Challenges for Government Innovation in Bangladesh

Subhan Tahrima* and Don Jaegal**

Abstract: Innovation is not self-generating or self-sustaining. Successful innovation requires leadership to establish organizational capacity to generate ideas and to ensure prompt and effective service. If any government fails to provide these supports to the innovation process, it will not be effective. This paper seeks to identify factors that hamper government innovation in Bangladesh. It proposes a strategy for the Bangladesh government that involves political institutionalization, administrative and market decentralization, promotion of social and economic justice, and good governance in order to promote innovation processes and ensure successful innovation flows within the country.

Keywords: innovation, government innovation, innovation strategy

INTRODUCTION

The international environment is becoming more competitive, innovative, and demanding. To be able to benefit from this increasingly globalized environment, developing countries have to improve their skills and innovation capabilities. Developing countries are characterized by sociopolitical instability, corruption, weak economies, imperfect markets, poor infrastructure, deficient management and technical skills, inadequate public education facilities, and limited government initiatives in support of innovation. These barriers can lead to a vicious cycle, from which Bangladesh has not yet emerged.

Bangladesh and other developing countries need to follow innovative approaches in various sectors. Innovations can lead to new institutions, change the relationship between levels of government and within government departments, and strongly

Manuscript received March 30, 2012; out for review May 16, 2012; review completed July 9, 2012; accepted July 16, 2012.

^{*} Subhan Tahrima is a researcher in the Department of Public Administration at Andong National University. E-mail: subhan_tahrima@yahoo.com.

^{**} Don Jaegal, corresponding author, is a professor in the Department of Public Administration at Andong National University. E-mail: jaegal@andong.ac.kr.

contribute to the democratization of institutions and processes. In Bangladesh, government innovations may be introduced to enable policy makers to meet certain targets or objectives, to improve the services provided by the state to its citizens, to strengthen the country's economic growth, and to address various socioeconomic and political problems that affect the government and the people. Indeed, the strength of developing countries strongly depends on their ability to generate and integrate innovations.

The government of Bangladesh has been under pressure to respond to the demands of its citizens and to increasing complexity and change in global environments. Since 1971, Bangladesh has experienced eight regimes with a variety of political systems and styles of governance. Every government has undertaken different initiatives for sociopolitical development, administrative improvements, and economic security. But these innovations failed more often than they succeeded, which hindered the establishment of good governance and the country's overall development.

Therefore, Bangladesh needs to introduce innovative mechanisms, strategies, and policies to improve technological infrastructure, human capital, and economic performance and to strengthen innovation capacities in the changing modern environment. Studies on government innovation in Bangladesh are somewhat limited. This study focuses on various challenges to government innovation in Bangladesh and suggests strategies for overcoming them.

Government Innovation in Theory

Government innovation is a broad term that includes the overall process of initiating new steps, changing existing conditions, and accelerating the development orientation of the government. It has become an increasingly important issue as Bangladesh seeks to achieve economic development and political stability. It can be defined as the effort by a government to find an optimal solution to problems it faces by undergoing a change within itself. Various political, social, economic, and environmental factors affect government innovation, but from an administrative point of view, transparency, efficiency, and participation are the three axes that support government innovations (Royall, 2000).

Innovation, at the government level, means formulation of adequate policies to attract foreign investment, create an innovation culture, facilitate the integration of new technologies, and support innovative small and medium-sized enterprises (SMEs) and creators and produce market innovations (Tenenbaum, 1999). For some countries, government reform and innovation involve the reform of an old bureaucracy in a newly democratic state. For other countries, they entail an all-out fight against corruption. While different countries have come to government reform for different reasons,

reform and innovation are global phenomena. In some countries this movement has been called reinventing government; in others it is referred to as building state capacity or modernization of the state, and in still others it is called the New Public Management (Kamarck, 2004). In today's knowledge-based world, government innovation is a key tool to make the government more responsive to citizens and meet the progressive demand of the state. In sum, innovation in governance and revitalization of public administration are imperative for governments that wish to effectively deal with emerging national, regional, and international challenges and to strengthen democratic governance.

According to Drucker (1974), innovation is the process of equipping with improved capabilities or increased utility. He argues that innovation has to be market oriented. It should be not a one-off event but a continuous response to changing circumstances. A sustainable innovation system not only helps to solve a problem but also creates a new capacity, opening up opportunities for further innovation. A long lag between innovation and invention, being an effect of lacking proper conditions for commercial implementation, makes the difference between innovation and invention distinctive (Fagerberg, 2004). Radical innovations shape big changes in the world, whereas incremental innovations fill in the process of change continuously (Schumpeter, 1934). Drucker (2001) advises us not to confuse innovation with novelty and argues that three conditions must be met for an innovation to be successful. First, innovation requires work, knowledge, and creativity. Second, to succeed, innovators must build on their own strengths. Third, innovation must cause a change in the behavior of customers, teachers, farmers, doctors, and people in general.

The academic literature contains a number of definitions of innovation, each revealing important aspects of it. Various authors have emphasized newness, including anything perceived to be new by the people doing it (Rogers & Kim, 1985), or innovation as something different for each organization into which it is introduced (Downs & Mohr, 1976), or the generation, acceptance, and implementation of new ideas, processes, products, or services (Thompson, 1965) in an applied setting (Mohr, 1969). Some see it as early adoption of a new idea (Rogers & Kim, 1985), others as synonymous with creativity (Jacques & Ryan 1978), and a final group as involving substantive but not revolutionary changes (Merritt, 1985).

Osborne and Gaebler (1992) argue that the American government bureaucracy that was appropriate to the industrial era and times of economic and military crises during which it was created is not the best system of governance for the post-industrial information age. Since the 1960s, the American public has increasingly demanded quality and choice of goods and services and efficiency of producers. However, quality and choice are not what bureaucratic systems are designed to provide, nor is efficiency

possible in a system of complex rules and drawn-out decision-making. Moreover, since 1982, reductions in federal funds have made it more difficult for state and local governments to meet continued citizen demand for services and increasing expectations for quality. The authors' prescription is entrepreneurial government, which focuses on results, decentralizes authority, reduces bureaucracy, and promotes competition both inside and outside government. Government's clients are redefined as customers who are empowered by being able to choose among providers of various services, including schools, health plans, and housing options.

Foremost among the reinventing government movement's principles is the transformation of the bureaucracy from a commander into a facilitator. The facilitating government serves as a catalyst for competition, efficiency, and productivity. Bureaucrats are therefore expected to shed the deadening weight of rigidity, accumulated rules and regulations, and obsolete activities. Instead, they should assume new roles which incorporate a mission-oriented approach, such that they eliminate many of their internal rules and radically simplify their administrative systems such as those for budget, personnel, and procurement.

This enterprising attitude will then free managers to find the best way to accomplish their mission within legal bounds. It encourages managers to become consumer driven in their efforts to accomplish their mission, rather than driven by bureaucratic needs, and to be income earners for the government instead of merely disbursement officers for public funds. The central doctrine of this movement includes eliminating red tape, holding administrators accountable for measurable results, emphasizing customer satisfaction, empowering front-line managers, and contracting with the private sector, whenever possible, for public service delivery. The reinventors claim to focus primarily on how government should work and not on what it should do (Gore, 1993).

