Abstract: E-governance, a paradigm shift from the traditional approaches in public administration, has been recognized as a pivotal force for transformational improvement of governance in quality, responsiveness, efficiency and effectiveness. Advancement in Information and Communication Technology (ICT) as well as immense pressure of globalization thus has brought about a new dimension to the concept of governance. Basically, the quintessence of good governance lies in the best installation of ICT based governance mechanism through widening the way for more transparency and increased accountability. The objective of this study is to identify the nexus between e-governance and good governance in the context of Bangladesh. Accountability, transparency, efficiency, decentralization, administrative reform and satisfaction regarding public services by its clients are noticeable problem areas in the present governance of the country. On the basis of lessons learned from successful practices in developing countries and various research reports, this study suggests that e-governance mechanism, an antidote to poor governance, can play a significant role in ensuring good governance and thus offers the opportunities to transformational change in public administration of Bangladesh.

Keywords: Governance, E-Governance, Good Governance, Accountability and Transparency, Bangladesh Public Administration

1. Introduction

How is today’s world in governance disclosure and how have been the definitions of governance changed over the years? Undoubtedly, the most appropriate word to refer to governance in the twenty first century is ‘E-governance’ or in other words ‘governance through Information and Communication Technology (ICT)’. In today’s globalized world, if a country fails to understand the importance of ICT based e-governance, it is really difficult for it to find out better way to sustainable governance framework. It is the latest addition to governance framework that seeks for providing the services to the door of the people with least time, better efficiency and least cost.

Mismanagement and usurpation of public funds, poor service delivery, lack of accountability and transparency, breakdown of law and order have all been witnessed in many poorly-governed countries in Africa, Asia, Latin America and the Middle East and hence the quest for good governance. Bangladesh, one of the victims of this kind of poor governance, inherited a structure of governance characterized by large amount of paper work and files handling; time consuming process and many explicit controls and approvals. Government of the country costs too much, takes much time but delivers too little and is not sufficiently responsive and accountable. In this situation, e-governance offers a new way forward helping improve governance process, connect citizens and build interactions with and within the stakeholders.

2. Methodology

The exploratory research method has been followed for the study. The research has followed Secondary sources which include different books, journals, newsletters and annual reports of different organizations. Internet facilities are also
availed for collecting secondary data.

3. Conceptual Framework

3.1. Governance

Since the second half of the 1990s, the term ‘governance’ has emerged as popular concept and seems to have replaced public administration in the literature [1]. From public administration viewpoint, governance has proliferated to the point where the construct has become analytically intractable [2]. Governance is the exercise of economic, political and administrative authority of a state to manage its affairs. Governance encompasses the nature of functioning of a state’s institutional and structural arrangements, decision making processes, policy formulation, implementation capacity, information flows, effectiveness of leadership, and the nature of the relationship between rulers and the ruled [3]. In concise, governance is “the relationship between civil society and the state, rulers and the ruled, and the government and the governed” [4].

3.2. Good Governance

Nowadays, good governance is very complex and multidimensional concept but an essential prerequisite for a country. The concept emerged as a counter attack to poor or miss- governance. People all over the world are increasingly criticizing poor or miss-governance and running after good governance [5]. Basically good governance, in contrast to poor governance, is (a) the promotion of open and pluralistic society; (b) strengthening of transparent, accountable, efficient and effective national government; (c) reinforcement of rule of law, including fair and accessible legal and judicial system; (d) promotion of an independent media and dissemination of information; anti-corruption initiatives; and (f) efforts to reduce excessive military expenditure. It is synonymous with sound development management. Good governance is precised by predictable, open and enlightened policy making; a bureaucracy imbued with a professional ethos; a strong civil society participating in public affairs; and all behaving under rule of law [6].

