

Developing a Standard Project Management System for Sustainable Development in Bangladesh

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Abstract

Project Management is a complex issue. It changes case by case nature. In project management refers to consolidating these policies into services, products and processes, seriously considering the policies of sustainable development. Sustainable development policies, namely economic, environmental and social based; It can be short-term, medium-term and long-term based; Local, regional and global based; As well as price-based. Project development process is considered for improvement in the project decree process and project management process. The study was survey type. Purposive sampling method was used for the study. Total 124 respondents of different categories were interviewed. A number of short field visits has been undertaken to develop further knowledge in specific areas on the basis of information gathered through the desk review and the questionnaires. During the field visits, meetings have been organized with key stakeholders to discuss issues, address gaps and explore possibilities for further collaboration. Much useful qualitative information was collected from the planners, policy makers and the personnel responsible for the project implementation by interviewees. From the result it was found that project management process is not a universal method. It changes case by case nature. Sustainable development is desired to all. So, sustainable project management is an urgent need to all sectors. Software based project management can fulfill some specific areas of management process but not the whole. Ultimately, project manager and related personnel performance influence the whole procedure. In Bangladesh, different software based project management process specially scheduling and data processing are practicing. E-procurement is also practicing by different government organizations with the leadership of CPTU. But still private sector project management process is more efficient due to their uniform funding, skilled manpower, less political biasness and less corruption compare to public sector. Projects are always designed to achieve ultimate goal and objectives that relates to the beneficiaries. Thus, end beneficiaries or interested groups should have important focus throughout the management process. Ownership building of the stakeholders or local interested groups ultimately will help to success the project.

Keywords: Project, Standard, Management, Software, Sustainable Development, Corruption, Private, Government.

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1. Introduction:

Bangladesh is a least developed country. It has a huge population compare to limited land and resources. At present, total population is around 16 cores and total land area is 147570 sq. km. Population density is around 1085 per square kilometer. Bangladesh becomes independent in 1971. Since then, its economy advances remarkably- although several political unrests occurred. Presently, Private Sector is doing well in the whole economy. But Public sector is dominant in infrastructure development field. Every year, the government as well as many NGO invests huge money to develop infrastructure. Bangladesh is a Labor intensive country. But skills level is not up to the mark. Thus, Project management in an effective way is a great challenge for both public and private sector management field. Project management is complex in nature. It changes in case by case nature. But there are some common features in all project management system all over the world. Infrastructure Project implementation in Bangladesh is little bit difficult due to some natural hazards like- flood, drought, heavy rainfall, Cyclones etc. Bangladesh Government oversight its project management system through ministry of planning. It has some guidelines to manage a public sector project or program or portfolio. Private sector project management is more efficient compare to public sector project management in Bangladesh. Funding system, personnel skills and corruption level create this difference.

Sustainable development is a concern issue all over the world. Several convention already been arranged to address the issue. It implied mainly on economic sustainability, social sustainability, environmental sustainability and technical sustainability. In Project, program or portfolio management system sustainability measure should be considered carefully. Without sustainability measures no endeavor will success. In Project management process, sustainability issues should be incorporate or integrate so that ultimate Project successes can be achieved. Now in Bangladesh, this issue is little practices in a Project management Process- except big Projects. Both Public and Private sector should analyze the issue and should design Project accordingly. It should be built-in in any management system. The planning and managing development projects have been considered as one of the foremost dilemmas in developing countries like Bangladesh. Bangladesh is now suffering from serious objections in implementation of developing projects claimed by World Bank, International Monetary fund and other development partners. The government of Bangladesh has taken different measures as desired by the development partners to regain her dignity in project implementation. The entire responsibility of taking and implementing development projects lies on the shoulder of Ministry of Planning which has a rhetoric history of emergence. The Ministry of Planning used to communicate management systems and procedures throughout the project. As it has been said 'Time spent planning is never wasted'. As an indispensable element of project management, project planning entails the enlargement of action items and setting up that will continue the project moving forward on an unailing root.

Bangladesh embarked upon planning for social and economic development immediately after independence within the framework of what the political leadership chose to call socialism and democracy. The foremost purpose of planning is that, it trims down the uncertainty that stays alive prior to a project is start taking place. The scheme of project arrives from social

problem and individual crisis turns into social crisis. Being a developing country, it has been getting foreign direct investments and donation or even loan from international organization, development partners like Japan, USA, UK etc. and the rate has been increasing day by day. Development projects in Bangladesh squeezes actions of purchasing, hiring of commodities, mechanism or services by any contractual means. Different government agencies or procurement entities, especially the ministries, divisions, departments/directorates, and other autonomous/semi-autonomous bodies or corporations often acquire/purchase goods, services or works have been involved in the process.

