

Evaluation of the Performance of Innovation Teams in Public Organizations

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Abstract

This paper aimed at evaluating the role of innovation teams in facilitation of innovation in public service delivery in Bangladesh through analyzing the current responsibilities of innovation teams along with the challenges and prospects. This paper is based on data from both primary and secondary sources. Three sets of semi structured questionnaires and focus group discussions were used to collect primary data. Accordingly secondary data were collected from all relevant sources. The study has revealed that the roles of innovation teams are not always supportive to innovation and the innovation guidelines are not followed properly in many cases. The innovation teams are not active and well-motivated. The study also identified that there is a shortage of budget for innovation and the innovation teams have lack of capacities and incentives. Based on the key findings some recommendations were drawn which include allocating sufficient budget to the government agencies for innovation, developing a comprehensive guideline, providing incentives to the innovation team members, developing capacity of the innovation team members and developing an M&E framework for effective implementation of innovation in public service delivery in Bangladesh.

Keywords: Innovation, Innovation team, Service delivery, Performance

Introduction

1.1. Statement of the problem

Bangladesh has a population of 165 million within a small area (Chowdhury, 2017). This huge number of population largely depends on different government agencies for different services. Citizens here suffer a lot in accessing public services in

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respect of time and cost. It also increases the administrative cost for delivering services as these services are mostly archaic paper-based and manual (a2i, 2017). Most recently Bangladesh has fulfilled the eligibility requirements of being developing country and the country is now on the process of graduation from LDC to developing country (Rahman, 2018). This has enhanced the expectation among citizens for better services from the government. Citizens are no more satisfied with unresponsive and traditional government services (a2i, 2017).

Till date the public service innovation initiatives are mostly sporadic in Bangladesh. Cabinet Division issued a circular in 2013 for the formation of innovation teams at different government organizations (Cabinet Division, 2013). But absence of a central innovation agency, confusion about the concept of innovation and weak performance of innovation teams lead to create a vacuum and thus de-incentivize innovation (a2i, 2017). These barriers have resulted in a poor performance in global innovation index (WIPO, 2018). The current study aims at analyzing the current roles, responsibilities and performance of the innovation teams in order to identify the challenges and opportunities to develop an innovation ecosystem for better public service delivery in Bangladesh.

1.2. Significance of the Study

In absence of an institutionalized innovation approach, in global innovation index Bangladesh ranked 118 among 127 countries in 2018 (WIPO, 2018). Apart from this, in the goal 9 and target 9.b of Agenda 2030, importance has been given for fostering innovation at all levels. The 7th Five Year Plan has also prioritized innovation for better public service delivery. It is strongly believed that innovation in public service delivery can play a crucial role in reducing the cost of both citizens and the government. In case of Bangladesh there is very limited research on public service innovation and on the activities of the innovation teams in public organizations. Thus findings of the current research will help suggest some recommendations for efficiency and effectiveness of the innovation teams in public organizations of Bangladesh.

1.3. Scopes of the Study

Innovation has different dimensions. The current study mainly focused on innovation in public service delivery with special emphasis on the role and responsibilities of the innovation teams. The study tried to find out the existing activities of the innovation teams, the challenges and prospects of the innovation teams through an extensive literature review and a survey with three different semi structured questionnaires involving policy makers, innovation team members and innovators. Finally the study came up with some policy recommendations supportive to the institutionalization of innovation through making the innovation teams more effective.

1.4. Research Objectives

The main objective of this study is to evaluate the role of innovation teams in facilitation of innovation in public organizations. The study also has the following sub-objectives:

- i. To analyze the current responsibilities/activities of innovation teams at different levels of the government;
- ii. To identify the challenges of innovation teams in managing innovation; and
- iii. To identify the ways on how to overcome these challenges.

1.5. Limitations of the Study

The allocated time for collecting data, reviewing literature and preparing report was not sufficient. On the other hand, the issue of innovation in public service delivery in Bangladesh is still evolving. As a result available literature in this area was not adequate. Out of 1000, the survey could only cover 9 innovation teams at Ministry, Directorate and field level. During the survey a large group responded uncomfortably in the issues where the performance of their offices was under examination. In this context prejudice in answering the questions was apprehended. Computer generated (MS Word, Excel) tables, graphs and charts have been used for analyzing collected data. In-depth analysis using other statistical tools was not possible due to time constraint.