The reinventing-government movement seeks to utilize the government's resources for its programs, rather than spending them on trivialities. This can be achieved by anticipating future problems, devising contingencies, and delegating authority, responsibility, and accountability in such a way that conflicts and problems can be resolved as they arise. In short, the reinventors want the entire government to behave in a less political and more rational fashion. Nathan (1995: 213) sees in this movement the possibility of toning down what he calls the "hyper-pluralism of American government" so that "hard problems can be addressed more easily and expeditiously" so that we can get policy closure on highly salient issues and bring competence to bear in the implementation of these new policies once adopted. These strategies are said to work in small cities and large nations, in parliamentary and presidential systems, and in strong-mayor cities and council-manager cities (Osborne & Plastrik, 1997).

Vigoda-Gadot et al. (2005) deal with the fuzzy concept of organizational innova-

tion in public sector domains, provide a broader understanding of innovation in modern bureaucracies, and point to efforts that may accelerate post-public managerial reforms. This understanding builds on a system approach and on existing knowledge about innovation—its characteristics, antecedents, and consequences—as they have been previously encountered in the private sector. The authors suggest that this knowledge should be treated as another key element of the New Public Management doctrine and the reinventing government paradigm that have dominated discussions in this discipline in recent years. While government reform movements around the world share many concepts and even language, the paths to reform and the root causes of reform are remarkably different from one country to another. Major causes of government reform movements include public dissatisfaction with government, political and economic crises, postmodern values, global economic competition, and democratization (Kamarck, 2004).

International development efforts can significantly benefit from knowledge sharing, particularly regarding innovations and good practices. Even when innovations in government are circumscribed in scope, they have the potential to trigger a bigger process of transformation of the state. Alberti and Bertucci (2006) therefore look at the process, capacities, and environment required for the successful transfer, adaptation, and implementation of innovations in governance and public administration. They argue that the sustainability and effectiveness of innovation and new practices depend on many intangible factors, such as partnerships and community involvement. Innovations must also be institutionalized to ensure that they will not fade away with a change in leadership. The environment in which innovation takes place also requires attention. The authors reviewed a number of positive results of introducing innovations in governance, such as maximizing utilization of resources and capacities, encouraging a more open culture in government, and improving services.

There are various barriers to government innovation, both internal (strategy related) and external (market related). Garsombke and Garsombke (1989) identified major barriers to innovation such as government bureaucracy, lack of government assistance, complex credit policies, and lack of capital, time, staff, and knowledge of available technology. These are key dimensions for public service organizations. It is important to understand more about the organizational processes of innovation through top-down policy development, bottom-up initiatives by managers and staff, and lateral adoption and adaptation of good practices (Tidd, 2001).

Yoon (2006) focuses on the methodologies and strategies of Korean government innovation. The Korean government has identified five goals—efficiency, high quality of service, transparency, decentralization, and participation—as key elements in the realization of its vision for innovation. Sustainable innovation involves many challenges.

According to Yoon (2006), these include nonautonomous innovation management, innovation tasks unrelated to policy, intense competition for innovation, workload, the burden of being evaluated, resistance to change and innovation fatigue, and a negative mindset about failure. It is difficult to resolve the matter through the efforts of the government alone. So the society needs to foster an environment more accepting of failure.

Aubert and Quirke (2005) identify special innovation challenges for developing countries as largely indigenous knowledge, foreign sources of technology that need to be adapted to local conditions, importance of the local dimension, greater risk of isolation, problematic governance conditions (bureaucratic complexity, poor regulatory frameworks, and low enforcement), lack of infrastructure (transport and telecommunications), and limited resources.

Factors Hampering Government Innovation

Government innovation is a multifaceted process that depends on both internal (organizational culture) and external factors (stakeholder interests). Alberti and Bertucci (2006) summarize factors that hinder innovation in government as resistance to change; lack of effective legal structure; lack of autonomy, professionalism, and access to information; deference to authority; resource limitations (human or financial); and low regard for public administration. Innovation may also be hampered by economic factors (such as high costs or lack of demand), enterprise factors (such as lack of skilled personnel or knowledge), and legal factors (such as regulations or tax rules).

It would be easier to identify hampering factors if we first identify the motivating factors for innovation, because lack of these motivating factors strongly inhibits innovation. Motivations for innovation have often been categorized into two groups, intrinsic and extrinsic (Morgan et al., 1993). Extrinsic motivations include prestige, material possessions, monetary and technical support, job security, career opportunities, positive workplace environment, and positive job evaluations. Intrinsic motivations include the opportunity to develop new ideas, intellectual challenges, job satisfaction, and social incentives.

This study assesses the innovation environment in Bangladesh, focusing on the following factors that impede innovation, many of which were identified by the Regional Workshop on Science and Technology Statistics (2005).

 Knowledge factors include insufficient innovation potential; lack of qualified personnel, advanced technology, management systems, and market information; and difficulty in finding cooperative partners. Development and diffusion of government innovation in any country are not possible without continuous upgrading of employees' knowledge and skills and management capacity as well as technological advancement and mutual cooperation. But in developing countries, lack of qualified personnel, lack of technology, and lack of information and cooperation are constraints to innovation.

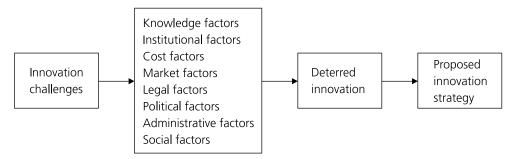
- Institutional factors include poor infrastructure and weak property rights. Infrastructure consists of the basic physical and organizational structures needed for the operation of a government, society, or enterprise. Less developed countries have inadequate infrastructure support—such as gas, electricity, and water resources, transportation and communication mechanisms, and technology—and this discourages government innovation. Moreover, they face arduous institutional challenges in formulating, enforcing, and regulating International Property Party (IPR).
- Cost factors include complicated financial markets, excessive perceived risks, lack of internal funds and external finance, including public sources of funding, and high innovation costs. The development of the financial sector is critical for meeting the twin goals of economic growth and poverty reduction. But in developing nations, the financial sector is too complicated to benefit the citizens and country's economy and to promote innovation, including start-up companies. Innovation requires a risk-taking mindset, but excessive perceived risk and risk aversion hinder innovation attempts. Besides that, lack of access to financing is perceived as one of the major factors hampering innovation in developing countries.
- Market factors include market domination by established enterprises and uncertain demand for innovative goods or services. In developing countries, large, established enterprises, especially foreign enterprises, often create pressure on local emerging and small enterprises to preserve their business power. They are change resistant because they think that local innovation attempts may hamper their business mechanism.
- Legal factors include lack of effective legislation, regulations, standards, and taxation policies. Developing countries suffer from an unfavorable policy environment, including lack of tight inflation control, lack of a market-friendly trade and industrial regime, high budget deficits, and irrational real exchange rates, which acutely hamper government innovation.
- Political factors include absence of democracy and political parties, confrontations
 among political parities, intolerant and egocentric attitudes of political leaders,
 absence of honest and dedicated leadership, criminality and corruption among

party leaders, and authoritarian government approaches that discourage constructive participation by citizens and opposition parties. Lack of accountability, transparency, and decentralization is also a severe obstacle for government innovation.

- Administrative factors include bureaucratic corruption, lack of a strategic vision, overly centralized policy making and resource allocation, politicization of the civil service, and complicated and outdated administrative systems.
- Social factors include social instability and inequity, lack of education, and values and beliefs that are not conducive to innovation.

Bangladesh is a developing country in Southeast Asia. The innovation climate in Bangladesh, as in other developing countries, is hampered by weaknesses in many key elements of a knowledge-based economy. This study explores the challenges to innovation described above as they relate to Bangladesh (figure 1).

