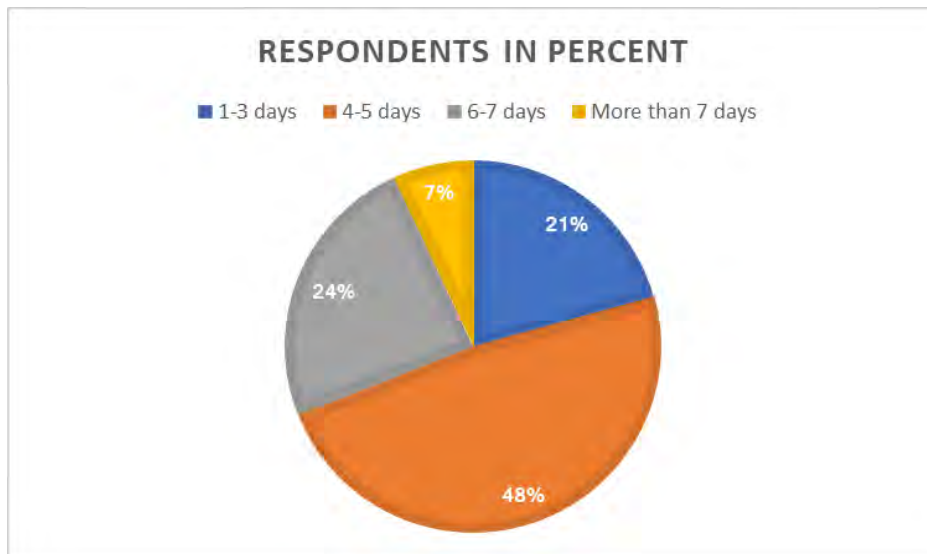
Roles played by respondents in managing e-GP

The respondents were asked about the types of roles played in managing e-GP in last seven years. It was found that the highest number of respondents played the role as chairperson of tender evaluation committees followed by playing the similar role in opening committees. Half of the respondents reported that they played the role of the external member in tender evaluation committees. Figure 4.1 illustrates the details.

4.2 Assessment of e-GP implementation in surveyed LGED District Offices

4.2.1 Extent of procurement cycle managed manually, electronically and combined

Manual activities in e-GP system

The respondents were asked about the activities that are still being done manually in e-GP system. Table 4.2 shows that the highest number of the respondents has identified contract management which entails agreement, quality, termination, PCC correction being done manually. The second largest respondents pointed out verification of bidders' documents such as experience, turnover, liquid asset, performance guarantee etc. being carried out manually. 50 per cent of respondents mentioned evaluation (post qualification, minutes, comparative statement) being done manually.

Table 4.2: Manual activities in e-GP system

Activities	No. of respondents N = 30
Evaluation (post qualification, minutes, comparative statement,	15
Contract management (agreement, quality, termination, PCC correction)	19
Bill payment	9
Verification of bidders' documents (experience, turnover, liquid asset, performance guarantee)	17
Tender document (IFT in newspaper, TER-2, 5, 6)	6
Identification of front loading	3

The respondents were further asked to measure the management of the whole procurement cycle manually, electronically and combined. According to all respondents, bid submission and opening are managed completely in electronic manner in opposed to payment of bidder's bills being processed complete manually. The remaining activities of procurement cycle are managed both electronically and manually. Of these activities, 50 per cent of respondents reported overall contract management done both electronically and manually and the remaining respondents said that this activity is managed complete manually. Details are illustrated in Figure 4.5.

Figure 4.5: Extent of procurement cycle managed electronically
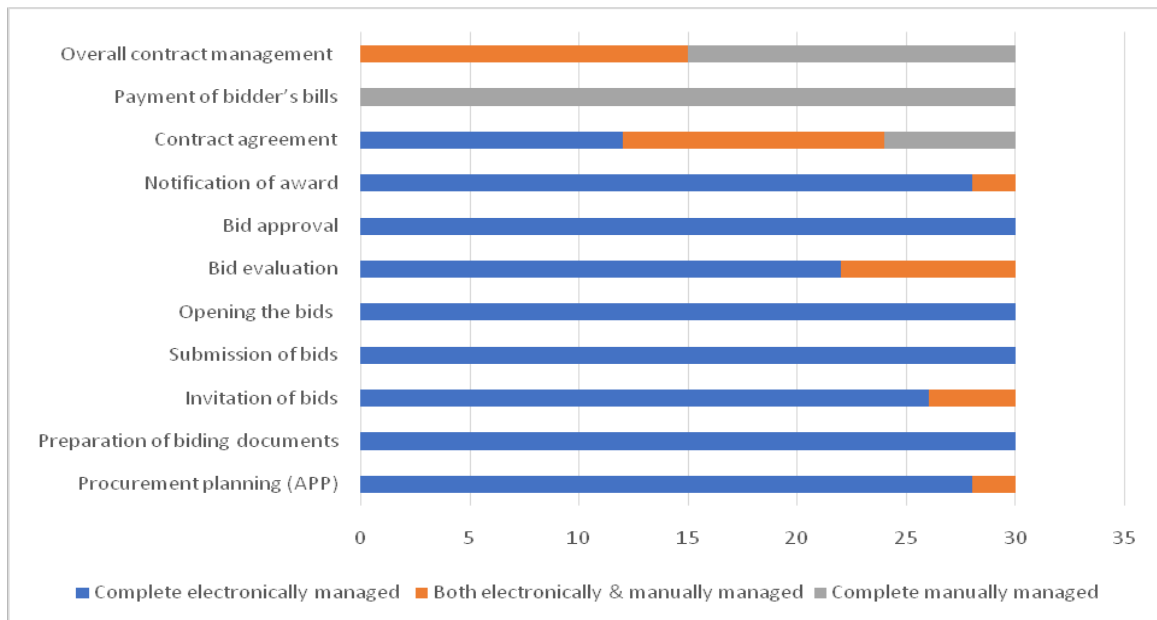
4.2.2 Preparedness of LGED's district offices to manage e-GP

Equipment to process e-GP

There are some digital tools such as computer, printer, scanner and photocopier, etc. fundamentally needed to conduct procurement activities digitally. It is observed that all of the surveyed respondents either strongly agreed or simply agreed to the availability of these necessary equipment in district LGED offices to manage e-GP.

Power supply to process e-GP

The respondents were asked whether the district LGED offices had uninterrupted power supply to process e-GP. Figure 4.3 shows that 33 percent disagreed to uninterrupted supply of power in respective offices. In contrast, around 47 percent respondents expressed their agreement to having uninterrupted power supply.