2. Literature Review

2.1. Concept of Innovation Teams at Public Organization

There are two schools of thought regarding how innovation could be better organized in public sectors. One advocates creating dedicated units to drive innovation. The other subscribes to the belief that innovation is everyone's responsibility and so should be a part of everyone's job (Nesta, 2014).

Research shows that there is a value to having separate specialized innovation teams, as they bring in new methods and new people and also act as catalyst for change. But it is also vital that these teams work with existing agencies and departments – for instance, by using their budgets and some of their staff—otherwise new ideas are seen as being created by outsiders and are too easily rejected (Nesta, 2014).

Dedicated innovation units can overcome some of the barriers to public sector innovation, providing “room” to develop new ways of doing things. They are a structural response to the cross-cutting and interdisciplinary nature of innovation projects, and to the tension between continuing business-as-usual while also introducing new approaches (OECD, 2015).

Innovation teams basically serve five broad functions: supporting and coordinating the implementation of innovative solutions (such as the Office of Citizens Services and Technologies—OCSTI—in the United States), experimenting with different approaches to problems (such as the Northern Ireland’s Innovation Lab), supporting the delivery of a cross-cutting initiative or agenda such as digitization, providing the investment needed to give emerging ideas the space to grow (such as Vinnova in Sweden), and capacity building and networking support (such as the Laboratorio de Gobierno in Chile) (OECD, 2017).

2.2. Criteria for Team Membership

Belbin (2012) highlights two principal criteria for team membership:

Eligibility refers to the past experience and qualifications of team candidates:

- Do they have track records that align with the content of the work to be done?
- Are they likely to bring suitable skills to the table?

Suitability refers to the future potential of team candidates:

- Are they likely to be a good fit in the team?
- Do they have role preferences and strengths that complement those of other team members?

2.3. What makes a successful Innovation Team?

Different studies show the ways on how to make the innovation teams more effective. The results are summarized below;

2.3.1. Establish a Team Process Early

According to Laundry (2017), there needs to be an establishment of a clear team process early on. This includes defining the roles of each team member, establishing a leadership structure, setting individual and group goals if not already in place, and outlining norms for how the team should collaborate and communicate. By creating a process, every employee is held accountable to the same principles, understands his or her responsibilities in a measurable way, and knows how to respond when conflicting projects come up.

2.3.2. Allocate the Proper Resources—Including Time

Organizations need to properly invest in the innovation team, whether that’s creating dedicated office space and a support staff or allotting time for employees to actually focus on the tasks at hand. Because most employees aren’t working solely on a single innovation project, team members often “experience constant pressure from other work demands and even other innovation team projects.

2.3.3. Encourage and Embrace Failure

If an organization wants big, bold ideas, it needs to create a climate of “psychological safety. “It’s about establishing a climate in which people feel comfortable admitting to well-intentioned mistakes without being punished. Failure means the team tried something new and learned an invaluable business lesson. This can only happen, though, if employees know it’s safe to take risks.

2.4 Innovation teams at Public Organizations in Bangladesh

According to the gazette notification of the Cabinet Division (Cabinet Division, 2013) there are innovation teams in four different levels of administration; Ministry, Directorate, District and Upazila. At the Ministry level innovation team is headed by Chief Innovation Officer with the rank of Additional Secretary or Joint Secretary and other 3-5 members. At the Directorate and organization level an officer equivalent to Director holds the position of Innovation Officer and he has 3-5 members in the team. At district level an Additional Deputy Commissioner works as the head of the team with other 3-5 members from different organizations while at Upazila level, UpazilaNirbahi Officer is the head of the team with total 3-5 members.

2.5. Challenges of Public Sector Innovation in Bangladesh

Jaegal and Tahrira (2012) mentioned that some factors hinder the process of innovation in Bangladesh. These includes risk averse nature of bureaucrats, lack of sufficient capacity to innovate, lack of qualified personnel, lack of required resources and weak infrastructure for innovation.

Rahman (2018) identified coordination gap among different agencies as one of the major challenges of innovation in public sector of Bangladesh. As for example three organizations namely the Cabinet Division, ICT Division and Governance Innovation Unit of the Prime Minister’s Office are directly involved in implementing innovation in Bangladesh.

Hossain (2017) mentioned that there is confusion about what innovation is and what is not. Sometimes some minor improvements are treated as innovation. As for example in some cases construction of a waiting room in an office and arranging safe drinking water for the community have been treated as innovation. This mainly happens due to the absence of a clear strategy and guidelines for innovation in public service delivery in Bangladesh

Public sector innovation is yet to be focused very much in research (Nielsen, 2014). This preliminary literature review shows that the past studies are primarily focused on the process of public sector innovation. In case of Bangladesh public service innovation initiatives are limited to forming innovation teams, developing some guidelines, organizing innovation fairs etc. What is missing from the past studies is a thorough study on the current status, challenges and prospects of public service

innovation with special focus on the effectiveness of innovation teams responsible for spearheading innovation in public organizations of Bangladesh.