Figure 1. Analytical Framework for the Study



FACTORS AFFECTING INNOVATION IN BANGLADESH

Despite its history of eight major regimes since 1971, Bangladesh's ultimate goal is to achieve the image of a stable welfare state through continuous innovation in various sectors. For example, the Bangladesh government has decided to require financial statements by political leaders and civil servants to help uncover political corruption. It has adopted the Citizen Charter, which proposes to make public service provision less bureaucratic and more citizen-led. To achieve greater economic democracy, innovation in economic activities, and higher levels of economic growth and employment, the government is pursuing privatization. Microcredit for self-employment of the poor, pioneered in Bangladesh, is an innovation that is now being replicated worldwide as a tool for combating poverty.

But fostering ongoing innovation is very hard, specially if the innovation is disruptive in nature. A spirit of innovation and collaboration does not come naturally; it requires effort to make it an integral part of the country's governance culture. The Bangladesh government is trying to promote innovation, but the country's overall sociopolitical, economic, and administrative condition is not favorable to government innovation. Political unrest, administrative complexity, economic crises, illiteracy, poverty, and lack of technology, institutional support, and incentives have kept the process and level of government innovation below standard. Thus, most government innovations in Bangladesh have not been institutionalized and have resulted in only temporary improvements.

In the Global Innovation Index 2011 edition, released by the European Institute of Business Administration, a leading international business school, Bangladesh is ranked fourth out of the four South Asian economies and 97th overall. Bangladesh was ranked 95 out of 104 countries in 2004, which further deteriorated to 105 out of 117 countries in 2005, in the *Global Competitiveness Report* (World Economic Forum, 2006).

Knowledge Factors

Insufficient Innovation Potential

Innovation potential requires behaviors that generate innovation and enhance the development of new products, processes, and procedures in organizations. In Bangladesh, there is a serious lack of innovation potential and of motivation to seek and adopt new ways of working in the public and private sectors, especially in the country's research and development (R&D) organizations. According to a recent survey (BANSDOC, 2001), 73 organizations (including university science departments) are engaged in R&D in the country. The absence of an organized and well-planned research management system is a serious limitation affecting most such organizations. As a result, except in agriculture, research efforts are uncoordinated, fragmented, and poorly related to the country's long-term development needs (Islam & Haque, 1999; Islam, 2001; ESCAP-UNDP, 1989). Another shortcoming has been the absence of satisfactory links between academia and industry. Consequently, local industries have continued to rely on imported technologies and have not made serious efforts to gear up their own innovative R&D activities.

Lack of Qualified Personnel

Because of brain drain to abroad and inadequate education, the lack of qualified personnel is becoming an important factor inhibiting innovation in developing countries like Bangladesh. Rothstein (1998, p. 69) observed that to ensure effective program implementation, available resources should be placed in the hands of skillful and motivated organizational actors. In order to create a knowledge-based society, Bangladesh needs a knowledgeable workforce and government support and incentives. But the country lacks a solid base of technologically skilled and experienced and properly organized government personnel within the ministries and other government bodies, and this is seriously hampering government innovation.

A study of e-government in Bangladesh (Taifur, 2004), covering 303 government institutions with 35,658 officers and 103,126 staff, was conducted to assess the current situation of IT in the government sector. This study showed that about 58 percent of ministries and divisions, 65 percent of departments and corporations, and 35 percent of academic institutions have no IT staff. The growth and status of e-governance varies from country to country. The low level of ICT aptitude among government officials is responsible for the slow growth of e-governance—a prime example of how the lack of highly qualified human resources hinders the country's innovation process.

Lack of an Adequate Management System

Lack of systematic management within ministries and other government bodies is a principal constraint on innovation. In Bangladesh, the absence of a unique managerial method, ambiguity regarding technological priorities, a complicated decision-making process, confusion regarding policy-making roles, lack of prompt and effective execution of policies, lack of control and supervision, and extreme governmental intervention in all fields deter the spontaneous flow of organizations' activities, create uncertainty for future initiatives, and negatively influence the country's innovation environment.

For example, as part of its poverty eradication strategy, the Bangladesh government has established compulsory and free primary education. But this is not progressing well due to weak management, ineffective planning and execution, and a negative political and bureaucratic culture in Bangladesh. Transparency International Bangladesh (TIB, 2005) revealed that 40 percent of students paid for admission, and 32 percent for enrolling the stipend list. Five percent of stipend recipients reported that they were not receiving the full amount of the stipend. To achieve the United Nations' Millennium Development Goals, the government also initiated a stipend program for female secondary school students. But Transparency International (TIB 2005) reported that

this initiative was infected with corruption as well: 22 percent had to pay an illegal fee for inclusion in the stipend program, and 38 percent reported receiving less than the full amount of the stipend.

Lack of Advanced Technology

Technology is a crucial factor for acceleration of government innovation and development efforts. In Bangladesh, government innovation systems are on the brink of collapse, due to the lack of technological development. Bangladesh's position in the Global Competitiveness Report technological index in 2004 was 100 out of 104 countries, and it remained almost at the same level in 2005, 101 out of 117 countries (Battacharya et al., 2005). The technological environment is rapidly changing, and research and technological innovation are needed to cope with this change. Unfortunately, such R&D is usually funded and conducted in developed countries, and developing regions are usually dependent on them for technology. Lack of local technical and managerial skills in Bangladesh causes the cost of development activities, including maintenance and management, to be far greater than in developed regions.

Bangladesh faces massive electricity shortages that have hit its booming textile industry and hampered people's daily lives. The communication system in Bangladesh is time consuming, inefficient, and complicated. The Bangladesh government established a policy to set up a nuclear plant to support the industrial sector and meet the country's electricity demand. But the implementation of this initiative faces technological challenges. Lack of advanced technology and expertise creates pressure on the country's economy and disrupts innovative initiatives.

Lack of Information on Technology and Markets

Information on technology and markets is essential in order for a developing economy to effectively compete in the information-intensive global economy. Unfortunately, in Bangladesh, lack of advanced technology limits the flow of information. This severely constrains analysis of competitiveness as well as the innovative capacity of the public and private sectors and limits the design of appropriate policy measures. Lack of Internet facilities, limited performance by the broadcast media, complexity of market policies, and lack of adequate statistics and baseline research means that public personnel, market owners, and entrepreneurs lack up-to-date information on technology, markets, infrastructure, financial development, human resources, domestic competition, and company operations and strategy. As a result, they cannot keep up with the changing world and fail to explore or execute innovative ideas for the betterment of the government.

Bangladesh faces difficulties in stimulating productivity and marketing of products in the agriculture sector and providing the necessary marketing- and technology-related information to the SMEs sector because of inadequate information and communication technology.

Lack of marketing partnerships, difficulties in finding partners for product or process development, lack of external services, organizational rigidity, and change-averse attitudes are the other knowledge factors that hamper innovation in the Bangladesh government.

Institutional Factors

Lack of Infrastructure

In Bangladesh, inadequate infrastructure is one of several factors constraining innovation and economic growth. Physical infrastructure typically refers to the technical structures that support a society, such as roads, water supply, power grids, and telecommunication. Mobile phone technology has transformed telecommunications, but Internet service remains limited. Inadequate transportation, communication infrastructure, and water and energy facilities adversely affect the development of existing industries and may prevent new industries from emerging. For example, SMEs play a key role in a country's economic growth and industrial development. But manufacturing-based SMEs' development in Bangladesh is constrained by lack of utilities and a poor but expensive transportation system.