Figure 4.6: Respondents' opinion regarding power supply to process e-GP
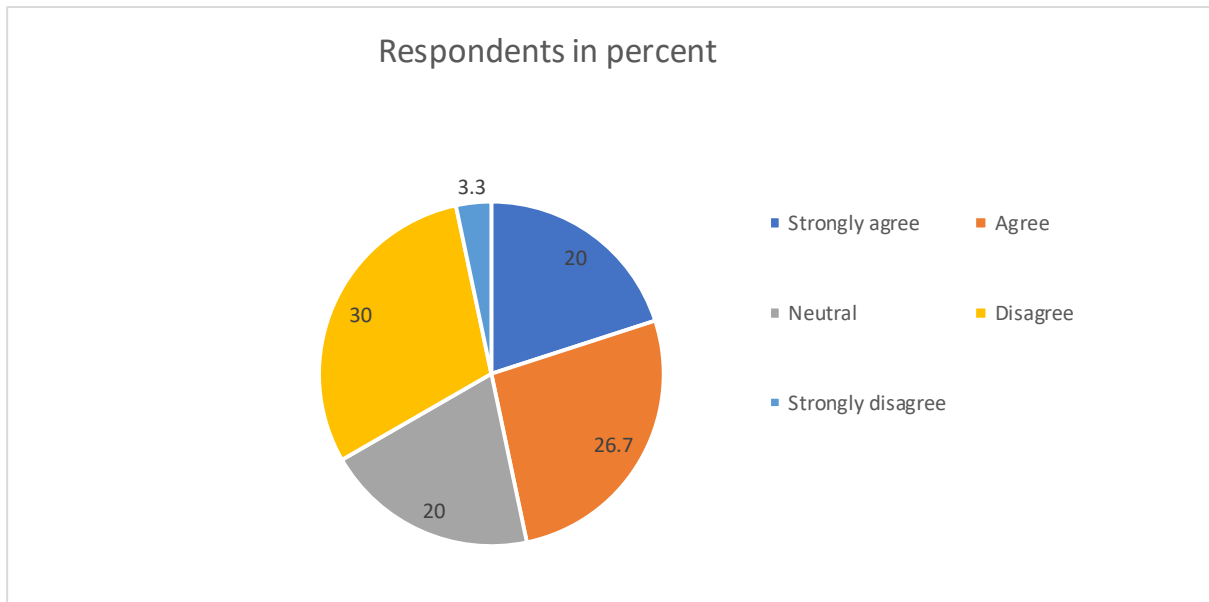
Uninterrupted internet connectivity to process e-GP

Figure 4.7 shows that 33 percent of the respondents disagreed to having uninterrupted internet connectivity in respective offices. However, half of the surveyed respondents said that their offices had uninterrupted internet connectivity.

Figure 4.7: Respondents' opinion regarding uninterrupted connectivity of internet to process e-GP

25
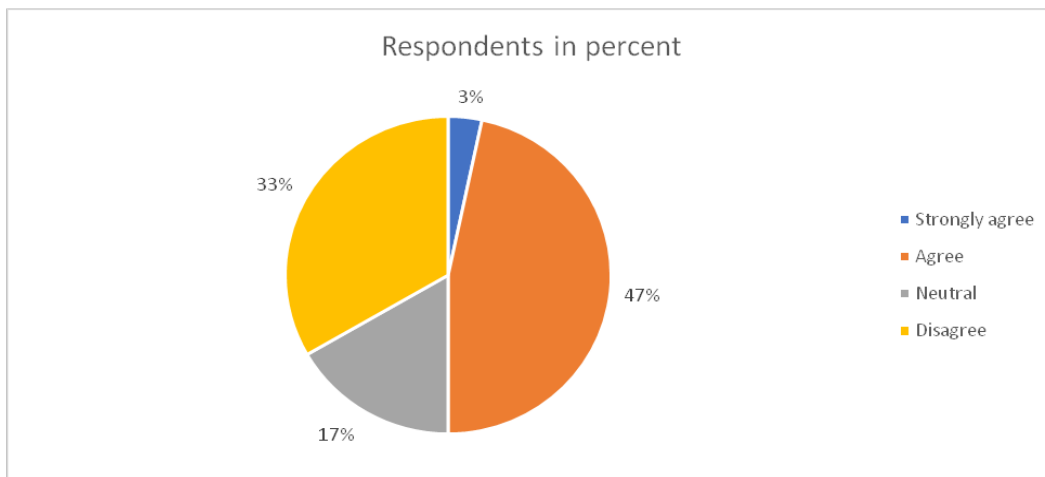
Knowledge and skills of LGED's district officers on computer and ICT

LGED's engineers i.e. Assistant Engineer and above are allowed to deal with e-GP. No staff is entitled to be involved in the e-GP procedures. Accordingly, the respondents were asked whether the designated officers of LGED's district offices had sufficient knowledge and skills on Computer and ICT. Most of the respondents reported that LGED's district officers have had sufficient knowledge and skills required to process e-GP. Only one respondent reported the opposite.

Knowledge and skills of the bidders on computer and ICT

While the LGED's engineers play the role of demand side of procurement as procuring entity, the bidders are the supply side who responds to the bid advertisements. In case of processing the bidding activities through e-GP, the bidders need to have skills and knowledge about computer and ICT as like as the LGED's officials. Here, the surveyed LGED's engineers were asked to report on bidders' knowledge and skills on computer and ICT to deal with the e-GP. Figure 4.8 shows that more than half of the respondents (i.e. 53 per cent) said that the bidders did not have sufficient knowledge and skills on computer and ICT. In contrast, 20 per cent of the respondents expressed their agreement to having bidders' sufficient knowledge and skills.

Figure 4.8: Bidders' knowledge and skills on computer and ICT
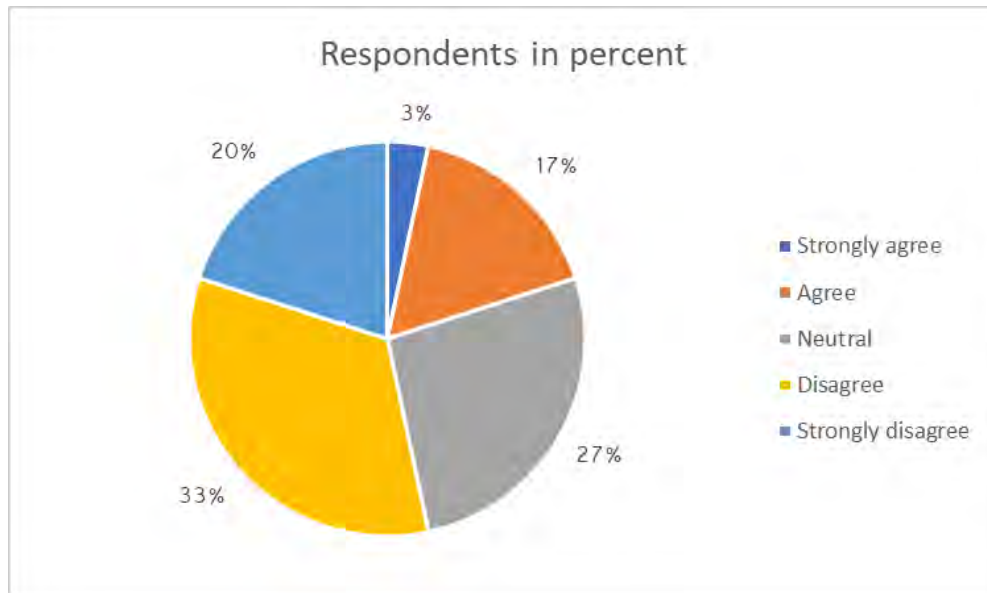
User-friendliness of e-GP website and software to bidders and LGED officers

Eighty three per cent of the surveyed respondents observe that existing e-GP website and software is user-friendly to the bidders and the remaining 17 per cent are not sure about this. However, all respondents expressed their opinion that the e-GP website and software is user-friendly to the officers of LGED.