Corruption and poor governance are impeding Bangladesh's efforts to decrease its enormous scarcity by reducing monetary growth and lowering the triumph of socio-economic objectives. They destroy citizens' faith in their government and discourage the foreign and household investment, which desires so badly. And they destabilize the knack of Bangladesh's development partners to prolong their support. Overall, The Project management is a board issue. It is not possible to determine a universal management system for all kinds of Project. In this research work, Public Funded Project management Processes has been given more emphasizes-in Bangladesh perspective. Software based Project management is a part of overall management system. This research tries to find out existing Project management system in Bangladesh, challenges, constraint and recommended a better way of management integrating sustainability issues in all public funded projects. Discussion also made on Private Funded projects. Theoretical discussion also made on different concern issues regarding this- considering world standard.

2. Rationale of the Study:

Bangladesh, as a symbol of least developing country, has inheritably been alienated with friendly foreign policy and holds geographical importance. It is a unitary self-governing republic. The president is head of the state. The legislature is replica of the British parliamentary system. Depending on the funds or donations from her development partners, she is on the way of development to reach desired goals. In doing so, the government has focused on planning and managing development projects in a Sustainable way which may facilitate the people of the country as soon as possible. This study is significant for the general people as well as politicians, bureaucrats, educationists, donors, nongovernmental organization (NGOs), and civil society. Various factors are responsible for a corrupted mode of government (that is, traditional bureaucrats, unskilled professionals, centralized authority and power, lack of financial resources). A lot of research works on project management have been conducted in Bangladesh on either national or local level. Unfortunately, no significant research is found regarding the challenges of planning and managing development projects considering sustainability in Bangladesh. The study would be a reliable one for the government as well as bureaucrats, academicians, civil society etc. for making further research or other movements. It is relevant with the present status of planning and implementing development projects all over the world. In an age of globalization the study will open up a new door for all concerned to think about the matter. In addition, conducting such a research in this specific area was both challenging and interesting, too.

3 The Objective of the Study:

The objectives of the Research are as follows:

1. To identify existing project management system of Bangladesh.
2. To identify constraints that influence project management in Bangladesh
3. To induce Sustainability issues in all project management system in Bangladesh
4. To develop an effective project management system of Bangladesh.

4. Methodology of the Study:

The study was survey type. Purposive sampling method was used for the study. Total 124 respondents of different categories were interviewed. Some documentary analysis has been used in this study. It required a thorough probe into various reports, documents relating to development projects. These documents were collected from the relevant authorities. Much useful qualitative information was collected from the planners, policy makers and the personnel responsible for the project implementation by interviewees. All possible care has been taken in recording various information and views from different relevant sources. All available literature and studies on the subject were reviewed. In addition, some actual project cases are also studied, which gave some insight to the problems and issues relating to project implementation in Bangladesh. The research has undertaken within a framework of (a) Primary Sources, and; (b) Secondary Sources.

(a) Primary Sources:

Primary data were collected from the respondents through interview. A number of short field visits has been undertaken to develop further knowledge in specific areas on the basis of information gathered through the desk review and the questionnaires. During the field visits, meetings have been organized with key stakeholders to discuss issues, address gaps and explore possibilities for further collaboration.

(b) Secondary Sources:

The research work has conducted to establish a baseline of available public information. It took account of studies, annual reports, publication on international Journals and other relevant documentation produced by governments, academic and research institutions. The assessment of Economics of Project Management is based on questionnaire. Information gathered was organized in such a manner to allow the sharing of data within a specific control and validation system.

5. Results and Discussion

Table 1: Designation of the Respondent

Designation of Respondent	Frequency	Percent
Assistant Manager	16	12.4
Chief Designer	18	14.0
Deputy Director	2	1.6
Director	3	2.3
Field Engineer	20	15.5
General Manager	15	11.6
Instructor	9	7.0
Manager	19	14.7
Managing Director	2	1.6
Project Director	2	1.6
Senior Assistant Engineer	6	4.7
Software Engineer	6	4.7
System Engineer	7	5.4
Water Resource Engineer	4	3.1
Total	129	100.0