3. Research Methodology

Based on multiple sources of data related to the activities of the innovation teams; a systematic research approach has been applied in this study.

3.1. Methods of Study

The study applied an admixture of quantitative and qualitative methods for extracting relevant data. Three sets of semi structured questionnaires and a Focus Group Discussion (FGD) were used to conduct a survey for gathering both quantitative and qualitative data. As other sources of qualitative data observations and different documents especially government policy, order, resolution, online sources were reviewed.

3.1.1. Justification of the Method of Study

The study employed a mixed method for data collection because this provides more comprehensive and reliable data. The strength from one method can be used to overcome the weakness of other method. The results from the methods can validate each other and provide stronger evidence for a conclusion.

3.2. Sample Size

A total of 144 respondents took part in the survey through a semi structured questionnaire. The respondents were selected purposively. The categories of the respondents were:

- Policy makers : 20 (from 4 Agencies)
- Innovation team members: 66 (30 from field administration and 36 from the ministries)
- Innovators: 58 (From different parts of the country)

3.2.1. Justification of sampling method and size

As a rough rule of thumb, many statisticians say that a sample size of 30 is large enough to be representative. Despite the sample size under this study was 144 from three different categories of respondents. The respondents were selected purposively because public service innovation is a specialized area and providing opinion on different issues of innovation requires specific knowledge

3.3. Sample Coverage

Two Ministries: Ministry of Fisheries and Livestock, Secondary and Higher Education Division

Two Directorates: Directorate of Secondary and Higher Education, Directorate of Livestock

Five Districts: Jashore, Cox's Bazar, Rangpur, Gaibandha and Nilphamari.

3.4. Target Respondents

The study focuses on three sets of respondents. They are the policy makers, the innovation team members of different government organizations and the innovators across the country.

3.5. Data Collection

The study randomly selected a total of 144 respondents from three different categories. Three different sets of semi structured questionnaires were used in the survey.

3.6. Data Processing, Analysis and Presentation

The study systematically processed and analyzed all collected data through application of simple statistical methods. The analytical findings are demonstrated through uses of different table, graphs and charts in line with set objectives of the study.

4. Results

Initially the data was processed manually as the data size was not very large. Later on these data were entered in MS Excel sheet. The comments made by the respondents were categorized manually and analyzed accordingly.

4.1. Opinion of the respondents

Total 144 respondents under three different categories responded on different aspects of innovation and the activities of innovation teams. These have been described below:

4.1.1. Knowledge and awareness level on innovation and innovation teams

Regarding knowledge and awareness level on innovation and innovation teams 65.15% of the respondents of innovation team member mentioned that they know about innovation and 86.36% of them mentioned that they are aware about innovation teams. On the other hand 27.58% respondents from the innovators know about innovation while 36.20% of them are aware of innovation teams. Accordingly 40% of the respondents from policy makers know about innovation whereas 90% of them are aware of innovation teams. Overall 46.52% of them know about innovation and 66.66% are aware about the innovation teams in public organizations (Table 1, Figure 1 and 2).

Table1: Knowledge and awareness level on innovation and innovation team

SL No	Respondents	No of respondents	No of respondents know about innovation (%)	No of respondent aware about innovation team (%)
01	Innovation team member	66	43 (65.15)	57 (86.36)
02	Innovators	58	16 (27.58)	21 (36.20)
03	Policy makers	20	8 40.00	18 (90.00)
Total		144	67 (46.52)	96 (66.66)

Figure: 1 Knowledge and awareness level on Innovation and innovation team.