Load handling capacity of e-GP server

Server capacity is critical to handle the load during tender submission and related activities in e-GP. According to 47 per cent of respondents, the e-GP server used by LGED's district offices could handle the load in opposed to 30 per cent of the surveyed engineers highlighting lack of the server's capacity. However, the remaining 23 per cent of the respondents are not sure of the server's capacity. Figure 4.9 demonstrates respondnets' feedback on e-GP server's capacity in handling the load.

Figure 4.9: Capaicity of server in handling load of e-GP related activities
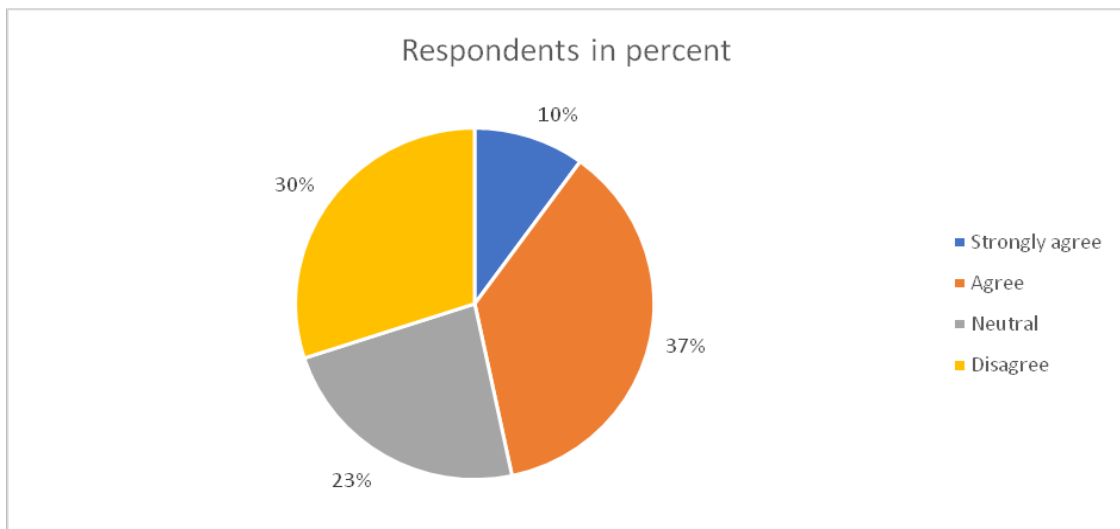
Maintain confidentiality in e-GP

Security of password is highly critical to ensure confidentiality in public procurement. The respondents were asked whether the password in e-GP is secured or not. 97 per cent expressed their opinion that password is secured in e-GP and only one respondent i.e. 3 per cent said the opposite.

In addition to password security, confidential information related to e-GP might be diclosed from the banks to various stakeholders especially the bidders. Table 4.3 shows that 40 per cent of the respondents expressed their agreement to having scope of banks' branches to disclose confidential information. However, the similar per cent of the respondents said that the branches of banks did not have any scope to disclose information. The remaining respondents (20 per cent) are not aware of disclosure of tender related information from banks.

Table 4.3: Scope to disclose confidential infromation related to tender by banks

Opinion	No of respondents	per cent of respondents
Strongly agree	1	3
Agree	11	37
Neutral	6	20
Disagree	6	20
Strongly disagree	6	20

Banks' willingness to deal with e-GP

Furthermore, the respondents were asked whether the bank branches were willing to deal with e-GP. 57 per cent of the respondents said that the banks were found willing and 3 per cent reported the opposite. However, a good number of the respondents (40 per cent) refrained from saying about banks' willingness to be involved in e-GP procedures and they remained neutral in this regard.

4.2.3 Benefits from use of e-GP

Maintaining confidentiality of price quotation in e-GP by bidders

More than two-thirds of the surveyed engineers observed that bidders could maintain confidentiality regarding price quotation while submitting tenders through e-GP. In contrary, 17 per cent of the respondents said that there was a scope of disclosure of price-quotation because of submitting tenders electronically. Figure 4.10 demonstrates respondents' opinion regarding confidentiality of price quotation in e-GP.

Figure 4.10: Confidentiality regarding price quotation by bidders
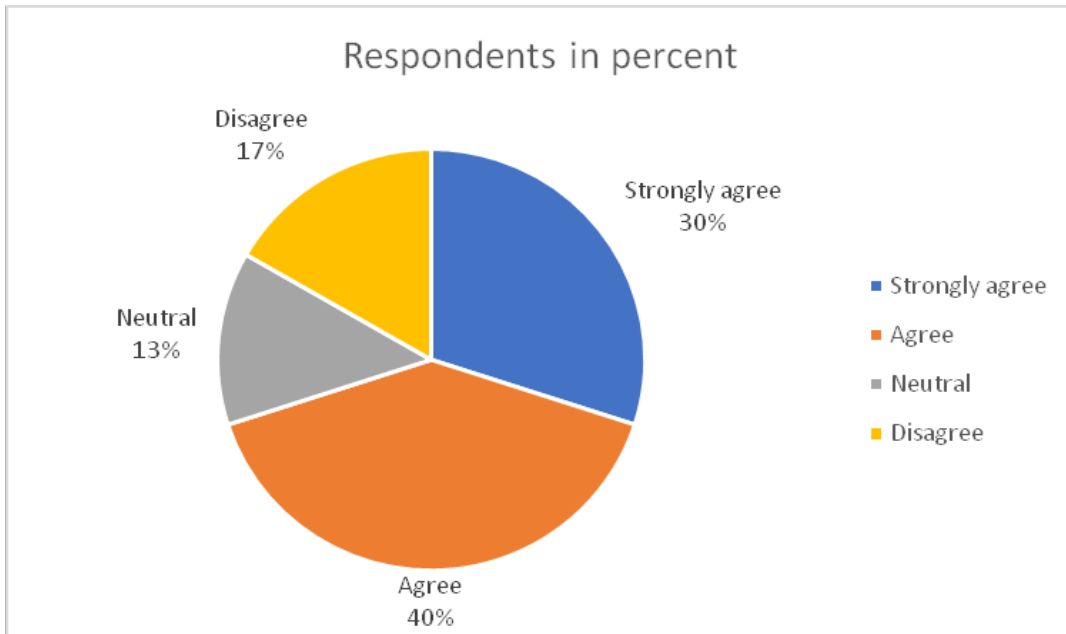
Maintaining confidentiality of official estimated costs in e-GP by District LGED Offices

The respondents overwhelmingly said that LGED district offices did not face any problem in maintaining confidentiality of official estimated costs because of handling public procurement through e-GP. Only 3 per cent of the respondents observe that the official estimated costs can be disclosed in e-GP. Details are shown in Figure 4.11.