Source: Field Survey, 2016

Designation of the Respondent has described in the above table. From the result it was found that 16 respondents were Assistant Manager, 18 respondents were Chief Designer, 2 respondents were Deputy Director, 3 respondents were Director, 20 respondents were Field Engineer, 15 respondents were General Manager, 9 respondents were Instructor, 19 respondents were Manager, 2 respondents were Managing Director, 2 respondents were Project Director, 6 respondents were Senior Assistant Engineer, 6 respondents were Software Engineer, 7 respondents were System Engineer and 4 respondents were Water Resource Engineer

Table 2: Field of Experience of the Respondents

Field of Experience	Frequency	Percent
Building. Bridge. Hospital	23	17.8
Business. Textile	13	10.1
Construction	21	16.3
Electro Mechanical	19	14.7
Manufacturing and Power	17	13.2
Power sector	5	3.9
Real Estate	13	10.1
Software development	18	14.0
Total	129	100.0

Source: Field Survey, 2016

Field of Experience of the Respondents has shown in the above table. From the result it was found that 23 respondents had experience on Building, Bridge, Hospital, 13 respondents had experience on Business, Textile, 21 respondents had experience on Construction, 19 respondents had experience on Electro Mechanical, 17 respondents had experience on Manufacturing and Power, 5 respondents had experience on Power sector, 13 respondents had experience on Real Estate, 18 respondents had experience on Software development work.

Table 3: Project management is a complex issue

Respondents' opinion	Frequency	Percent
Agree	129	100.0

Source: Field Survey, 2016

Whether Project management is a complex issue has shown in the above table. From the result it was found that 100% i.e. all the respondents replied that Project management is a complex issue

Table 4: Project Management is software based

Respondents' opinion	Frequency	Percent
Agree	25	19.4
Disagree	75	58.1
No comments	29	22.5
Total	129	100.0

Source: Field Survey, 2016

Whether Project Management is software based has shown in the above table. From the result it was found that 19.4 % respondents were agreed, 58.1% respondents were disagreed, and 22.5% respondents replied no comment

Table 5: Private sector project management is more efficient than public sector

Respondents' opinion	Frequency	Percent
Agree	117	90.7
Disagree	12	9.3
Total	129	100.0

Source: Field Survey, 2016

Whether Private sector project management is more efficient has shown in the above table. From the result it was found that 90.7% respondents were agreed that Private sector project management is more efficient than public sector. On the other hand 9.3% respondents were disagreed that Private sector project management is more efficient.

Table 6: Nature of Project Management decision making system now in Bangladesh

Respondents' opinion	Frequency	Percent
Top-bottom approach	118	91.5
Both way approach	11	8.5
Total	129	100.0

Source: Field Survey, 2016

What nature of Project Management decision making system now in Bangladesh has shown in the above table? From the result it was found that 91.5% respondents replied that Top-bottom approach decision making Project Management system is going on now in Bangladesh. On the other hand 8.5% respondents replied that both way approach project management decision making system is going on in Bangladesh.

Table 7: Steps are now following in Bangladesh for a public funded project Management

Steps	Frequency	Percent
Planning-Executing-Closing	31	24.0
Initiating-Planning-Executing-Monitoring-Closing	91	70.5
Others	7	5.4
Total	129	100.0

Source: Field Survey, 2016

What steps are now following in Bangladesh for a public funded project Management have shown in the above table. From the result it was found that 24.0 % respondents replied that Planning-Executing-Closing steps are now following in Bangladesh for a public funded project Management, 70.5% respondents replied that Initiating-Planning-Executing-Monitoring-Closing steps are now following in Bangladesh for a public funded project Management and 5.4% respondents replied that others steps are now following in Bangladesh for a public funded project Management.

Table 8: Vital role players in a standard project management system

Persons	Frequency	Percent
Stakeholders	26	20.2
Project managers	103	79.8
Total	129	100.0

Source: Field Survey, 2016

Who play the vital role in standard project management system has shown in the above table. From the result it was found that 20.2% respondents replied that stakeholders play the vital role in standard project management system and 79.8% respondents replied that Project Manager play the vital role in standard project management system. They also mentioned that Project Manager must have adequate project oriented knowledge with leadership quality.

Table 9: Main constraint for effective project management in Bangladesh for public funded project

Main constraints	Frequency	Percent
Bureaucratic complexity	13	10.1
Political intervention	37	28.7
Insufficient funds	12	9.3
Inefficient manpower	67	51.9
Total	129	100.0

Source: Field Survey, 2016

Which is the main constraint for effective project management in Bangladesh for public funded project? From the result it was found that 10.1% respondents replied that Bureaucratic complexity is the constraint for effective project management in Bangladesh for public funded project, 28.7% respondents replied that Political intervention is the constraint for effective project management in Bangladesh for public funded project, 9.3% respondents replied that Insufficient funds is the constraint for effective project management in Bangladesh for public funded project and 51.9% respondents replied that Inefficient manpower is the main constraint for effective project management in Bangladesh for public funded project.