3.3. E-Governance

In the late 1980s a new generation of public administration began to displace the last classical administration which came to be called New Public Management (NPM). NPM focuses on networking. Hence, later electronic-governance, popularly known as e-governance emerged as a distinct tool of networking based governance in the public sector management. It is the process of strengthening governance actors using Information and Communication Technology (ICT) to make governance effective for citizens in terms of efficiency, transparency and cost-effectiveness. The desired objective of e-governance is to have the omnipresent access of the government information and service through e-administration and e-procurement. In a broader perspective, e-governance is based on the integration of several stands i.e. systems and services between Government to Citizens (G2C), Government to Business (G2B), Government to Government (G2G). In brief, E-governance is the application of Information and Communication Technology to the processes of government functioning in order to bring about Simple, Moral, Accountable, Responsive and Transparent (SMART) governance [7]. Hence it is also called SMART governance.

4. E-Governance and Good Governance: The Linkage

An important question arises- can e-governance ensure much expected good governance? And the answer is very much affirmative. A strong correlation remains between e-governance and good governance. ICT is one of the key instruments that support good governance by increasing transparency, accountability and eventually helping to reduce the cost of government business operations [8]. All over the world, as governments in the developing nations cost much, deliver too little, and is not sufficiently responsive and accountable; e-governance offers a new way forward to address these shortcomings.

There are conscious attempts among the government across the globe regarding the reforms in public administration to facilitate customer-centered, cost efficient, user friendly and up-to-date delivery of services to the citizens. E-technology has strengthened reforms in many areas in the public sector and is widely recognized as an effective reform tool to introduce integrated management and improve service delivery [9]. It is obvious that documentary mode and interpersonal interaction of bureaucratic paradigm has shifted to electronic exchange and non-face-to-face interaction of e-governance paradigm. In addition, standardization, impartiality and equity principles are shifted by user customization, personalization and steering the governance procedure through invoking improved service delivery by the government agencies.

The World Public Sector Report (2003) showed that:

ICT allows a government’s internal and external communication to gain speed, precision, simplicity, outreach and networking capacity. This can be converted into cost reduction and increased effectiveness- two desired features of all government operations, but especially of public services. It can also be converted into 24/7 usefulness, transparency and accountability, networked structures of public administration, information management and knowledge creation in public administration [10].

Undeniably, e-governance evidences smooth intervention between the government and other stakeholders. This kind of intervention enables active people’s participation through wide services such as informing, representing, encouraging and consulting for various activities. In addition, ICT helps make the task of governance more systematic for those, who govern. It also makes the task of governance more convenient to avail the service by the governed. Thus, it
brings about a tremendous change in the way of living, the way of thinking, the way of behaving and the way of designing social, political, economic and administrative aspects of the state (See Table: 1).

| Good Governance Principles | The Impact of E-governance |
|----------------------------|---------------------------|
| Accountability and Transparency | 1. omnipresent access of timely, comprehensive, relevant, high-quality and reliable information concerning government activities. |
|                              | 2. This kind of active disclosure of governance information leads to accountability and transparency. |
| People’s Participation       | 1. Enables all the Stakeholders to take part in policy making and implementation i.e. e-participation, e-feedback. |
|                              | 2. Much access of general mass with no harassment. |
| Responsiveness               | 1. Citizen centric services in a responsive manner |
| Efficiency and Effectiveness | 1. Results in huge cost saving |
|                              | 2. Makes service delivery process speedy abolishing unwanted delay and dissipation of resources. |
| Equity and Inclusiveness     | 1. Ensures equity and fairness in public service delivery profoundly. |
|                              | 2. Each and every citizen of a country gets the benefits of e-service, e-administration and e-procurement regardless of caste, class, race, religion and sex from any corner of a country or even the world. |
| Consensus Orientation        | 1. Creates a bridge between the government and the public for the basic information access and interchange. |
|                              | 2. This kind of bridging brings about a consensus between “who govern” and “who are governed”. |
|                              | 3. Thus helps to develop an atmosphere of two way invisible e-dialogue between government and citizen. |

Source: Author’s own work

Corruption has emerged as an acknowledged “crisis of governance” [11]. Good governance and corruption are much talked terms in the contemporary world governance where the former has positive connotation and the latter has negative perception in public mind [12]. Corruption is a curse, the continuance of which leads to economic malaise and squandering of public resources, lowers governmental performance, adversely affects general efforts and accountability measures and perpetuates social and economic inequalities [13]. E-governance can play a pivotal role in corruption control and thus offers opportunities to cost effective service delivery to citizens, a daunting task of modern public administration.