Figure 4.11: Confidentiality by LGED office
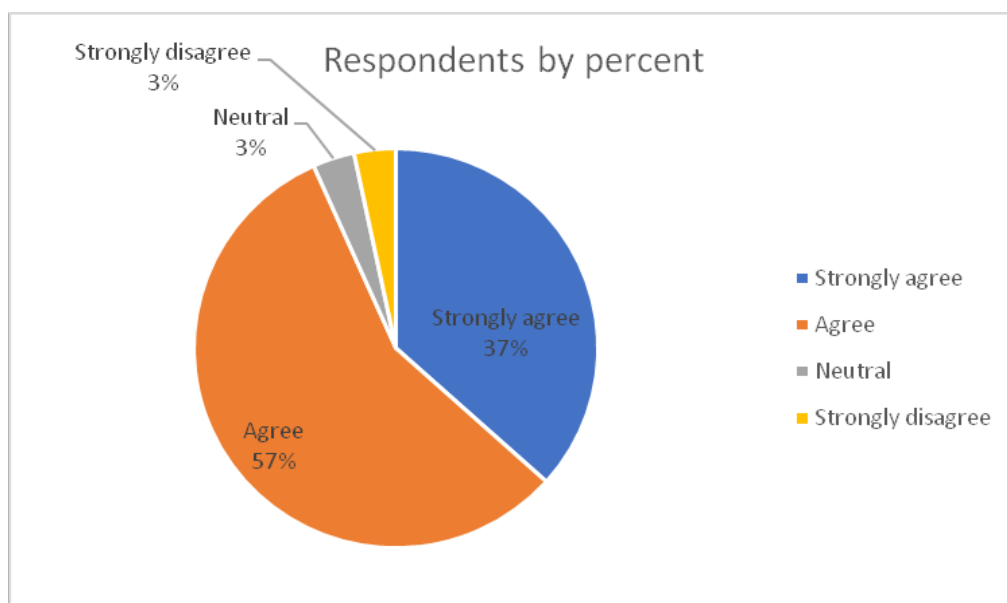
Saving time in e-GP

This is generally argued that e-GP has been introduced in public sector to manage procurement more efficiently. In order to assess efficiency, the respondents were asked whether time is saved because of processing public procurement through e-GP. Figure 4.12 shows that according to 74 per cent respondents, time was saved because of processing public procurement through e-GP. However, 13 per cent of the respondents expressed their disagreement regarding time-saving in e-GP and the similar per cent of the respondents remained neutral in assessing time-saving.

Figure 4.12: Time saving in e-GP
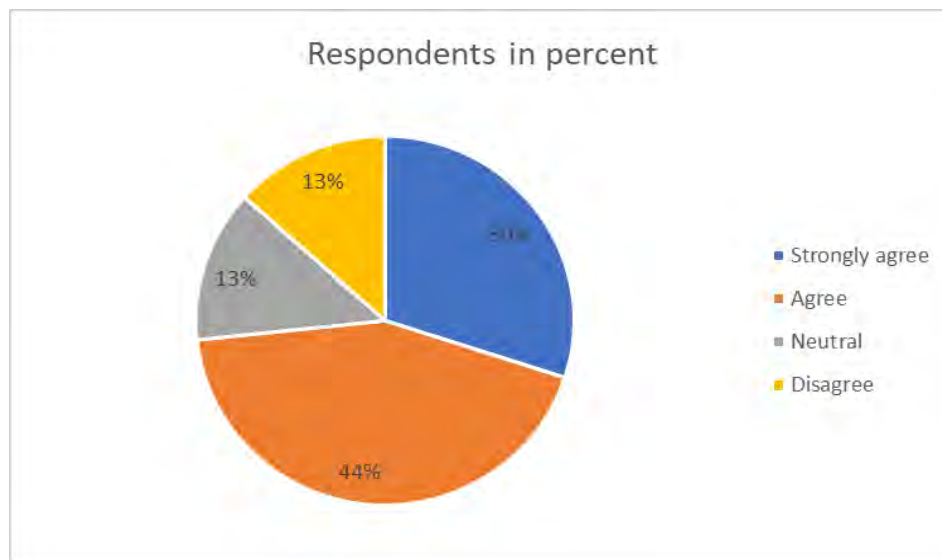
Possibility of collusions in e-GP

Public procurement is vulnerable to collusions among the various groups. Such collusion may be forged between the LGED officials and bidders and the bidders themselves. It is revealed that 13 per cent of the respondents said that any sort of collusion is possible to be forged between LGED officials and bidders in e-GP. However, according to more than the four-fifth of the respondents (84 per cent), such collusion was not possible in e-GP.

Similar opinion was expressed about possibility of collusion among the bidders. Only 7 per cent expressed their opinion that collusion was possible among the bidders in e-GP. In contrast 90 per cent dis-agreed with it and the remaining 3 (three) per cent remained neutral.

Reducing external pressures in public procurement because of e-GP

As like as collusion, external forces try to influence public procurement in developing countries like Bangladesh. For instance, bidders used to be barred from bid submissions. e-GP has been

introduced in order to reduce or stop external influences. Accordingly, the LGED district engineers were asked whether outside pressures had stopped in public procurement because of e-GP. Table 4.4 shows that 70 per cent expressed their agreement to the reduction of outside pressure in public procurement because of e-GP. However, 23 per cent respondents think that external forces can still influence the procurement despite of e-GP.

Table 4.4: Respondents' opinion regarding reduction of external pressure in procurement because of e-GP

	No.	%
Strongly agree	9	30
Agree	12	40
Neutral	2	7
Disagree	4	13
Strongly disagree	3	10

4.2.4 Comparative benefits between e-GP and traditional procurement system

Easiness of tender opening and transparency

According to the surveyed LGED officials, processing tenders through e-GP has accrued benefits in comparison with the manual processing tenders. More specifically, tender opening in e-GP has been easier than traditional method, said all the respondents. Improved transparency has been another benefit from processing tenders through e-GP because it provides equal opportunity to all prospective bidders in case of accessing tender related information, documents and tender submission.