Weak Intellectual Property Rights

Intellectual property rights include patents, copyrights, trademarks, and trade secrets, each of which is subject to separate laws in every country. Intellectual property systems capture, channel, and shape innovation. Bangladesh has relatively weak laws to protect intellectual property rights and weak enforcement of the laws that do exist, and this is a hindrance to development. Also, Bangladesh has adopted policies on direct foreign investment and licensing designed to improve the terms on which it can get foreign technology. But lack of stronger intellectual property rights hinders indigenous technological and innovative activities. Ineffective enforcement of patent, counterfeiting, and piracy laws has weakened Bangladesh's ability to enforce intellectual property protection.

Legal Factors

In emerging economies, balanced and effective legislation, regulation, standards, and taxation policies can stabilize markets, reduce uncertainty, promote innovation, boost investment, and improve market efficiency. Unfortunately, in Bangladesh, these elements are so ineffective that they create a barrier to government innovation and growth. Excessive regulation is associated with lower rates of business startups, lower employment, and lower national economic performance. Improper regulation and poor tax administration distort market indicators, reduce the rewards of business ownership, and discourage market entry, investment, innovation, and business growth, all of which leads to a suboptimal level of economic activity from which businesses, workers, and consumers suffer. SMEs in Bangladesh face intense problems, including high (sometimes prohibitively high) interest rates. Lack of access to funding can cause an SME to fail even if it has great potential (Fillis, 2004).

Cost Factors

Exaggerated Perception of Risk

The strategic management literature associates risk with novelty. An idea involving a high level of novelty is associated with a high degree of risk. Thus, managers' attitudes toward change and willingness to take risks affects innovation. The risk-adverse mindset that is so typical of many state-controlled agencies might reduce innovation, whereas a risk-oriented mindset might enhance it. Innovation is inherently risky. To innovate, one must step beyond what is known and accepted by society. That is why it involves risks. Efforts to invent may fail, as may efforts to win public approval and commercial success. But unnecessary or excessive perceived risk is not conducive to innovation. In Bangladesh, public personnel have an exaggerated sense of the risk involved in developing or adopting any new ideas, which negatively affects their willingness to innovate. They forget that innovation is inherently risky and that risk taking is an important characteristic of innovation.

Complicated Financial Markets

A sound financial market plays an important role in government innovation by promoting overall economic growth, which leads to improved income levels and reduces the risk of financial crisis. But in Bangladesh, the limited role of the financial sector in resource mobilization and allocation is an obstacle to government innovation

and economic prosperity. Most public enterprises consider the level of sophistication of financial markets in Bangladesh lower than international norms. Bangladesh's domestic investment was 24.7 percent of GDP in FY2006 and 24.3 percent of GDP in FY2007. This was higher than that of Pakistan (21.8 percent and 23 percent, respectively) but notably lower than that of India (35.9 percent and 38.4 percent) (Asian Development Bank, 2008).

In addition, financial market imperfections such as informational asymmetries, transaction and contract enforcement costs, poor financing for establishing and expanding businesses, poor credit distribution, lack of venture capital, lack of financial auditing and reporting standards, high interest rates, and inadequate support for exports are constant threats to SMEs in Bangladesh.

High Costs

Bangladesh is heavily dependent on imports, especially for specialized industrial equipment. As a result, industrial costs are high, and a significant amount of foreign exchange goes to meeting import costs, which worsens the country's already poor balance of payments. Bangladesh is a small country, and the majority of the population is dependent on agriculture. It has few mineral resources. Though natural gas and coal have been extracted for quite a long time, lack of technical know-how has made Bangladesh dependent on other countries for this as well. In addition to agricultural products, therefore, most raw materials are imported, which increases their price. Fast, cheap transportation is not yet available, a significant problem for manufacturers seeking to transport raw materials and finished goods. Lack of specialized research and training services, fluctuation in prices of raw materials, and a high level of inflation also create higher production costs, which limit innovation.

Market Factors

Local market domination by foreign companies is a problem in all developing countries. Bangladesh is rich in natural resources but poor in advanced technology, and foreign companies take advantage of this opportunity. They buy raw materials cheaply, produce finished goods, and supply them to the Bangladeshi market. Potential Bangladeshi enterprises are at a disadvantage in this market because of their lack of technological and financial support. In this way, foreign companies dominate the Bangladeshi market. For example, Unilever (all products), Orion (all products), Rackitt Benckiser (all products), BATA (lather goods), Marico (cosmetics), Grameen Phone (telecommunications) are the most dominant multinational companies in

Bangladesh.

In Bangladesh, though the first telecommunications company, Citycell, was introduced long ago, the telecommunication device did not become pervasive until 1997, the year when the biggest telecommunications company in the country, Grameen Phone, hit the market with its GSM (Global System of Mobile Communication) technology. After that, there was no looking back. The industry grew at an almost unimaginable rate for a decade. Efforts they made to capture the market and create customer satisfaction include modern technical facilities, cheap rates, bonus offers, and profit sharing.

Political Factors

Absence of Democracy

In Bangladesh, democracy remains a theory rather than a practice. People's competence to cope with democratic norms and values is not adequate. By writing, enacting rules and regulations, and other acts, the parliament and the government cannot show that they are democratic in nature. Thus, democratic norms and values have not been able to take root in Bangladesh. The absence of democracy within parties is a result of parties functioning as patronage machines. Ruling parties enjoy greater access to state resources and are thus in a better position to reward members and supporters, be it through jobs or licenses and contracts.

Though Bangladesh has been independent for 40 years, it has failed to establish democracy as an institution. The ruling and opposition parties do not hold regular party councils and conventions. Even when these are held, election of party leaders does not take place. There is no formal system for leadership change; rather, it is decided by the party chiefs. For example, in BNP, there exists a national executive committee and electoral college, but they depend fully on the party chairperson for leadership. Even though there is a working committee in the Awami League party system, party planning and activities depend on the party president.

Instead of becoming a powerful institution, parliament remained inactive and ineffective most of the time under different democratic regimes. Boycott of parliamentary sessions by the opposition has become a common practice. The present opposition, the BNP (Bangladesh Nationalist Party), joined only 22 out of 72 sittings of the ninth parliament (2008-2009). Therefore, all important bills and acts passed with the one-sided support of the party in power, which does not represent democracy.

Confrontational Politics

In Bangladesh, there is little cooperation, open-mindedness, tolerance, mutual respect, trust, or solidarity among political parties and groups. The country has experienced, and continues to experience, many types of political violence, instability, and conflict. Bangladesh has more than 100 political parties; most are fragile and fragmented, and few have a definite ideology or program. The opposition parties frequently engage in hostile acts such as boycotts of parliament, street agitation, and strikes, aimed at toppling the government before its term is over, as has happened after every election.

The internal conflicts of the political parties also spill over into other institutions, and party units at both central and local levels are not well organized or managed. Thus, Bangladeshi democracy continues to be unstable and contradictory. Political actors oppose each other for the sake of opposition, which inflames enmity among politicians and endangers the process of development and innovative thinking. Unity among political parties on issues of national development, which would promote innovative activities by the government, is seriously lacking in Bangladesh.

Absence of Strong Political Leadership

Bangladesh lacks the strong, innovative political leadership essential for leading the nation toward progress, stability, and creativity. Criminality and corruption among party leaders has become increasingly common. Instead of attempting to eradicate corruption, ministers, parliament members, and civil servants have used their power to benefit themselves. This has serious implications for democracy. There is no vision, no future direction, and no strong will to save this independent country. Leaders are unwilling to accept new political orientations or ideology or the presence of a new generation in politics. They consider themselves as leaders of their respective parties, not of the nation as a whole, and fail to ensure an innovative environment. Leaders want to use power to increase their wealth and utilize good facilities, not to serve the citizens. For example, political elites are not only engaged in misappropriating money, but they are sending the plundered money abroad. This reflects their lack of intention to associate their future with that of the country that they are looting. The present Hasina government has become isolated from people due to its fragile leadership.