In addition, e-service, e-administration and e-procurement have cohesiveness with civic inclusiveness and participation. Because better information for citizens improves efficiency for the political market process which generates greater and more effective representation and participation leading to better governance and democracy [14].

5. Necessity of ‘E’ in Public Governance of Bangladesh

Government and governance of the world in the 21st century are undergoing a paradigm shift from their traditional role of control and suppression towards result orientation, flexibility, facilitation and a citizen centric approach. There is a strong correlation between “global pressure” and the effect of e-government on changes in accountability, the central pillar good governance [15]. Multinational agreements, expansion of Multinational Corporations (MNCs), a revolution in ICTs, empowerment of I-NGOs, worldwide attempts against public sector corruption, public sector management reform initiatives; all these stimulate global pressure on public administration. Moreover, today’s reforms in public administration emphasize on different values such as security and efficiency, predictability and innovation, speed and accuracy, flexibility and accountability, effectiveness and justice, responsiveness and inclusion [16]. Nowadays, in public administration, trends are seen in the form of global public administration, the objective of which is transcending division among cultures and national boundaries [17]. There are six trends in this regard i.e. global innovation, holistic mapping, flexible government, web and networks, citizen engagement and human dimension [18].

The overflowed advancement of ICT world wide as well as immense pressure of globalization has pushed Bangladesh to be aware regarding e-governance. The country is at a backdrop position in arena of extensive globalization especially, in the wave of ICT based development the country is still far behind compared to other neighboring countries. Hence keeping these issues in consideration, the present government in power took the predominant political agenda of ‘Digital Bangladesh’ under ‘Vision 2021’ in the manifesto of national election-2008 and it is high time to turn the agenda into reality. In spite of some initiatives already taken by Bangladesh in this area, there is no space for the country to be complacent and there are much more actions to be taken to reach the pinnacle of ultimate vision. Public administration in Bangladesh is always termed as British-Pakistan legacy [19]. In the post-colonial era the country has not been shy to retain elitist status-quo in the bureaucracy and also has not made the way for modern ideas replacing colonial heritage [20]. In addition, traditional procedures of governance i.e. information gathering, storage, processing and dissemination which is very laborious and time consuming, are being considered moldy with the demands of the 21st century hence is the call to embrace digital governance.

Bangladesh is reflection of mal-governance where the overall capacity of public administration to rule has declined over the decades and in general it does not seem to be capable of responding to emerging challenges of governance [21]. The governance structure of Bangladesh is always characterized by giant in size, clumsy in skills and outmoded...
in nature. It is slow due to presence of too many layers and complexities. This has created a vacuum in all echelons of public administration both higher to lower which helps perpetuate mismanagement and encourage and institutionalize corruption. In addition, inter-service conflict, improper career management, lack of communication between public servants and the people have made the situation worse [22]. These poor practices in public organizations bring forward the need to design and implement new systems and electronic-governance is the best prescription in this regard.

Bangladesh is a high power-distance country where the hierarchy of authority in the administration is over-emphasized and these results into rigidity and centralization; absence of accessibility and friendliness; low-level of trustworthiness and gaps in cooperative efforts [23]. Moreover, prevalence of abduction and rip-off as responsibility evasion and negligence of day to day official duties are common administrative culture [24]. Development practitioners urge that ICT emerges as a magical antidote to this i.e. to reduce massive corruption, red tape, bureaucratic elitism and inefficiency, favoritism, lack of accountability and transparency [25]. So, e-governance can be the one and only mechanisms that will help reshape public sector and remake the relationship between government and mass people as technology and connectivity is synonymous nowadays.