Proper checking of bidders' records by procuring entity

More than two-thirds of the respondents (73 per cent) said that the procuring entities could check records such as experience certificates, audit report, construction turnover record etc. submitted by bidders as per requirements of meeting bidding conditions properly in e-GP. However, the remaining respondents expressed their disagreement to this view.

Verification of bidders' documents during post qualification stage: Easiness and accuracy

Further to proper checking the bidders' records, the respondents were asked whether document verification had been easier in e-GP. More than two-thirds of the respondents disagreed to easy verification of bidders' documents during post qualification assessment stage, among them 33

per cent respondents strongly disagreed to this notion. Only around one in four respondents said that e-GP had made such verification easier than the traditional method of procurement. Respondents' opinion is illustrated in Figure 4.13.

Figure 4.13: Respondents' opinion regarding easiness in verification of bidders' documents
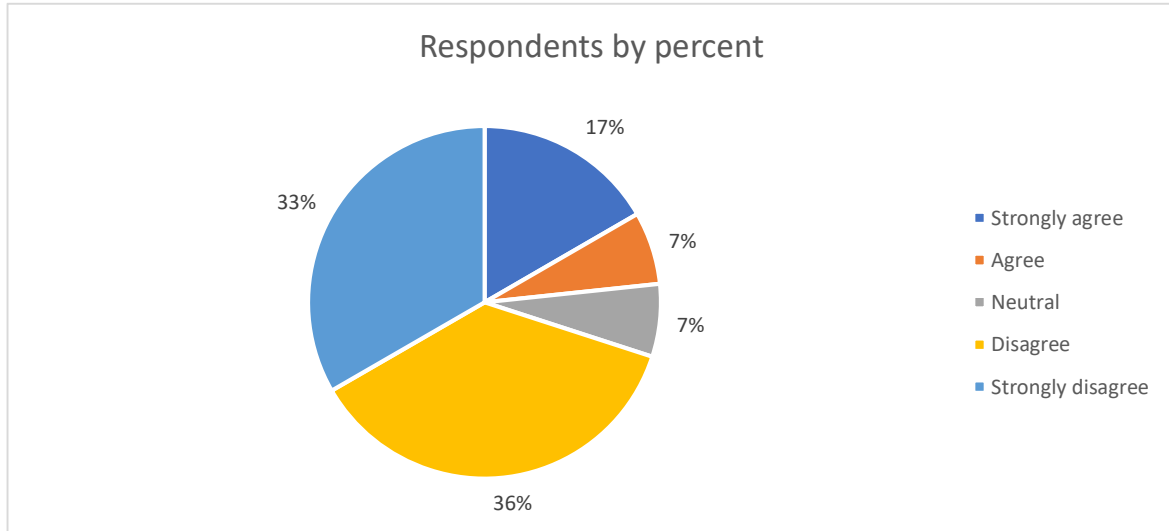
While the verification of bidders' documents during post qualification had not been easier to the most of the respondents, such verification was accurate because of processing tenders through e-GP. This opinion was expressed by 55 per cent of surveyed LGED engineers. On the contrary, 38 per cent respondents did not agree to this opinion. Details are demonstrated in Figure 4.14.

Figure 4.14: Respondents' opinion regarding accuracy in verification of bidders' documents
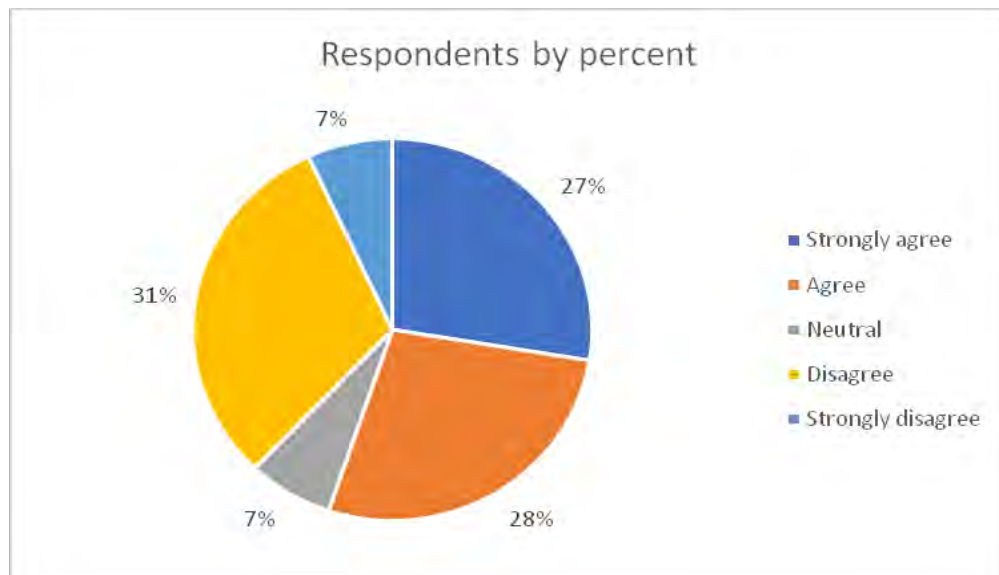
Reduction in printing costs in e-GP.

Electronic transaction of businesses is meant to reduce paper usage. In reality, one third of the surveyed respondents expressed their dis-agreement to the notion that e-GP had reduced printing costs. In contrary, the majority of the respondents said that printing cost was reduced in e-GP.

Minimization of mistakes in e-GP

All but two respondents said that mistakes had been much fewer in e-GP than the traditional system. Nevertheless, if any mistake was made, those could not be corrected easily in e-GP, said 37 per cent of the respondents. 56 per cent respondents expressed their opinion that mistakes could be corrected easily in e-GP. Details are shown in Table 4.5.

Table 4.5: Mistakes can be corrected easily in e-GP.

	No	%
Strongly agree	7	23
Agree	10	33
Neutral	2	7
Disagree	8	27
Strongly disagree	3	10

Acceptability of e-GP to bidders and LGED officials

This study tried to understand the acceptability level of e-GP to the relevant stakeholders specifically to bidders and LGED officers. It was revealed that e-GP had been widely accepted by the bidders and the LGED officials. Only one respondnet said that e-GP had not been acceptable to the bidders yet.

4.3 Challenges in managing e-GP

The respondents were asked about the types of challenges/problems/barriers they observed in managing e-GP in last seven years. It was observed that server incapacity which is caused by slow internet speed, weak network performance and lack of user friendliness, was the greatest problem while processing public procurement electronically. In addition, half of the total respondents pointed to manual verification of bidders' documents, which contributed to the lengthy process of managing government purchases and hence increased possibility of inaccuracy especially during evaluation. Inflexibility, manual contract management and bidders'

deficiency in ICT were cited by respondents as major challenges for e-GP. Details are demonstrated in Table 4.6.