Authoritarian Approach by Government

In a democracy, people should have a say in decision-making, either directly or through legitimate intermediate institutions that represent their interests. But Bangladesh's government appears authoritarian rather than encouraging constructive participation by citizens and opposition parties; this indicates a lack of freedom of association and speech as well as capacity to participate. The present government is a coalition government, but the other small political parties remain as flag bearers.

Excessive centralization of power makes the government autocratic. It also creates pressure on the central government that reduces government innovation and creativity. In fact, authoritarian government does not focus on fostering the right environment for innovation. Patron-client relationships within the parties remain an obstacle to systematizing party rules and mechanisms and affect both party and state governance. Political institutions are also not strong or well developed enough to support government innovation for socioeconomic and political development. For example, the Bangladesh government has recently made many decisions to share market such as president and member election, which are not supported by investors. Moreover, the present government wants to establish an interim government instead of a caretaker government without considering public opinion.

Lack of Accountability and Transparency

Lack of accountability and transparency is another serious obstacle for government innovation. Internal and external mechanisms for executive accountability, i.e., Annual Confidential Report (ACR), the Rules of Business, and the Warrant of Precedence, remain procedurally weak, which reinforces the pervasiveness of corruption. Transparency remains alien to Bangladesh's bureaucratic culture. Decision making takes place out of the view of those it will affect, and anything of significance is marked secret and guarded closely. The nontransparent nature of decision making is linked to both lack of accountability and bureaucratic corruption. Patrimonialism has been another problem within the parties, regarding which the central party leaders remain submissive and demoralized. This also affects the whole party governance. Local party leaders frequently claim that democratic practices do not exist in the center, so the local units also don't care for democracy in the party.

For example, the Bangladesh government should be accountable and transparent to the citizens. But the present Sheikh Hasina government has made treaties with India regarding water sharing, enclave exchange, and maritime boundaries without publicizing any information about those treaties. Former prime minister Khaleda Zia alleged that the present government is providing transit corridors to India in the name of transit.

Political Corruption

Corruption in Bangladesh emanates from both politics and administration. Political corruption occurs when political decision-makers, such as heads of state, ministers, and other top officials with mandates for formulating and implementing laws, are engaged in corruption. It also occurs when policies are formulated to benefit politicians and legislators. Administrative corruption will be discussed in the next section.

Since independence in 1971, Bangladesh's political leaders have used their positions to grant undue favors or benefits to their friends, relatives, and supporters. Corruption has become institutionalized. Since the beginning of the democratic era in 1991, there has been no indication of a reduction in corruption. Institutionalization of electoral corruption and emergence of a politics-business nexus worsened an already heavily corrupt environment. The electoral system has become a farce, and money is widely circulated for vote buying, vote rigging, or taking control of vote centers.

Recruitment within the civil service has also become a major source of corruption. A study conducted by Institute of Governance Studies (2007) has found that the Public Service Commission, a constitutional body, was used by political leaders to make recruitment within civil service a private business. Recruitment for certain cadres was decided by money, and those who were recruited considered it an investment that they expected to recover once in the civil service (IGS, 2007). The presence of corruption has become so evident that nothing seems immune from it. A notable example was the allegation made by the World Bank accusing transport and communication minister of corruption.

Administrative Factors

Bureaucratic Corruption

Corruption in the administration of Bangladesh has deterred many government innovations. The Bangladesh bureaucracy is well known as a hotbed of corruption. The position of ombudsman, a powerful entity for checking corruption, was not introduced in Bangladesh, despite being called for in the constitution, due to lack of political will in successive governments. The field administration is directly or indirectly charged with corruption. Transparency International, which considers both political and administrative corruption in its index (Manzoor, 2007), ranked Bangladesh as the most corrupt country in the world for five consecutive years (2001-2005). The World Bank identified Bangladesh as the 12th and 17th most corrupt country in 2004 and 2005 (Kaufmann, Kraay, & Mastruzzi, 2006). And the

World Economic Forum (2006) identified Bangladesh as the most corrupt country among 125 in the corruption sub-index of the Global Competitiveness Report for 2006-2007.

The rise of corruption in all corners of the bureaucracy and politics is hindering Bangladesh's socioeconomic growth, undermining its competitiveness in local and international markets, interfering with the allocation of resources, and harming the investment climate. For example, a report of the United Nations Development Program found that bureaucratic corruption and inefficiency are causing hundreds of millions of dollars in losses in terms of unrealized investments and income (UNDP, 1997). If Bangladesh were to improve the integrity and efficiency of its bureaucracy, investments would rise by more than 5 percentage points and its yearly GDP would rise by over half a percentage point.

Lack of Strategic Vision

Strategic vision is deeply related to innovation. But in Bangladesh, leaders, administrators and civil society organizations have no strategic vision, which makes government innovation and development activities difficult. There is a serious lack of strategic vision linking public service reform to the broader aspects of the country's political economy (Kiggundu, 1998). Lack of sustaining political and community support, logistics, and positive work values, and lack of integration and objectivity are also obstacles to administrative reform and innovation. For example, the Bangladesh civil service system has undergone very few changes since independence in 1971, and most reforms have been merely cosmetic. International donors also have had hardly any success in convincing successive governments to implement reforms, which were needed to radically change the structure and composition of the public service and the work attitudes of the civil servants.

Bureaucratic Complexity

In Bangladesh, excessive formalism, overlapping of work responsibilities, red tape, favoritism, leadership's authoritarianism and distance from the rank and file, and a tendency to favor traditionalism over new ideas has created an administrative system that is complicated and outdated and hinders government innovation. Public administration in Bangladesh remains largely centralized, excessively reliant on hierarchy, and complicated by multiple layers of decision making. The introduction of procedures to ensure consumer welfare may result in even greater bureaucratic complexity. Greater complexity, in turn, can provide new opportunities for corruption—for example, in

manipulation of tenders, opportunistic renegotiation of operational terms, or noncompetitive contract renewals (Guasch, 2003). Thus, rather than protecting consumer interests, more procedures may result in higher levels of corruption and inferior performance.

Bureaucratic traditionalism and resistance to dynamic and innovative thinking hinder administrative innovation. Bangladesh's bureaucracy relies on old organizational models (tradition, vertical communication channels, and excessive emphasis on compliance, order, and control) rather than on new models that represent creativity, commitment, a mixed flow of communication, autonomy, and responsibility. Successful innovation is defeated by the classic bureaucratic model (Golembiewski & Vigoda, 2000). For example, timely implementation of projects has been a major problem. The present government aimed to complete 427 projects by the end of fiscal year 2010-2011. The projects cannot be completed in time because of bureaucratic complexity, procrastination in the process of tendering, delay in acquisition of land, and withholding of funds. This may make the projects more expensive and their results more limited. During the first quarter of the present year, only 9 percent of ADP (Annual Development Plan) has been implemented.

Centralized Decision-Making

Bangladesh has typically followed a centralized system of policy making and resource allocation in which intergovernmental transfers are unstable, poorly defined, and lacking an adequate system of incentives. Traditional knowledge, experience, and conservative institutional solutions strongly influence top managers' decisions, which causes resistance to change and creativity. Moreover, the imbalance between central and local offices regarding decision making affects inter-organizational coordination, which in the long run affects policy implementation. When power is consolidated at the top of an organization, employees feel less motivated to do their best as they do not have an avenue for sharing their innovative ideas on how to improve the organization.