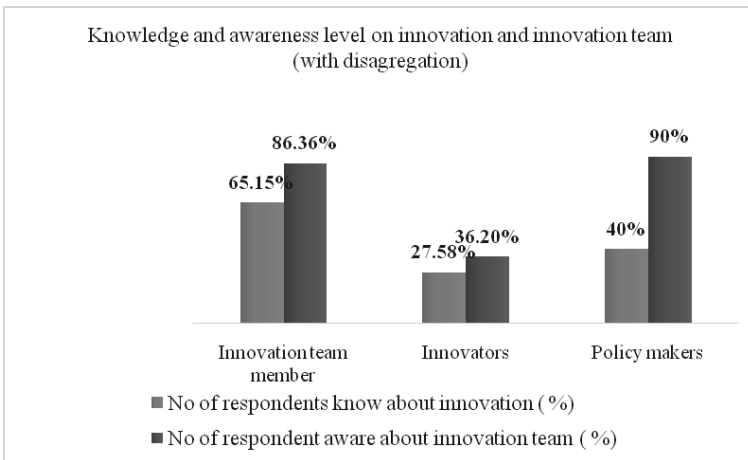
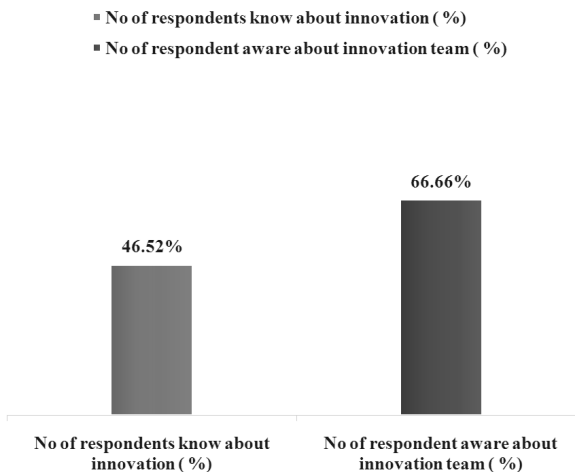


Figure 2: Knowledge and awareness level on innovation and innovation team (Total)



4.1.2. Training on innovation and available support for innovation

48% of the respondents from innovation team member mentioned that training program on innovation is available at their organization whereas 52% answered negatively. On the other hand 39% of the respondents mentioned that they get necessary support for innovation, 18% declined while 43% mentioned that the support is not always available (Table:2 and Figure 3, 4).

Table 2: Training on innovation and available support for innovation

SL No	Respondents	No of respondents	Training program available		Necessary support for innovation (%)		
			Yes (%)	No (%)	Yes (%)	No (%)	Not always (%)
01	Innovation team member	66	32 (48.48)	34 (51.52)	26 (39.39)	12 (18.18)	28 (42.42)

Figure- 3: Training on innovation and available support for innovation (Training programme available)

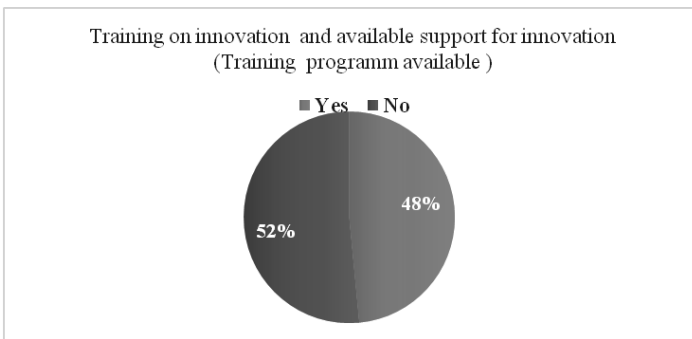
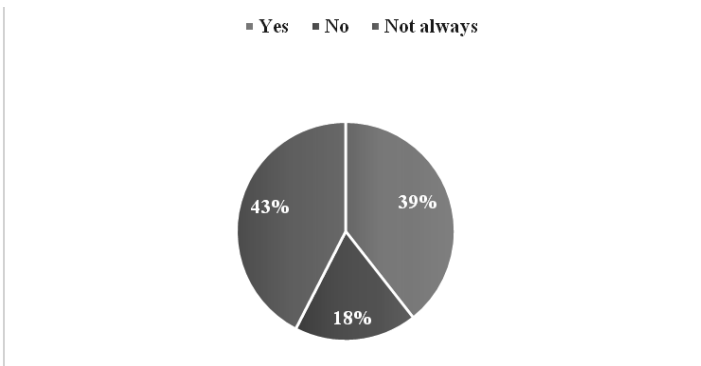


Figure 4: Training on innovation and available support for innovation (Necessary support for innovation)

4.1.3. Regular activities on innovation in organization



39% of the respondents from innovation team stated that yearly report had been sent to Cabinet Division and relevant higher authorities. Another 46% mentioned that it was sent irregularly. Regarding annual work plan on innovation, 42% of them mentioned that they had a plan while 58% answered negative. Regarding monthly meeting of the innovation team only 24% mentioned that they had regular meeting and 56% stated that it was irregular. Rest 19% mentioned that meetings were not held (Table 3 and Figure 5, 6, 7).