Table 4.6: Challenges in managing e-GP in last seven years

Challenges/barriers/problems	No. of frequency N = 30
Drawing & lengthy scanning document	6
Server incapacity (internet speed, network, user friendliness)	26
Lack of ICT skills of bidders	8
Prone to breaching confidentiality (use of common computer and lack of confidentiality in banks)	5
Insufficient time to open (time length 1 hour)	5
Manual verification of bidders' documents during evaluation (lengthy process, hence inaccuracy)	15
Inflexibility (correction of mistakes, extension of tender validity period, performance security)	11
Manual contract management	11
Others (lack of central data bank, time consuming, power supply interruption)	6

4.4 Measures to address the challenges of e-GP implementation

In order to administer e-GP more efficiently and hence get full benefits the aforesaid challenges need to be overcome. Of 30 respondents, 25 emphasized enhancing capacity of e-GP server (i.e. high-speed, 24 hours uninterrupted internet, electricity especially in rural areas). Two other prioritized measures are training and awareness of bidders, officers and other stakeholders; and central storage of e-GP documents and improving its capacity. Details are given in Table 4.7.

Table 4.7: Recommendations for addressing the challenges or improving e-GP implementation

Recommendations	No. of frequency
Software to verify bidders' submitted documents within shorter period	7
Training & awareness of bidders, officers & people	13
More browser friendly e-GP software	8
Enhancing capacity of e-GP server (high-speed, 24 hours uninterrupted internet, electricity especially in rural areas)	25
Easier and friendlier e-GP helpdesk services, logistics	7
Digitalization of existing manual tasks (TEC minutes, post qualification report, comparative financial report, auto calculation of turnover, CMS, e-billing)	7
Central storage of e-GP documents & improving its capacity	9

Chapter 5

Conclusion and Recommendation

5.1 Conclusion

If we process tenders through e-GP, the public procurement will become more transparent and political influence will decrease. Considering these benefits, many countries are processing their procurements through e-GP. Bangladesh government has introduced it in June 2011. In Bangladesh among the 4 (four) pilot agencies who started e-tendering, LGED has implemented the highest number of tenders through e-GP i.e. up to December 31, 2016 LGED implemented 15526 e-Tenders which was 485% higher than target. At the same time RHD implemented 3302 e-Tenders (103%), BWDB implemented 1617 e-Tenders (168%) and BREB implemented 414 e-Tenders (323%).

Most of the respondents reported that LGED's district officers (Assistant Engineers and above) have had sufficient knowledge and skills required to process e-GP. All the Engineers have sufficient ICT Knowledge and all are adequately trained on e-GP.

All of the surveyed respondents either strongly agreed or simply agreed to the availability of the necessary equipment in District LGED offices to manage e-GP. Around 47 percent respondents expressed their agreement to having uninterrupted power supply but around 33 percent disagreed to uninterrupted supply of power in respective offices. 33 percent of the respondents disagreed to having uninterrupted internet connectivity in respective offices. However, 50 percent of the surveyed respondents said that their offices had uninterrupted internet connectivity.

There are several benefits of e-GP over manual tendering process. Bidders can maintain confidentiality in price quotation while submitting tenders (can be submitted from anywhere) through e-GP. LGED district offices can maintain confidentiality of official estimated cost in e-GP. Time was saved because of processing public procurement through e-GP. If the estimated cost is unknown, possibility of collusion in e-GP is almost impossible. External pressure is reduced because of e-GP. Tender opening, tender processing and bidders' document verification

is easier and transparent in e-GP. Printing cost and procurement processing cost is reduced in e-GP. Mistakes are much fewer in e-GP than the traditional system.

There are still some challenges in e-GP. For the latest amendment of PPR 2008 issued on 21 November 2016, inclusion of Performance Matrix made all interested bidders to submit various additional documents which is a rugged work for the bidders. After introducing the Performance Evaluation Matrix (as per the latest amendment in 2016), many more documents are to be verified for post qualification. If other performances are same, lastly the lowest acceptable bidder was being determined by the amount of average annual construction turnover. So, bidders having small and medium amount of turnover have a very low possibility to get contract awards subsequently they are losing interest in the participation of bids. The competitive environment is being destroyed as the official estimated costs are being leaked out to some bidders which will also increase collusive practice.

Some corruption occurred in bank as the bank is responsible for selling tender document in e-GP procedure if the bank managers share the tender selling related information of one tenderer with others. All of the scheduled banks including all branches of our country are not willingly interested to work with e-GP process.

The e-GP system is very slow and there are many problems in e-GP system till now. In re-tendering process, the previous tender documents cannot be retrieved although there is an option to do so. Post clarification cannot be allowed more than the tender publishing date. There is no central databank for bidder's experience certificates, audit report, turnover record etc. Thus, procuring entity cannot check the records of bidders in e-GP online system. Procuring entities have to print huge document to send for post qualification. This is a time consuming and costly process.

For evaluation in e-GP system declaration is to be done before seeing the name of tenderers but which should be after seeing the opening report i.e. with whom he has relations. There is also no scope to change the declaration or the evaluation committee. When evaluating tenders in e-GP system "Technically responsive can be selected although Qualification criteria is 'No'. So, mistake may take place. The reviewer or approver of the Tender Evaluation Report cannot see

the qualification criteria or TDS. No scope of calculating front loading in e-GP system. It has to be calculated manually by the Evaluation Committee highlighting 'offline within online'. Now there is no e-GP Tender Evaluation Committee in CCGP Level for evaluation of tender packages that have tender value more than 1000 million; which is a barrier to 100 per cent e-GP implementation. In LGED all the Tender Evaluation Reports of any value under development projects have to be approved by the Chief Engineer without applying the delegation of financial power. It requires additional times.

Bidders do not have sufficient knowledge and skills on computer and ICT to deal with e-GP. Uninterrupted power supply and uninterrupted internet connectivity is not yet available in upazila and rural areas in Bangladesh. In e-GP system under Limited tendering method Salvage Item and Fixed Item could not be included in the BOQ of Tender document. Password lock is very easy in e-GP system. One can easily lock the ID of someone else. It may hamper the tender submission. The powerful political leaders/persons/tenderers want to have collusive practices in e-GP; which is a great barrier to proper e-GP implementation.

After getting the performance security within the stipulated time through online, all the remaining process are to be done by offline system. Contract agreement may be uploaded later mentioning an earlier date. Under e-GP, contractor selection and award of contract can be done electronically but agreement with the selected contractor, payment of the work done and overall contract management is being done manually (following existing procedure).