Table 10: Upon what the project success depends

Project Success factors	Frequency	Percent
Cost effectiveness	36	28.00
Time bound	31	24
Quality assurance	62	48
Total	129	

Source: Field Survey, 2016

Upon what the project success depends? From the result it was found that 28 % respondents replied that project success depends upon Cost effectiveness, 24% respondents replied that project success depends upon Time bound, 48% respondents replied that project success depends upon Quality assurance.

Table 11: Vital Things for a Successful Project Management

Factors for Successful Project Management	Frequency	Percent
Transparency	56	43.4
Quick decision making	29	22.5
Close monitoring	13	10.1
Effective rules and regulations	31	24.0
Total	129	100.0

Source: Field Survey, 2016

Which is Vital for a Successful Project Management? From the result it was found that 43.4% respondents replied that Transparency is Vital for a Successful Project Management, 22.5% respondents replied that Quick decision making is Vital for a Successful Project Management, 10.1% respondents replied that close monitoring is Vital for a Successful Project Management and 24.0% respondents replied that Effective rules and regulations is Vital for a Successful Project Management.

Table 12: A Project manager should have sufficient project management knowledge

Respondents' opinion	Frequency	Percent
Agree	91	70.5
Disagree	38	29.5
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked whether Project manager should have sufficient project management knowledge. From the result it was found that 70.5% respondents were agreed in this matter and 29.5% respondents were disagreed in this matter.

Table 13: Whether existing government rules and regulations are enough for effective project management system in Bangladesh

Respondents' opinion	Frequency	Percent
Agree	62	48.1
Disagree	67	51.9
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked whether existing government rules and regulations are enough for effective project management system in Bangladesh. From the result it was found that 48.1% respondents were agreed with this question. On the other hand, 51.9% respondents were disagreed with this question.

Table 14: Whether a Project Management Body should be formed at national level

Respondents' opinion	Frequency	Percent
Agree	129	100.0

Source: Field Survey, 2016

Respondents were asked whether a Project Management Body should be formed at national level. From the result, it was found that 100% respondents were agreed in this regard.

Table 15: Whether Sustainable Development is an integral part of project management

Respondents' opinion	Frequency	Percent
Agree	103	79.8
Disagree	26	20.2
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked, Do You Think Sustainable Development is an integral part of project management? From the result it was found that 79.8% respondents were agreed with this question. On the other hand 20.2% respondents were disagreed with this question.

Table 16: Whether sustainable Development is now Considered in all public project

Considerations	Frequency	Percent
Considered in all public funded projects	11	8.5
Considered in all public and private funded projects	69	53.5
Considered in a few public and private funded projects	49	38.0
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked, do you think sustainable Development is now Considered in all public funded project in Bangladesh? 8.5% respondents replied that sustainable Development is considered in all public funded projects, 53.5% respondents replied that sustainable development is considered in all public and private funded projects and 38.0% respondents replied that sustainable development is considered in a few public and private funded projects.

Table 17: What is Sustainable Development at the national project management context?

Meaning	Frequency	Percent
To sustain the project objectives	26	20.2
Long term project benefit for the stakeholders	12	9.3
Sustainable project benefit in terms of economic, social and environmental	91	70.5
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked what Sustainable Development is at the national project management context. From the result it was found that 20.2% respondents replied that Sustainable Development is to sustain the project objectives, 9.3% respondents replied that Sustainable Development is long term project benefit for the stakeholders, 70.5% respondents replied that Sustainable Development is Sustainable project benefit in terms of economic, social and environment.

Table 18: Current Positions of Bangladesh regarding sustainable development

Positions	Frequency	Percent
Little practices at national level	81	62.8
Moderate practices at national level	31	24.0
Practices in all activities at national level	11	8.5
None of above	6	4.7
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked where we are now regarding sustainable development. From the result it was found that 62.8 % respondents replied that little practices at national level, 24.0 % respondents replied that Moderate practices at national level, 8.5 % respondents replied that Practices in all activities at national level and 4.7 % respondents replied no comment in aforesaid opinion.

Table 19: Our destination to go regarding sustainable development

Actions	Frequency	Percent
We should analyze the issue in all of our development activities	45	34.9
National level policy is essential at all sector	84	65.1
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked where we want to go regarding sustainable development. From the result it was found that 34.9% respondents replied that we should analyze the issue in all of our development activities and 65.1% respondents replied that National level policy is essential at all sector.