Table3: Regular activities on innovation in organization

SL No	Respondents	No of respondents	Sending of yearly report to Cabinet Division			Annual work plan		Monthly regular meeting		
			Regular (%)	Irregular (%)	No (%)	Yes (%)	No (%)	Regular (%)	Irregular (%)	No (%)
01	Innovation team member	66	26 (39.39)	30 (45.45)	10 (15.15)	28 (42.42)	38 (57.57)	16 (24.24)	37 (56.06)	13 (19.69)

Figure: 5 Regular activities on innovation in organization (Sending of yearly report to Cabinet Division)

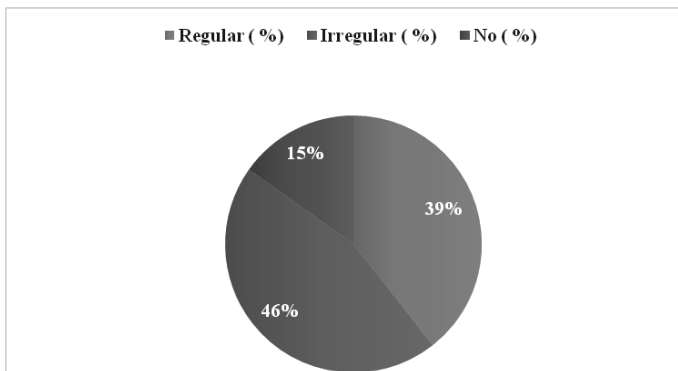


Figure: 6 Regular activities on innovation in organization (Annual work plan)

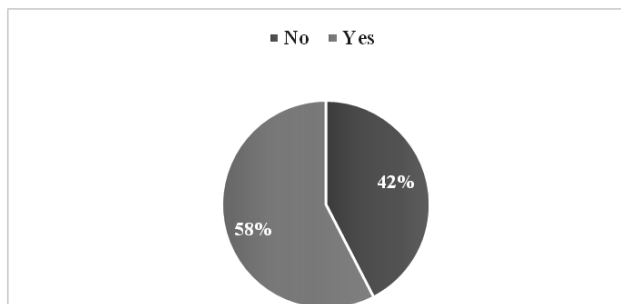
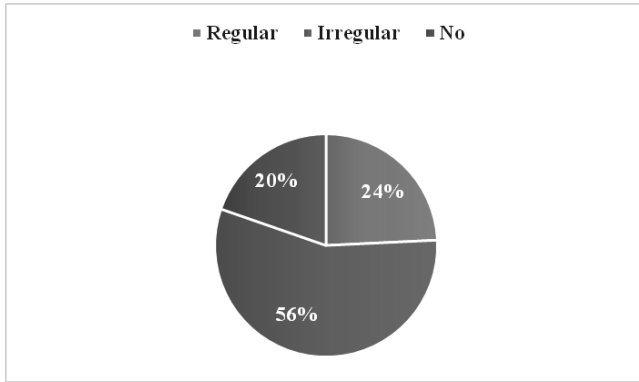


Figure: 7 Regular activities on innovation in organization (Monthly regular meeting)



4.1.4. Comments on guidelines on innovation issued by the Cabinet Division

The respondents were asked whether the guidelines issued by the Cabinet Division on innovation was effective or not. 27.27% of the respondents from the innovation team mentioned that it was effective while 48.48% mentioned that it was not effective. From the respondents of the innovators 24.13% termed it effective while 41.38% disagreed. On the other hand, 35% of the policy makers stated that it was effective and 45% mentioned it was not. Overall 27% of the respondents comprising three different groups mentioned the guidelines as effective, 45% as not effective and 28% made no comments on it Table4 and Figure 8.9)

Table 4: Comments on guideline on innovation issued by the Cabinet Division

SL No	Respondents	No of respondents	Response		
			Effective (%)	Not effective (%)	No Comments (%)
01	Innovation team member	66	18 (27.27)	32 (48.48)	16 (24.24)
02	Innovators	58	14 (24.13)	24 (41.38)	20 (34.48)
03	Policy makers	20	07 (35.00)	09 (45.00)	04 (20.00)
	Total	144	39 (27.08)	65 (45.14)	40 (27.77)

Figure 8: Comments on guidelines on innovation issued by the Cabinet Division (with disaggregation)