The World Bank's board meeting on Friday (July 28, 2017) in Washington, USA, approved the World Bank's new project loan in government procurement. The implementation of the project, named as Digital Implementation Monitoring and Public Procurement Project, will provide a total of 5.5 million dollars. The aim of the project is to strengthen the development and supervision of the government procurement system. Through this project, the government's ongoing e-GP activities will be expanded. This will increase the use of technology in monitoring the development project along with the development of government procurement activities. The World Bank believes that the maximum value of public money will be ensured. World Bank's Country Director in Dhaka, Chimaoya Fan, said that through implementing the project will ensure the proper utilization of government resources by effective government procurement. This will facilitate the government to go to high-middle income countries.)Ittefaq, 2017(.

e-GP implementation in the local government organizations is a major component of the project. e-GP will be implemented at a total of 1300 procuring entities through a new 5-year project, out of which in 888 offices LGED will be in charge of e-GP implementation management. For the implementation of e-GP with more professional vision through LGED, more than 327 municipalities, 491 Upazila parisads, 61 Zila parisads and 9 (nine) city corporations (excluding Dhaka North and Dhaka south) under the Local Government Division have been included.

Under the local government division of the Ministry of Local Government, Rural Development and Co-operatives, all local government institutions were set to implement 100 per cent e-GP implementation by December 2016. But reality is still not implemented in all the institutions.

The present government introduced the e-tendering system in 2011 to make the development process more dynamic and to ensure greater transparency and accountability at public expenditure. Electronic Government Procurement (E-GP) system has already been popular in government departments and increasing the number of tender invitations at a significant rate day by day. Till now, about one lac twenty-five thousand tenders have been called through e-GP, of which 48 per cent of the tender is under LGED. LGED's role in implementing e-GP in Bangladesh is pioneer, which has come up in various reports of the World Bank and the Government.

Everybody thinks that the implementation of the project will be a challenge for implementing e-GP in this huge number of offices. However, the previous success of LGED's E-GP implementation and the long-standing experience of working with donor agencies is expected to provide encouragement to this challenge.)Islam, 2017(.

5.2 Recommendations

Considering the study findings and on international practice, some practical measures are recommended for better implementation of e-GP in Bangladesh:

- ➢ The e-GP web portal should be fast and the software should be bug free and more user friendly.
- ➢ Comprehensive help menu in each page of e-GP system should be incorporated.

- There must be an e-GP Tender Evaluation committee in CCGP Level for evaluation of tender packages that have tender value more than Tk. 1000 million.
- The latest amendment of PPR 2008 issued on 21 November 2016 and the Performance Matrix included in Tender documents should be reviewed and should be made more comprehensive as there are negative effects (discussed earlier) after using this Matrix & Amendment.
- There should be an integrated rate schedule for all public-sector Projects irrespective of the organization.

- Manual tender data for all PE offices of different financial years yet not incorporated in PROMIS software. For proper monitoring the procurement performance of PE offices, need to incorporate all manual tender data in PROMIS software.

- Improve monitoring of procurement performance within LGED using indicators through constant tracking of activities that will show expected deadlines/deliverables/requirements, deviations and reasons for deviations. A fit list may be prepared for posting a focal person for procurement purpose in each project/unit of LGED.

- During tender evaluation, still there is no difference for e-Tender and manual tender, while the process of tenderer's document verification during post qualification. This is a time-consuming issue and sometimes TEC can not complete the evaluation within the PPR'08 specified time frame. A central database can be established where contractors' previous qualification will be stored, which is already verified. Thus, repetition of verification of same information for a tenderer by different PE offices can be eliminated and corresponding time and cost required for verification purposes also be reduced.

- Some of the indicators value fully depends on user's awareness and skills. There are no alternatives without user's capacity development training in this regard.

- There are still many scope for software development to gain more efficiency in case of e-Tendering process, by developing this area system can ensure more compliance on tendering process. As example, for compliance of financial delegation and publication of award information can be done 100 per cent by just developing the software. CPTU can take initiative for this development.

- ➤ e-GP initiative needs to be monitored regularly to identify opportunities for ongoing improvements.
- ➤ Bank fees need to be kept on a reasonable level in order not to run the risk of reducing supplier's participation.
- ➤ The CPTU should create a sustainable training system for procurement practitioners and bidders to ensure compliance, professionalism and career development. Online training tool (Animation, Video tutorials, etc.) is not developed yet. CPTU should train both procuring entities and suppliers.
- ➤ The information's of two procurement websites: www.cptu.gov.bd and http://www.eprocure.gov.bd. should be consolidated on one website and both Bengali and English language should be used.
- ➤ Internet bandwidth and connectivity of the country should be upgraded i.e. not only in Capital, Division and District HQ level but also in all over the country. As it is not possible to do overnight, bidders may be encouraged to submit tender at night. Also, tender opening time may be spanned for any time of the day.
- ➤ LGED Should abide by the delegation of financial powers in contract approval.
- ➤ All review Panels of CPTU should be expert in e-GP and should be corruption free.

5.3 Recommendations for Future Research

Further to the current study there are scopes of research in this area. Future research scope and location can be the following:

- ➤ A similar research work could be done for LGED's different tier PE offices.
- ➤ Later a separate research work could be done for LGED's manual contract and e-CMS.
- ➤ Performance measurement of the procuring entity and bidders.
- ➤ Find out actual cost savings in e-GP tendering process.
- ➤ Identifying the training needs, motivational issues and composing a comprehensive training plan for both procuring entities and bidders.
- ➤ Ethical issues in e-GP.
- ➤ Identifying the reason to reduce number of participating bidders after introducing the latest amendment of PPR 2008 as on 21st November 2016.

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Annex 1: Random Sampling from 64 districts of Bangladesh

Here i give the list of all District of Bangladesh. There are total 64 Districts in Bangladesh.

01) Thakurgaon	33) Lalmonirhat
02) Tangail	34) Lakshmipur
03) Shylhet	35) Kushtia
04) Sunamgonj	36) Kurigram
05) Shirajgonj	37) Kishoreganj
06) Sherpur	38) Khulna
07) Shariyatpur	39) Khagrachori
08) Shatkhira	40) Jhinaidaho
09) Rangpur	41) Jhalokathi
10) Rangamati	42) Jessore
11) Rajshahi	43) Jamalpur
12) Rajbari	44) Jaypurhat
13) Pirojpur	45) Hobiganj
14) Potuakhali	46) Gopanganj
15) Panchagar	47) Gazipur
16) Pabna	48) Gaibanda
17) Norail	49) Feni
18) Noakhali	50) Foridpur
19) Nilphamari	51) Dinajpur
20) Netrokona	52) Dhaka
21) Nawabgonj	53) Cox's Bazar
22) Nator	54) Comilla
23) Narsingdi	55) Chuadanga
24) Narayangan	56) Chittagong
25) Naogaon	57) Chandpur
26) Mymensingh	58) Bhola
27) Munshiganj	59) Bogra
28) Moluvibazar	60) Brammonbaria
29) Meherpur	61) Barisal
30) Manikgonj	62) Barguna
31) Magura	63) Bandarban
32) Madaripur	64) Bagerhat

Random Number Generator

Generate 10 integers between 1 and 64 · Unique Values

GO

Copy down these data or cut and paste them into your application · About

42 31 26 54 64 16 63 56 21 2

Random numbers generated Oct 11 2017 at 22:34:4 by www.psychicscience.org
Free educational resources for parapsychology and psychical research.