6. E-Governance Initiatives in Bangladesh Public Administration

In Bangladesh dedicated efforts have been authored in a view to encourage the proliferation of e-governance implementation. Digital Bangladesh with Vision 2021 is a big pathos for the development of digital technology for e-governance in the country. The country has gone to a far way in turning the vision of ‘e-service delivery in all the areas of administration’ into reality. The Prime Minister of the country has put great emphasis on identifying challenges in the implementation of nation-wide e-governance and on initiating pilot projects in various sectors of the government through a project called Support to ICT (SICT) Task Force.

The government of the country has adopted its ICT Policy-2009 with vision to expand and diversify the use of ICTs; to establish a transparent, responsive and accountable government; to development skilled human resources; to enhance social equity; to ensure cost-effective delivery of citizens services through public-private partnerships; and to support the national goal of becoming a middle income country in 10 years and so join the ranks of the developed countries within 30 years [26]. Besides, the government executed the Right to Information Act-2009, another milestone for accountable and transparent administration, to ensure the free flow of information and citizen’s right to information. [27]. This act has worked as catalyst to the public organizations to develop online information disclosure as well as web portals. The ICT Policy-2009 and Right to Information Act-2009, no doubt, have depicted the base for illustrating Digital Bangladesh priorities for the Government [28].

The government of Bangladesh has launched national web portals containing 64 districts’ web pages with the name of 64 administrative units of Bangladesh aiming at easing the dissemination of information. Citizens get the opportunity to be informed about the day to day works; circulars and notice from the government organizations. Most of the public offices has LAN, MAN and WAN connections and are providing web-based services to the citizens.

Ministry of Finance (MoF) has developed customized software for budget planning, sensitivity analysis, impact analysis, financial projections and various report dissemination. National Board of Revenue (NBR) has customized its service delivery i.e. e-TIN, e-BIN, e-payment, VAT e-filling and VAT e-appeal [29]. Both Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) are highly online-based which has widened the way for the citizens to trade with much more ease than before. Online Banking system has quickened the financial activities of the country. Bangladesh Bank, one of the most fully computerized public institutes has integrated ICT into the core business processes of it and thus has developed a splendid monitoring system for other commercial bank’s transactions. Online investment registration system has been inaugurated under the Board of Investment (BoI) which has simplified the investment registration procedures for local and foreign investors by reducing time, cost, hassle and unnecessary documentation.

Wide access of ICT has brought about a radical advancement in the education sector. Online-based registration system of admission and publication of the results of public examinations even through SMS are some noticeable reforms. E-learning environment in schools, colleges and universities and distance learning through TV, radio, mobile phone and internet are being getting priority. Moreover, textbooks of primary and secondary levels published by National Curriculum and Textbook Board (NCTB) have been converted into e-books and uploaded on www.ebook.gov.bd with direct technical support by Access to Information (A2I) of Prime Minister’s Office.

Union Information and Service Centers (UISCs) are operating more than four thousand Union Parishads which has paved the way for providing services to the people of grassroots level mainly through digital devices. This kind of digital mechanization has eliminated the scope of middlemen. Moreover, local level entrepreneurship is being developed on the basis of ICT knowledge through training local people under UISC program.

Another recent initiative in the arena of e-governance is the commencement of e-voting system widely known as EVM (Electronic Voting Machine) system. EVM is a noticeable e-governance initiative taken by the National Election Commission of Bangladesh. This e-voting system allows a voter to record his/her secret ballot electronically.
and thus prevents vote rigging and ensures transparency. This is a milestone in the way to good governance as free and fair election is an important precondition for good governance.