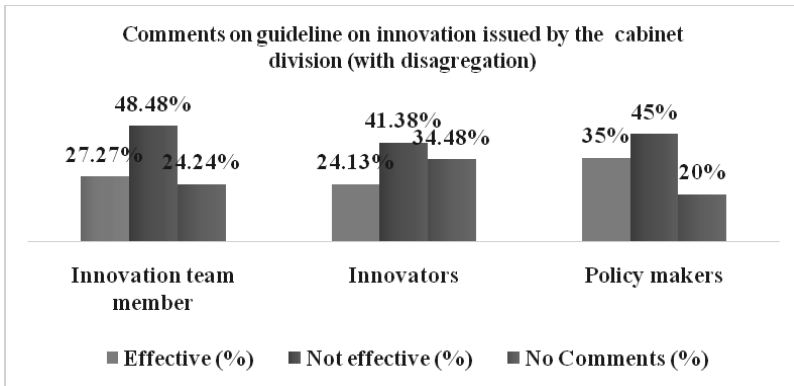
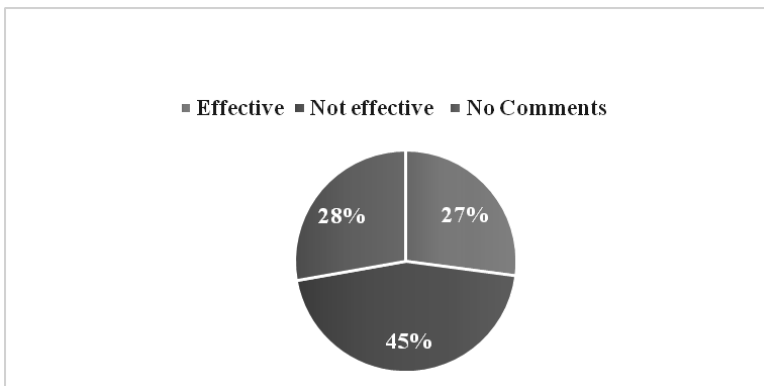


Figure 9: Comments on guidelines on innovation issued by the Cabinet Division (Total)



4.1.5. Role of innovation team in public service innovation at organization level

The respondents were given an agreement/disagreement type of statement that the innovation teams are playing crucial role at organization level. Among 66 respondents from innovation team, 6 strongly disagreed, 22 disagreed, 18 agreed and 13 remained neutral. Among the innovators (total 58), 15 strongly disagreed, 28 disagreed, 8 agreed and 4 were neutral. On the other hand among 20 policy makers 2 strongly disagreed, 5 disagreed and 7 agreed with the statement. Among 144 respondents of three categories 16% strongly disagreed, 38% disagreed, 23% agreed and 14% remained neutral (Table 5 and Figure 10, 11)

Table.5: Role of innovation team in public service innovation at organization level

SL No	Respondents	No of respondents	Playing crucial rule				
			Strongly disagree	Disagree	Agree	Neutral	Strongly agree
01	Innovation team member	66	6	22	18	13	7
02	Innovators	58	15	28	8	4	3
03	Policy makers	20	2	5	7	3	3
Total		144	23 (15.97)	55 (38.19)	33 (22.91)	20 (13.88)	13 (9.02)

Figure 10: Role of innovation team in public service innovation at organization level (with disaggregation)

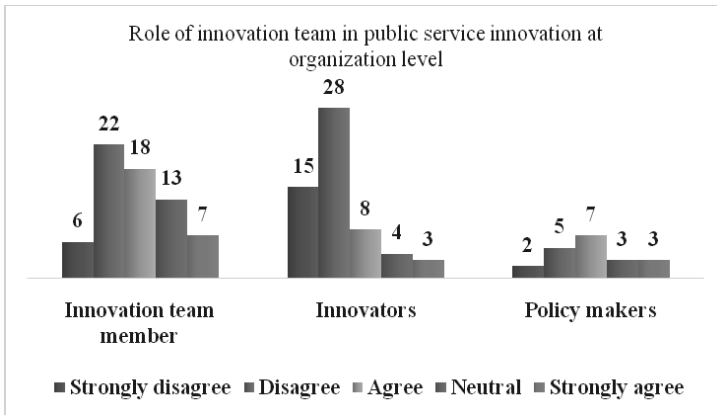
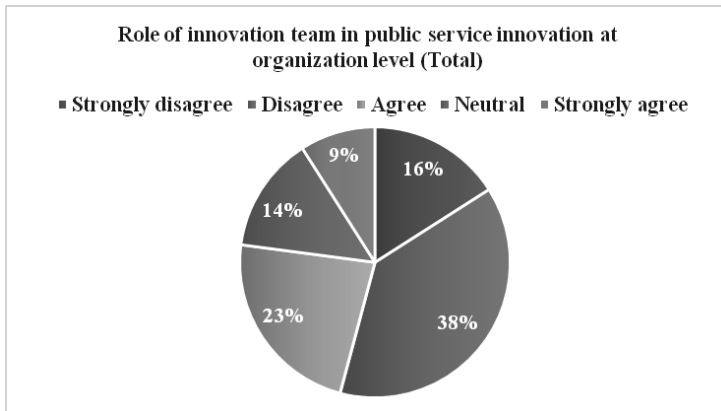