Sl. No.	Random No.	Name of selected LGED District Offices
1	42	LGED Bhaban, Jessore
2	31	LGED Bhaban, Magura
3	26	LGED Bhaban, Mymensingh
4	54	LGED Bhaban, Comila
5	64	LGED Bhaban, Bagerhat
6	16	LGED Bhaban, Pabna
7	63	LGED Bhaban, Bandarban
8	56	LGED Bhaban, Chittagong
9	21	LGED Bhaban, Nawabgong
10	2	LGED Bhaban, Tangail

The respondents are Executive Engineers, Senior Assistant Engineers and Assistant Engineers of those 10 (ten) districts. Total No. of respondents are 10x3=30 nos.

Annex 2: Survey Questionnaire for Research on "**Challenges of implementing e-Government Procurement in LGED: A study on selected offices of the District Executive Engineers**"

[This is a survey questionnaire for conducting a study to find out challenges in the management of e-GP in Local Government Engineering Department. It is a part of academic necessity for the Masters in Procurement and Supply Management in the BRAC Institute of Governance and Development (BIGD), BRAC University. Your response is valuable for the researcher. The researcher assures you that the information given by you will be kept confidential & will be used only for the academic purpose.]

Respondent's identity:

Name of LGED office	
Name of the respondent	
Gender of the respondent	☐ Male ☐ Female
Designation of the respondent	
Educational qualification (last degree obtained)	

Q1.   What types of roles have you played in managing e-GP in last seven years?
[Multiple responses are allowed]

☐ Procuring Entity
☐ Member of Opening Committee
☐ Chairperson of Opening Committee
☐ Member of Evaluation Committee
☐ Chairperson of Evaluation Committee
☐ External Member of Evaluation Committee

Q2. To what extent of the entire procurement cycle is electronically managed?
[Please tick (√) where appropriate]

Areas of procurement	Complete electronically managed	Both electronically and manually managed. [if tick here, please specify percentage]		Complete manually managed
		Electronically in %	Manually in %	
Procurement planning (APP)				
Preparation of biding documents				
Invitation of bids				
Submission of bids				
Opening the bids				
Bid evaluation				
Bid approval				
Notification of award				
Contract agreement				
Payment of bidder's bills				
Overall contract management				

Q2a.   In addition to broad areas mentioned in Q2, what other activities are still to be done manually in e-GP system? [Mention three key challenges/problems]

(i)………………………………………………………………………………………………
…

(ii)
………………………………………………………………………………………………..

(iii)………………………………………………………………………………………………
…

(iv)
………………………………………………………………………………………………

(v)………………………………………………………………………………………………
…

Q3. **What types of challenges/problems/barriers did you observe in managing e-GP in last seven years?** [Mention three key challenges/problems/barriers]

Areas of procurement	Types of challenges/problems/barriers
Bid preparation and submission through e-GP	i. …………………………………… ii. …………………………………… iii. ……………………………………
Opening of bids through e-GP	i. …………………………………… ii. …………………………………… iii. ……………………………………
Bid evaluation through e-GP	i. …………………………………… ii. …………………………………… iii. ……………………………………
Contract management through e-GP	i. …………………………………… ii. …………………………………… iii. ……………………………………
Overall management of e-GP	i. …………………………………… ii. …………………………………… iii. ……………………………………

Here we are presenting you a list of challenges/problems that may hamper the management of e-GP in LGED. We are asking you to measure the extent of these problems. [Please tick (√) where appropriate]

Q4. **The LGED District Office has necessary equipment (computer, printer, photocopy etc.) to process e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q5. **The LGED District Office has uninterrupted supply of power to process e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q6. **The LGED District Office has uninterrupted connectivity of internet to process e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q7. **The officers of the LGED District Office (Sub-Asst. Engineers and above) have sufficient knowledge and skills on computer and IT to deal with the e-GP related activities.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q8. **The bidders have sufficient knowledge and skills on computer and IT to deal with the e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q9. **e-GP website and software is user-friendly to the bidders.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q10. **e-GP website and software is user-friendly to the officers of LGED District Office (Sub-Asst. Engineers and above).**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q11. **e-GP server can handle the load of tender submission and other activities.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q12. **Password is secured in e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q13. **Banks have scope to disclose confidential information related to tender.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q14. **Branches of banks are willing to deal with e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q15. **Bidders can maintain confidentiality of price quotation in the e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q16. **The District LGED Office can maintain confidentiality of official estimated cost in the e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q17. **Time is saved because of processing public procurement through e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q18. **Collusion between LGED officials and the bidders is possible in e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q19. **Collusion among the bidders is possible in e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q20. **Outside pressures have stopped in public procurement because of e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q21. **Tender opening in e-GP has been easier than manual/traditional method.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q22. **Tender opening in e-GP has been more transparent than manual/traditional method.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q23. **The procuring entity can check the records of bidders (bidder's experience certificates, audit report, construction turnover record etc) in e-GP properly.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q24 **Cost of printing documents reduced in e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q25. **Verification of bidders' documents during post qualification has been easier in e-GP.**

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q26. Verification of bidders' documents during post qualification has been accurate in e-GP.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q27. Mistakes have been much fewer in e-GP than the traditional system.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q28. Mistakes can be corrected easily in e-GP.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q29. The evaluation committee can recommend for reducing the scope of work in e-GP.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q30. e-GP has been widely accepted by the bidders.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q30a. If you 'disagree' or 'strongly disagree', what are the reasons?

(i)………………………………………………………………………………………………
…

(ii)
……………………………………………………………………………………………..

(iii)………………………………………………………………………………………………
…

Q31. e-GP has been widely accepted by the officers of the LGED District.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Q31a. If you 'disagree' or 'strongly disagree', what are the reasons?

(i)………………………………………………………………………………………………
…

(ii)
……………………………………………………………………………………………..

(iii)………………………………………………………………………………………………
…

Q32. **What do you recommend for addressing the challenges or improving e-GP implementation?**

i. …………………………………………………………………………………………………
…

ii. …………………………………………………………………………………………………
……

iii. …………………………………………………………………………………………………
……

iv. …………………………………………………………………………………………………
……

v. …………………………………………………………………………………………………
……

Q33. **Do you perform your official works in computer by yourself?**

☐ Yes   ☐ No

Q33a. If yes, how long do you use computer?

………. years

Q34. Do you browse internet?

☐ Yes   ☐ No

Q34a. If yes, how long do you browse internet? …. years

☐ Yes   ☐ No

Q35. Have you got any training on e-GP?

☐ Yes   ☐ No

Q35a. If yes, how many days altogether did you receive training on e-GP?

………. days

Date of filling the questionnaire   :

Signature   :