For example, in spite of Bangladesh's decentralized legal-institutional framework for local government, in reality there has been little decentralized governance at the local level. In decision-making and allocation of grants, the central government has often acted beyond its authority, ignoring rules and norms, and has allocated more grants to municipalities that are administered by mayors belonging to the ruling party. Such situations, in the long run, affect policy implementation at the local level.

Politicization of the Bureaucracy

Innovation in modern public domains is highly complex, as it is rooted in political decisions and considerations that inhibit proactivity and creativity and smother promising potential services (Golembiewski & Vigoda, 2000). Politicization of the bureaucracy potentially reduces innovation and creativity in any organization, including those in the public sector. In Bangladesh, every ruling government tries to get the support of bureaucrats by serving their interests and offering them privileges.

The politicians and the bureaucrats of Bangladesh work hand in hand in order to continue corrupt practices (Haque & Rahman, 2003; Jahan, 2006). Political leaders use their power and position to control personnel management decisions like transfers, promotions, and recruitment, and they encourage civil servants to engage in corrupt practices. Personnel management decisions depend not on quality and efficiency but on the person's loyalty to a political party. This subversion of merit and seniority standards damages the civil service as an institution. When these two factors are combined, the cost to the poor increases for services they were supposed to receive free or almost free of charge and hinders their access to basic necessities, which the state is constitutionally bound to provide. In addition, the nexus between the professional and political cadres may result in reduced information dissemination, lower levels of responsiveness to citizens' needs and demands, and decreased organizational innovation. Through the recruitment of party bureaucrats irrespective of their qualifications, the democratic governments took control of the bureaucracy.

The ongoing process of politicization of the bureaucracy effectively utilized its participation in corruption by successive governments (Jahan, 2006). The last elected democratic government (a four-party alliance led by the BNP) initiated a new process of politicization. With the consent of the prime minister's office, an unofficial cell was created to ensure that no civil servant who is or was sympathetic to the previous regime was promoted (Khan 2003). The Superior Selection Board became dysfunctional due to decisions made by the prime minister's office; the board's only duty was to approve the list supplied by the prime minister's office. This process of politicization significantly curbed the thinking capacity and independence of the bureaucracy (Jahan, 2006). The present Awami League government has made various statements on the previous government's anomalies, but it has also promoted a huge number of officials loyal to the party, using the same promotion rules.

Social Factors

Social Instability and Inequity

Social exclusion is evident in power relations, social institutions, and networks. The present social condition of Bangladesh is not stable. Conflict based on race, religion, and caste is not excessive. But class conflict, poverty, lack of health, food, and social security, dishonesty, distrust, hopelessness, gender discrimination, imbalance between demand and supply, and crime create social conditions that inhibit innovation by members of society, including public officials and administrators, and hinder economic growth and social peace. For example, more than half of Bangladesh's population lives below the poverty line. Uncertainty about personal survival leaves no scope to think about the country. Scarcity drives many people to illegal activities that create volatility in the society. The relationship between business owners and laborers is getting worse day by day, and that also creates social instability.

Illiteracy and Lack of Education

Successful innovation needs proper translation of creative ideas or initiatives to the people to ensure their prompt achievement. But in Bangladesh, people's low level of understanding, due to low education and literacy rates, hampers government innovation. The current literacy rate in Bangladesh is about 47.9 percent, which is low compared to other low-income countries where the literacy rate is about 60 percent. Moreover, most Bangladeshis live in villages and are not aware of government decisions, and this also hinders innovation. The present government has established e-governance facilities in many public offices and utility centers, but most people are not aware of this, a barrier to the implementation of the program.

AN INNOVATION STRATEGY FOR BANGLADESH

In the fiercely competitive world of globalization, innovation is of prime importance to government effectiveness and economic success. Generally, the most wealthy nations and regions of the world are the most innovative, and innovation is a renewable source of wealth. But in Bangladesh, the concept of innovation in government remains obscure. Bangladesh faces political, administrative, economic, and social barriers to innovation. Keeping these in mind, this paper proposes an innovation strategy for the Bangladesh government. Bangladesh is a third-world country, but it is also a

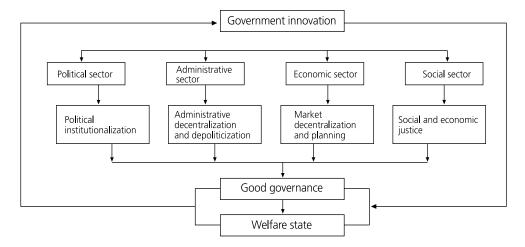


Figure 2. Innovation Strategy for the Bangladesh Government

democracy. This proposal is based on democratic values and suggests ways to overcome barriers to government innovation in Bangladesh (figure 2).

Political Institutionalization

Political institutionalization is regarded as a process of regularized, legal, and peaceful transfer of power, greater political openness, including greater roles for legislatures, civilian governance, and more meaningful forms of citizen participation. In institutionalized politics, political parties have qualified leaders, ideological strength, political ethics, democratic values, and willingness to compromise. Therefore, political vulnerability is reduced to a minimum and government can act effectively.

In Bangladesh, lack of political institutionalization is the root of political crises that deter government innovation. Bangladesh has a multiparty system, but it is not evolving as a mechanism for peaceful transfer of power. Political parties are increasingly seen as a way for leaders to amass wealth and power. The judiciary, the law enforcement agencies, the election commission, the anti-corruption commission, and other components of the democratic government did not come forward to institutionalize democracy and thereby check corruption. Rather, they became the prey of corruption, politicization, and control by the ruling parties.

It is high time for the Bangladesh government to promote political institutionalization. Government should specify rules and regulations to govern the formation of political parties and organizations. The judiciary and the anti-corruption and election commissions have to be independent and follow democratic work procedures. It is important for the government to strengthen the country's democratic institutions so that they can perform efficiently and effectively, as such institutions serve to assist the malnutrition of the people's political attitudes, especially in the case of choosing national leaders, and their active participation in public affairs.

Administrative Decentralization and Depoliticization

Administration is the engine of any government system. Political stability, economic growth, and innovation by the government have a positive correlation with administrative transparency and development, which in turn depend on administrative decentralization and depoliticization. Administrative decentralization seeks to redistribute authority, responsibility, and financial resources for providing public services among different levels of government.

The Bangladesh administration is theoretically decentralized, but in reality it is characterized by centralization of authority, elitism, authoritarianism, corruption, unequal distribution of resources, and lack of accountability and transparency, and this is severely hindering government innovation. Local government is not given enough financial and managerial autonomy to respond to the needs of the local community. The Bangladesh government, therefore, should take immediate steps to shift workloads from one ministry to another or from the ministry's central office to its field or local office. It should transfer responsibility for decision making and administration of public functions from the central government to semiautonomous organizations that are not wholly controlled by the central government (delegation), and it should transfer significant power, including law making and revenue raising, to locally elected bodies (devolution). Rational distribution of authority, responsibility, and financial resources among different levels of the government will reduce excessive pressure on central government, dependency of lower levels of government on top levels, and exploitation of power, resources, and time by the central bureaucrats, and it will support government innovation.