Figure11: Role of innovation team in public service innovation at organization level (Total)



4.1.6. Guidance of public service innovation agenda at organization level

The respondents expressed agreement/disagreement type of opinion on whether public service innovation agenda in Bangladesh is guided by clear and specific policies. Among 144 respondents of different categories 22% strongly disagreed, 37% disagreed, 19% agreed and 16% remained silent with the statement 9 Table 6 and Figure 12, 13).

Table 6: Guidance of public service innovation agenda at organization level

SL No	Respondents	No of respondents	Innovation agenda is guided by clear and specific policies				
			Strongly disagree	Disagree	Agree	Neutral	Strongly agree
01	Innovation team member	66	9	24	14	15	4
02	Innovators	58	19	26	7	4	2
03	Policy makers	20	1	3	6	4	3
Total		144	32 (22.22)	53 (36.80)	27 (18.75)	23 (15.97)	9 (6.25)

Figure: 12 Guidance of public service innovation agenda at organization level (with disaggregation)

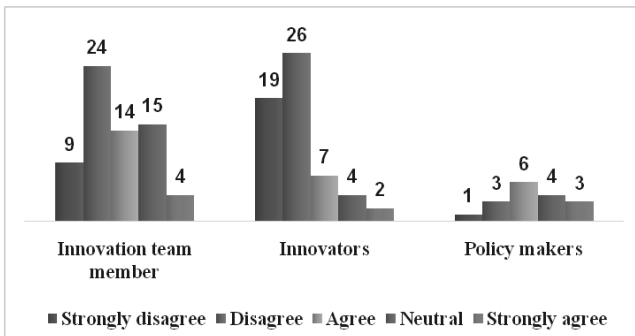
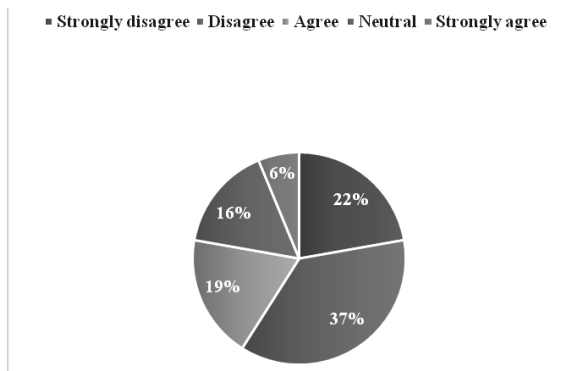


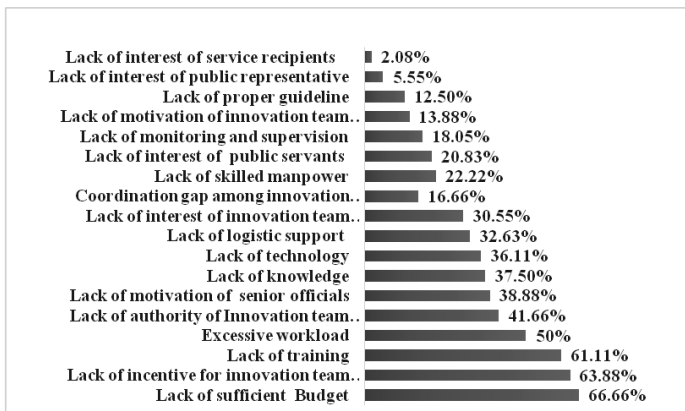
Figure 13: Guidance of public service innovation agenda at organization level (Total)



4.1.7. Challenges/limitations for the Innovation Teams

The respondents were asked an open ended question regarding the challenges/limitations faced by the innovation teams. 66.66% respondents identified insufficient budget as the most important challenge. Lack of incentive for the innovation team member (63.88%) and lack of training (61.11%) ranked 2nd and 3rd respectively. Apart from this 50% of the respondents mentioned the excessive workload, 41.66% mentioned lack of authority, 38.88% mentioned about lack of motivation of the senior officials. Other includes lack of technological and logistic support and lack of coordination etc.