Table 20: How do we get there regarding sustainable development?

Ways	Frequency	Percent
By government policy enforcement	50	38.8
By academic study at secondary and higher level	37	28.7
All of the above	42	32.6
Total	129	100.0

Source: Field Survey, 2016

Respondents were asked how we get there regarding sustainable development. From the result it was found that 38.8 % respondents replied, by government policy enforcement they may achieve sustainable development goals, 28.7% respondents replied by academic study at secondary and higher level they will get ideas regarding sustainable development, 32.6% respondents replied that they will achieve sustainable development goals from the aforesaid two opinions.

Table 21: Do you think a sustainable development body should be formed at national level?

Respondents' opinion	Frequency	Percent
Agree	129	100.0

Source: Field Survey, 2016

Respondents were asked do you think a sustainable development body should be formed at national level. From the result it was found that 100% respondents were agreed that sustainable development body should be formed at national level with collaboration national project management body to oversight project formulation and also disseminating knowledge areas.

Table 22: Do You Think Public-Private Partnership (PPP) is a good concept

Respondents' opinion	Frequency	Percent
Agree	129	100.0

Source: Field Survey, 2016

Respondents were asked do you think Public-Private Partnership (PPP) is a good concept. From the result it was found that 100% respondents were thought that Public-Private Partnership (PPP) is a good concept in Bangladesh. But, it requires good policy and guidelines.

6. Recommendation of the Study

Based on the research result, the recommendations of the study are as follows:

1. Stakeholders specially the beneficiaries or interested group participation from the problem identification to planning, execution and closing of a project must be ensured through a transparent way.
2. All projects must be analyzed in the view of economic, environment and ecological, social and technical viability during the initiation and planning process.
3. Project manager must have sufficient technical knowledge about the project management process. Project personnel must also have specific task oriented knowledge as required for a project.
4. Rewarded system for excellent performance should be adopted. Punishment mechanism also is clearly mentioned.
5. Quick decision making mechanism should be adopted in a project management process. Decentralization of power and authorization to competent level should be practiced.
6. For successful project management, a project must be time bound, cost bound and quality bound. Uniform flow of project funds and input measures must be ensured.
7. Political intervention and corruption can be checked and balanced through continuous monitoring and evaluation mechanism.
8. Project management office (PMO) as required should be located at project areas. Information sharing at different stages of project management process with the local beneficiary or stakeholders must be ensured.
9. Ownership building of the stakeholders and future maintenance and development mechanism should be clearly mentioned in project document.
10. For capacity building a national sustainability and project management body can be set up under the ministry of planning to deliver continuous training for the purpose. Competent project management professional both in public and private sectors may register here through a standard online based examination at a designated place.
11. Public Private Partnership (PPP) Project should be encouraged by the government through a proper guideline. This will lessen the pressure on ADP cost and will increase public ownership for a particular project.
12. The timeframe for each activity of a project management process should be fixed and rigid. Project revision should be carefully avoided if possible.

Here is given a suggested action plan model for a public funded infrastructure development project.

Sl. No.	Activities	Conducting authority	Liaison with	Comments
1	Problem identification by local people/Beneficiaries	Local Office	Local people, Higher authority	Documentation must
2.	Local level exchange and sharing views to identify the actual problem and probable solution	Higher Authority	Local Office and Local people	Documentation must
3	Analyze the problem and preparation of different alternative solution considering economic environment, social and technical viability	Planning cell of the respective authority	Local Office and Competent experts	Documentation must
4	If the best solution fit at local level discussing with local people further process will take place	Higher authority	Local Office	Documentation must
5	Detail analysis, project management procedure outline should be finalized (E-governance, E-procurement, E-contract management should be adopted. Future maintenance mechanism should be outlined.	Higher authority	Approval need from national sustainability and project management Authority	Documentation must
6	Training of all related project personnel if required about their role and task	Higher authority	National sustainability and project management Authority	Documentation must
7	Project start up discussion at project area including local beneficiaries	Higher authority	Local Office and local beneficiary	Documentation must
8	Project execution, monitoring and evaluation. Should be continuous at certain interval.	Higher authority	Competent authority, Higher Authority	Documentation must
9	After completion the project, post review and sharing exchange and views with all stakeholders including beneficiaries	Higher authority	Local Office	Documentation must
10	Post evaluation of the project and lesson learned should be conducted	Higher authority	Local Office	Documentation must
11	Ownership building and periodic maintenance mechanism	Higher authority	Local Office	Documentation must

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