A vivid advancement has come in the money order through mobile phone services of post offices. Even a couple of years ago, people were dissatisfied with slow services of this public office. But at present they can conduct money transactions across the country within a few minutes and the transaction cost is also minimum.

The total number of mobile phone subscribers has reached 135,982 million [30] and internet subscribers 73,347 million [31]. Nowadays, even a person with ordinary asset can get the amenities of mobile technology and can access the internet services from any corner of the country at low cost. In addition, tremendous changes have been made in many other sectors such as registration for jobs abroad, e-passport service, e-birth registration, e-registration of the pilgrimage, e-telemedicine service, e-payment of utilities i.e. electricity bill, water supply bill and so on. All these initiatives are good steps and milestones indicating the gradual digital transformation process in the country.

7. Salient Challenges to Bangladesh Public Administration

The government of Bangladesh has taken many ambitious, but achievable endeavors for introducing e-governance in the public sector of Bangladesh. In spite of this, recent international surveys i.e. ITU ICT Readiness and Access Survey 2016 showed Bangladesh as one of the poorest performers in the southern Asia [32]. The Survey has measured the level of progress of ICT readiness and access in 175 countries worldwide focusing on the advancement made between the years 2015 and 2016. According to the Survey, Bangladesh is at 145th position scoring an IDI value 3.06 which indicates that the country has still lagged behind compared to most of the neighboring countries (see Table 2).

| Country       | Rank 2016 | IDI 2016 | Rank 2015 | IDI 2015 |
|---------------|-----------|----------|-----------|----------|
| Maldives      | 80        | 6.22     | 79        | 6.04     |
| Sri Lanka     | 113       | 4.51     | 115       | 4.26     |
| Bhutan        | 125       | 4.02     | 128       | 3.75     |
| Pakistan      | 136       | 3.39     | 135       | 3.30     |
| India         | 139       | 3.32     | 140       | 3.15     |
| Nepal         | 143       | 3.16     | 144       | 2.91     |
| Bangladesh    | 145       | 3.06     | 143       | 2.91     |
| Afghanistan   | 163       | 2.51     | 163       | 2.39     |

Source: ITU (2016, p. 13)

Although e-governance scheme has been taken as one of the leading policies in Bangladesh during the last decade, it seems that the result is not pleasant and goals are not so easy to achieve due to various economic, administrative, organizational, contextual and technical problems. Bangladesh public administration faces multidimensional and multisided problems and challenges in installing e-governance mechanism to an expected extent.

1. Skilled ICT knowledge-based human resource is the most important indicator of to what extent a country will be successful in incorporating e-governance. Bangladesh public administration always faces an acute crisis of efficient personnel in case of ICT based human resource. This kind of gap between demand and supply of IT professionals limits the scope and speed of e-operation in the administration.

2. A well-developed telecommunication infrastructure is needed for smooth operation of e-governance. But inadequate telecommunication infrastructure of Bangladesh is an impediment to quality e-service delivery. Though the country has drawn a number of visionary initiatives the main challenge is to finance for their successful implementation. Because institutional infrastructural readiness, data system infrastructure, human infrastructure and technological infrastructure development costs too high.

3. Another challenge is a cause to be concerned about is Digital Divide. Digital Divide implies the gap between “haves” and “have-nots” in regard to ICT access. It indicates a gap between rich and poor as well as rural and urban households in terms of access to modern technology whether the earlier one has high access and later has low or even no access.

4. There is a continuing challenge in the areas of privacy and security that needs to be addressed. In recent years, cyber crimes have increased to a large extent in Bangladesh. So, now-a-days, cyber security is another crucial matter of concern for public governance of Bangladesh.

5. A great challenge is sluggish attitudinal change of the administrators, especially those who are the seniors and at the top of hierarchy. This is due to their fear of loss of control as well as fear of loss of comfort. As, in public bureaucracies, decentralization through access to information on to the desks of all employees and associated changes in power within the organizations, are seen as a direct threat to many senior staff, who then block to adoption [34].