Depoliticization, as a governing tactic, involves the creation of decision-making arenas that are theoretically insulated from political pressures, or the adoption of rule-based systems that remove or significantly diminish the discretion of politicians. In Bangladesh, different institutions of the National Integrity System, including the parliament, anticorruption commission, election commission, public service commission, and judiciary, have remained ineffective and politicized even under democratic regimes. Therefore, they cannot play a significant role in combating corruption. Because of acute politicization, the public service commission acts like a recruiting agency for the ruling government. Jurisdiction is also beyond the justice. Politically

motivated judicial decisions also deny people the right to justice.

Unfortunately, the present regime has been marked by indiscriminate politicization of government, semiautonomous and even autonomous offices and institutions, corruption and misrule, and legal violations, which make governance weak and undemocratic in practice. The party in power always uses its power and position to win the loyalty of the civil service. To depoliticize the civil service, the Bangladesh government should enact strict rules and regulations for recruitment, promotion, and transfer that focus on candidates' academic qualifications, talents, and experiences. Decisions regarding tenders for development projects, fund disbursements, and power distribution must be made by the administrative authority. The legislative, executive, and judiciary branches should be independent, but there must be a system of checks and balances. Above all, initiatives to reform public administration should emphasize the need for the civil service to be neutral, transparent, professional, responsive, and responsible.

Market Decentralization and Planning

Economic or market decentralization means passing to the private sector functions once exclusively performed by government. It is manifested through privatization and deregulation. Though the transfer of some planning and administrative functions and responsibilities from government to private or voluntary agencies facilitates the processes of decentralization, the privatization of public-sector industries has proceeded slowly. Government has continued to interfere in privatized companies and industries. Legal constraints on private participation also hamper effective privatization. In fact, it is a big challenge for Bangladesh to compete in the global economy given its considerable internal and external obstructions. To smooth the progress of economic innovation and progress, the Bangladesh government needs to privatize its state-owned enterprises, following privatization rules and regulations, so that the quality of goods and services is not sacrificed in the name of development and profit. Government needs to reduce the legal constraints on private participation.

Effective policy planning is also vital for economic prosperity and innovation. But the Bangladesh government's defective planning system imposes constraints on economic growth. Every government makes long-term (15-20 years) plans without considering their tenure, carrying out cost-benefit analysis, or taking political instability, natural calamity, and international and trans-boundary considerations into account. Therefore, such long-term plans remain incomplete, waste time and money, and hinder other development projects.

All relevant issues should be considered during planning. The Bangladesh Planning Commission, the central planning organization of the country, must be kept free of corruption, politicization, and excessive formalism. The Bangladesh government should target expenditures to priority development projects, enact and implement strong internal mechanisms for transparency, and ensure a secured environment and clear and competitive terms for local and foreign investment. Bangladesh should maintain good relations with the World Bank, International Monetary Fund, and other donor agencies.

Social and Economic Justice

Social justice refers to the fair administration of laws so that all people, irrespective of ethnic origin, gender, wealth, race, and religion, are treated equally and without prejudice. Social justice encompasses economic justice, under which everyone, from the poorest person on the margins of society to the wealthiest, deserves equal economic rights and opportunities. Economic and social justice are essential for inspiring social innovation and stability. Although the constitution proclaims socialism, meaning economic and social justice, as one of the fundamental principles of the Bangladeshi republic, Bangladeshi socialism is not socialism in the real sense.

In Bangladesh society, wealth inequality, absence of the rule of law, and minority problems are acute, and the poor are becoming poorer and the rich are becoming richer. Justice is ignored; influential members of society always gain from this. Ethnic minorities are also deprived of equal opportunities and rights. So the Bangladesh government has to undertake initiatives for economic and social justice that represent socialism in the true sense, by ensuring human rights and equitable distribution of wealth and opportunities among rich and poor, men and women, and urban and rural areas, and by strengthening and democratizing social institutions.

Good Governance and the Welfare State

In today's globalized world, good governance is one of the most widely recognized and important phenomena. Good governance means a participatory, transparent, accountable, effective, sustainable, and equitable governance system that promotes the rule of law at all levels and ensures that the voices of the poorest and the most vulnerable in society will be fully heard and considered in decision-making about the allocation of development resources. The welfare state means that the state plays a key role in protecting and promoting the economic and social well-being of its citizens. It is based on the principles of equality of opportunity and wealth. The concepts of government innovation, good governance, and the welfare state are interrelated and interdependent. It has become a truism to say that good governance is essential for successful government

innovation and development. Innovations take place in the government, the market, and civil society.

Good governance helps the innovation process by creating a positive environment in which sustained outcomes become achievable. Good governance is associated with accountable political leadership, enlightened policy-making, and a civil service imbued with a professional ethos—which are also preconditions for successful government innovation. Government innovation must also be seen as an integral part of the global effort to promote democratization, good governance, and socioeconomic development. Innovations contribute to the promotion of good government and to the creation of new democratic spaces.

This is certainly true for countries like Bangladesh that are trying to attain an economically developed status and politically mature culture and democratic institutions. It is also true for advanced democracies, since good government is a key factor in strengthening democratic governance. Introducing government innovation aims at simplifying governing procedures, motivating civil servants, accelerating the implementation of decisions, facilitating access to services, ensuring security and justice, reducing costs, and fighting corruption and poverty. All these factors help to establish good governance and the welfare state. In Bangladesh, government has passed a law to require financial statements from all political executives in order to reduce corruption and illegal acquisition of wealth. And it has separated the judiciary from the executive branch to ensure justice. These innovative steps help ensure good governance. Good governance ensures a country's welfare. Good governance and the country's welfare both strengthen the innovation process of the Bangladesh government.

CONCLUSION

The Bangladesh government is committed to building a secular, progressive, democratic, knowledge-based modern welfare state. The present democratic government has declared in its "Vision 2021" the intention to establish Bangladesh as a resourceful and modern country by 2021. So it is important to stimulate, support, and carefully nurture the spirit of creativity and innovation. Government innovation means initiating new and creative plans, policies, and strategies to bring change to the administrative sector, accelerate the market economy, and bring stability to politics and society. In terms of government innovation and sustainable development, Bangladesh, as a developing country, has a long way to go. The Bangladesh government has to provide more far-reaching and higher quality services with reduced resources and limited operational capacities. It has to use its resources and build capacities not only

more effectively, but also more creatively.

To sustain innovation and to cope with the rapid changes in the globalized world, a country's political, social, economic, and administrative institutions and actors require decisive reconstitution and moral improvement. The Bangladesh government has to ensure political peace and stability by reducing corruption, turbulence, and political egotism. Nurturing a cooperative and laissez-faire political culture will help the government to lessen political constraints on innovation and support innovation in a wide variety of sectors, groups, and regions. The Bangladesh government needs to continuously modify its institutional, infrastructure, information, and innovation systems and provide incentives as well as a supportive environment so that local potential can be realized.

High-priority resources and initiatives are needed to establish the cycle of intellectual creation. In addition, private- and public-sector collaboration needs to be institutionalized to share costs, promote research, and commercialize innovation. The resources committed to this effort must be considered investments in capacity building for innovation. Most importantly, the Bangladesh government must strengthen its democratic actors and factors, accelerate democratic processes, and secure national integration to ensure innovation and maximize the benefits of democracy. It must encourage changing attitudes, positive thinking, and innovative policies and mechanisms and explore creative ideas.