6. Success of e-governance very much depends on coordination and cooperation among public agencies. But Bangladesh public administration is always termed as inter-department and inter-agency rivalry; generalist-specialist controversy. Absence of coordination between government agencies results into poor public governance.

8. Conclusion and Recommendations

In today’s era of the triumph of ICT, electronic public governance and management system is the prime determinant to achieve much solicited good governance. The initiative of e-governance, to make the public administration pro-people, efficient, speedy and up-to-date, is a vibrant phenomenon in many developing countries. Bangladesh is a new member in
the world of e-governance. ICT movement and activities in Bangladesh is very recent and time has not yet come to assess its ultimate result. Rather much more emphasis should be given on correcting its loopholes and overcoming the above mentioned challenges. There needs to develop a well-planned program to create a greater number of IT human resource. Intensive training and workshops should be initiated. This will help properly orient the public officers with e-service delivery process and do attitudinal change as professionalism and a new way of thinking is a must for marching towards good governance through e-governance. Digital divide should be abolished through shortening the rural-urban gap and ‘haves’-‘haves not’ inequality of the citizenry. As the Government of the People’s Republic of Bangladesh has strongly expressed its zero tolerance against corruption, it is high time, much more sturdy initiatives need to be taken to fight against this curse. In addition, electronic infrastructure development and adequate financing for this is another big challenge. Public-Private Partnership (PPP), GO-NGO Collaboration and GO-GO Synergy can greatly accelerate this journey solving this problem. Above all, the Question is- will Bangladesh be able to achieve its ultimate apex of the vision “Digital Bangladesh”? And the affirmative answer depends on how efficiently the country will manage the typical hurdles in the path to e-governance.

References

[1] Sapru, R. K. (2014). Public Administration Theories and Management Thought. Delhi: PHI Learning Private Limited.

[2] Offe, C., (2009). Governance: An “Empty Signifier”? Constellations, Oxford: Blackwell Publishing Ltd. Vol. 16, pp. 550-562.

[3] Landell-Mills, P. and Serageldin, I. (1991). Governance and External Factor, World Bank, Washington D. C.

[4] McCarney, P. L., M. Hafiani and A. Rodriguez (1995). Towards An Understanding of Governance: The Emergence of an Idea and Its Implications for Urban research in Developing Countries”, in RR. E. Stern and J. K. Bell (eds.), Urban Research in the Developing World, Vol. 4: Perspectives on the City, Toronto: Center for Urban and Community Studies, University of Toronto, 1995, pp. 91-141.

[5] Khan, M. M. (2016b). Democracy and Governance: Public Administration and Public Governance. Vol. III. Dhaka: AH Development Publishing House.

[6] World Bank (1994). Governance: The World Bank’s Experience, Washington D. C.

[7] Heeks, R. (2001). Understanding e-governance for development, i-government working paper series, Paper No. 11. Manchester, UK: Institute for Development Policy and Management, University of Manchester.

[8] Harris (2000). e-governance. Retrieved from http://www.iadb.org.

[9] Khan, M. M. (2013b). Implementation Failure of Major Administrative Reforms in the Bangladesh Civil Service: Does the Governance Perspective Matters? In Aminuzzaman, S. M. et. al. (Ed.), Governance at Crossroads: Insights from Bangladesh (pp. 15-31). Dhaka: Institute of Governance Studies, BRAC University.

[10] World Public Sector Report (2003). e-Government at the crossroads. New York: UN, Department of Economic and Social Affairs.

[11] Bhuiyan, S. H. (2010). Modernizing Bangladesh Public Administration through E-governance: Benefits and Challenges. Government Information Quarterly, 28 (2011). pp. 54-65.

[12] Khan, M. M. (2016a). Public Administration and Public Governance. Vol. Ib. Dhaka: AH Development Publishing House.

[13] United Nations (1990). Corruption in Government. Report of an International Seminar held in The Hague, The Netherlands on December 11-15. New York, The United Nations.

[14] Saidi, N. & Yeard, H. (2002). E-governement: Technology for Good Governance, Development and Democracy in the MENA Countries, Paper presented at The Fourth Mediterranean Development Forum in Amman, Jordan, The World Bank Group, 2002.

[15] Welch, E. & Wong, W. (1998). Public Administration in a Global Context: Bridging the Gaps of Theory and Practice between Western and Non-Western Nations. Public Administration Review 58. Pp. 40-49.

[16] Lægreid, P. (2011). Administrative Reforms and the Challenges for Developing Countries. In Jamil, I. et. al. (Ed.), Understanding Governance and Public Policy in Bangladesh (pp. 1 22. Dhaka: MPPG, North South University.

[17] Hou, Y. et al (2011). The Case for Public Administration with Global Perspective. Journal of Public Administration Research and Theory, 21:145-155.

[18] Wolf, A. (2000). Trends in Public Administration: A Practitioner’s View. International Review of Administrative Science, 6 (4): 689-696.

[19] Islam, M. S. & Ahmed, B. (2015). Public Policy Making in Bangladesh: Problems and Prospects. Dynamics of Public Administration, Vol. 32, No. 2, pp. 83-93.

[20] Zafarullah, H. (2007). Bureaucratic Elitism in Bangladesh: The Predominance of Generalist Administrators. Asian Journal of Political Science, 15 (2), pp. 161-173.

[21] Ahmed, N. (2014). Public Administration and Governance in Bangladesh: In Search of a Paradigm. In Ahmed, N. (Ed.), 40 Years of Public Administration and Governance in Bangladesh (pp. 3-19). Dhaka: The University Press Limited.

[22] Khan, M. M. (2013a). Public Administration in the Governance Framework. Journal of Asiatic Society (Hum.), 58 (2), 277-288.

[23] Hofstede, G (1993). Cultures and Organizations: Software of the mind. Administrative Science Quarterly, 38 (1), 132-134.

[24] Zafarullah, H. & Siddiquee, N. A. (2001). Dissecting Public Sector Corruption in Bangladesh: Issues and Problems of Control. Public Organization Review: A Global Journal 1 (4), pp. 465-486.
[25] Hasan, S. (2009). *Introducing E-government in Bangladesh: Problems and Prospects*. International Social Science Review, 78 (3&4), (pp. 111-125).

[26] MoSICT (The Ministry of Science and Information and Communication Technology) (2009). The National ICT Policy 2009. Dhaka: MoSICT.

[27] MoLJPA (The Ministry of Law, Justice and Parliamentary Affairs) (2009). Right to Information Act 2009. Dhaka: MoLJPA.

[28] IGS, (2010). *The State of Governance in Bangladesh 2009: Entitlement, Responsive, Sustainability*. Dhaka: Institute of Governance Studies (IGS), BRAC University.

[29] NBR (2017), GoB, available at http://nbr.gov.bd/information-library/e-bin-report/eng accessed on 20th August, 2017.

[30] BTRC (2017), available at http://www.btrc.gov.bd/content/mobile-phone-subscribers bangladesh-june-2017 accessed on 18th August, 2017.

[31] BTRC (2017), available at http://www.btrc.gov.bd/content/mobile-phone-subscribers bangladesh-june-2017 accessed on 18th August, 2017.

[32] ITU (International Telecommunication Union), (2016). *Measuring the Information Society Report: 2016*. Geneva, Switzerland: International Telecommunication Union.

[33] Ashraf, M., Hanisch, J., & Swatman, P. (2009). *ICT Intervention in the “Chandanbari” Village of Bangladesh: Results from A Field Study*. Information System Frontiers, 11 (2), p. 155 166.

[34] Jackson, P. (2000). *Electronic Government in Bangladesh: Prospects and Approaches*. Bangladesh Journal of Public Administration, 9 (1&2), 79-96.