REFERENCES

- Alberti, A., & Bertucci, G. M. 2006. Replicating innovations in governance: An overview. In Innovation in governance and public administration: Replicating what works. UN Publication No. ST/ESA/PAD/SER.E/72.Asian Development Bank. 2007. Asian Development Bank report.
 - . 2008. Asian Development Bank key indicators.
- Aubert, J.-E., & Quirke, A. 2005. How to promote innovation in developing countries. World Bank Institute, PREM Week.
- BANSDOC (Bangladesh National Scientific and Technical Documentation Centre). 2001. Survey of research and development activities of Bangladesh 1997. Dhaka, Bangladesh Council of Scientific and Industrial Research (BCSIR): Bangladesh National Scientific and Technical Documentation Centre.
- Battacharya, D., Moazzem, K. G., Rahman, K., Mahmudur, H., & Saifuddin, S. 2005. Domestic perceptions and global comparison (Centre for Policy Dialog Occasional Paper 59.). Business Competitiveness Environment in Bangladesh.

- Dhaka: Center for Policy Dialog.
- Downs, G. W. Jr., & Mohr, L. B. 1976. Conceptual issues in the study of innovation. Administrative Science Quarterly 21: 700-714.
- Drucker, P. F. 1974. Management: Tasks, responsibilities, practices. New York: Harper & Row.
- _. 2001. The essential Drucker: The best of sixty years of Peter Drucker's essential writings on management. New York: Harper & Row.
- ESCAP & UNDP (United Nations Economic and Social Commission for Asia and the Pacific & United Nations Development Programme). 1989. Technology planning for industrial development in Bangladesh. Annex XI of a report prepared for ADB, Dhaka.
- Fagerberg, J. 2004. The Oxford handbook of innovation. New York: Oxford University Press.
- Fillis, I. 2004. The internationalizing smaller craft firm: Insights from the marketing/ entrepreneurship interface. International Small Business Journal, 22(1): 57-82.
- Garsombke, T., & Garsombke, D. 1989. Strategic implication facing small manufactures: The linkage between robotization, computerization, automation and performance. Journal of Small Business Management, 27(1): 34-44.
- Golembiewski, R. & Vigoda, E. G. 2000. Organizational innovation and the science/ craft of management. In M. A. Rahim, R. Golembiewski, & K. D. Mackenzie (eds.), Current topics in management, vol. 5 (pp. 263-280). Greenwich, CT: JAI Press.
- Gore, A. 1993. From red tape to results: Creating a government that works better and costs less. Washington, DC: Government Printing Office.
- Guasch. D. 2003. For empirical results on renegotiation in utilities, and discussion about opportunistic renegotiation in paper bureaucratic complexity and impacts of corruption in utilities. Chr. Michelsen Institute working paper 2008: 2. Line Tøndel, Tina Søreide.
- Haque, A. S., & Rahman, M. T. 2003. From domination to alliance: Shifting strategies and accumulation of power by the bureaucracy in Bangladesh. Public Organization Review: A Global Journal, 3(4): 403-418.
- IGS (Institute of Governance Studies). 2007. Institutions of accountability: Public service commission. Dhaka, Bangladesh: Institute of Governance Studies.
- Islam, M. N. 2001. Strengthening technological capability for industrial competitiveness in Bangladesh. Science, Technology and Society, 6(1): 133-158.
- Islam, K. N., & Haque, M. 1999. Promoting industrial competitiveness through technology capability building in Bangladesh. Study prepared for the Bangladesh Institute of Development Studies.

- Jacques, J., and Ryan, E. J. 1978. Does management by objectives stifle organizational innovation in the public sector? Canadian Public Administration, 21: 17-25.
- Jahan, F. 2006. Public administration in Bangladesh. Working paper, Centre for Governance Studies, Bangladesh Rural Advancement Committee (BRAC) University, & BRAC Research and Evaluation Division, Dhaka, Bangladesh.
- Kamarck, E. 2004. Government innovation around the world. Faculty Research Working Paper Series, John F. Kennedy School of Government, Harvard University, Cambridge, MA.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. 2006. Governance matters. Washington, DC: World Bank.
- Khan, M. M. 2003. The state of governance in Bangladesh. *The Round Table*, 92 (1): 391-405.
- Kiggundu. R. 1998. Civil service reform: Limping into the twenty first century. In M. Minogue, C. Polidano, & D. Hulme (eds.), Beyond the New Public Management (pp. 155-171). Cheltenham, UK: Edward Elgar.
- Manzoor, H. 2007. Public sector corruption in Bangladesh: Political and bureaucratic. Paper prepared for the Victory Day Commemorative Seminar, Bangladesh Institute of International and Strategic Studies.
- Merritt, R. L. 1985. Innovation in the public sector: An introduction. In R. L. Merritt & A. J. Merritt (eds.), *Innovation in the public sector* (pp. 9-16). Beverley Hills, CA: Sage Publications.
- Mohr, L. B. 1969. Determinants of innovation in organizations. American Political Science Review, 67: 111-126.
- Morgan, C. T., King, R. A., Weisz, J. R., & Schopler, J. 2005. *Introduction to psychology*, 5th ed. New York: McGraw-Hill.
- Nathan, R. P. 1995. Reinventing government: What does it mean? *Public Administration* Review, 55(2): 213-215.
- Osborne, D., and Gaebler, T. 1992. Reinventing government: How the entrepreneurial spirit is transforming the public sector. New York: Penguin Books.
- Osborne, D., & Plastrik, P. 1997. Banishing bureaucracy: The five strategies for reinventing government. New York: Addison-Wesley.
- Regional Workshop on Science and Technology Statistics. 2005, September 19-22. Measuring innovation in developing countries. Entebbe, Uganda. www.uis .unesco.org.
- Rogers, E. M., & Kim, J. I. 1985. Diffusion of innovations in public organizations. In R. L. Merritt and A. J. Merritt (eds.), Innovation in the public sector (pp. 85-108). Beverley Hills, CA: Sage Publications.
- Rothestein, B. 1998. Just institutions matter: The moral and practical logic of universal

- welfare state. Cambridge: Cambridge University Press.
- Royall, D. R. 2000. 26th annual advance family law. 2000 annual report. Vancouver: Fraser Institute.
- Schumpeter, J. 1934. The theory of economic development. Cambridge, MA: Harvard University Press.
- Taifur, S.A.S.M. 2004. Comprehensive study of e-government initiatives in Bangladesh, 2003. Dhaka: Planning Division, Ministry of Planning, Government of Bangladesh.
- Tenenbaum, J. 1999. The need for establishing innovation and invention support structure for services in developing countries. National Seminar on Innovation Promotion organized by the World Intellectual Property Organization, November, 22-23, Bridgetown, Barbados.
- Thompson, V. A. 1965. Bureaucracy and innovation. Administrative Science Quarterly, 10: 1-20.
- Tidd, J. 2001. Innovation management in context: Environment, organization and performance. International Journal of Management Reviews, 3: 169-183.
- TIB (Transparency International Bangladesh). 2005. Corruption in Bangladesh. Dhaka, Bangladesh: Transparency International Bangladesh.
- UNDP (United Nations Development Programme). 1997. Governance for sustainable human development. New York: UNDP.
- Vigoda-Gadot, E., Shoham, A., Schwabsky, N., & Ruvio, A. 2005. Public sector innovation for the managerial and the post managerial era: Promises and realities in a globalizing public administration. *International Public Management Journal*, 8(1): 57-81.
- World Economic Forum. 2006. The global competitiveness report 2006-2007. Hampshire and New York: Palgrave Macmillan.
- Yoon, J. I. 2006. Korean government innovation: Strategies and methodologies for administrative innovation. Fifth Meeting of the Committee of Experts on Public Administration. United Nations, New York, March 27-31.