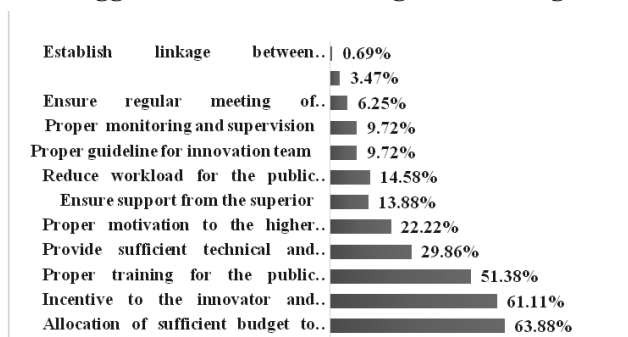
Figure: 14. Challenges/ limitations for the Innovation Team



4.1.8. Suggestions for overcoming the challenges/limitations

The respondents were asked an open ended question on how the challenges of innovation teams could be overcome. Highest 63.88% demanded sufficient budget allocation; 61.11% sought incentive for the innovator; 51.38% mentioned proper training; 29.86% mentioned technical and logistic support and 22.22% mentioned proper motivation of the higher authority to overcome the existing challenges. (Figure 15).

Figure: 15. Suggestions for overcoming the challenges/limitations



4.2. Result of the Focus Group Discussions

Apart from this 6 Focus Group Discussions were also held at the Ministry and District level. The participants were district innovation team members, innovation team members from different Ministries and Directorates, policy makers and innovators across different agencies. They came up with the following points in response to three different questions.

4.2.1. Regarding the responsibilities of Innovation Teams

The participants mentioned the following points

- Innovation teams are not well conversant about innovation
- Innovation guidelines are not followed properly
- There is coordination gap among the team members
- Team meetings are not held regularly

4.2.2. Regarding the challenges faced by Innovation Teams

The participants mentioned the following points:

- The innovation guidelines are not clear and comprehensive
- The teams do not get adequate support from their authority
- They do not get sufficient budget for innovation
- They have lack of capacities for innovation

4.2.3. Regarding the ways to overcome the challenges

The participants recommended the following points;

- A comprehensive strategy/guideline is required for innovation
- Sufficient budget allocation is required
- Proper training for the innovation team members is required
- Special awareness program should be taken for the head of the organizations on innovation

5. Discussions

The main objective of this study was to evaluate the role of innovation teams in facilitation of innovation in public service delivery along with drawbacks, major challenges and prospects of innovation teams at public organizations. A purposive sampling has been used to approach specific stakeholders i.e. policy makers, innovation team members and innovators with three sets of semi structured questionnaires. Total 144 respondents participated in this survey. Apart from the survey 6 focus group discussions were also held. The findings of the research have been summarized below as per the requirement of research objectives and to address research questions.

5.1. Current responsibilities/activities of innovation teams

Analysis of data shows that majority of the respondents are aware of the innovation agenda and innovation team of the public organizations. According to the opinion of the majority of the respondents; innovation work plan is not prepared on a regular basis and meeting of the innovation teams are also held irregularly. In addition, reporting to the Cabinet Division and higher authorities on innovation is also irregular. It is also evident from the opinion of the respondents that there is strong disagreement about the facilitating role of innovation teams in fostering innovation at public organizations. On the other hand majority of the respondents opined that the concept of innovation team is very effective at public organizations.

5.2. Challenges faced by innovation teams

It is evident from the opinion of the respondents that the innovation teams face some challenges in managing innovations. According to them insufficient budget is the most important challenge. Other challenges include lack of incentives for innovation team members, lack of training, excessive work load, lack of authority of innovation team members, lack of motivation of senior officials and lack of logistic support etc.

5.3. Ways on how to overcome the challenges faced by innovation teams

According to the opinion of the respondents it is necessary to allocate adequate budget to the innovation team. Their suggestions also include providing incentive to the innovators and innovation team members, providing sufficient training to the relevant persons, providing sufficient technical support, issuing proper guidelines for overall innovation and ensuring proper monitoring and supervision.

6. Conclusion and Recommendations

6.1. Conclusion

The research has revealed some important aspects of the current status of the activities of innovation teams at public organizations along with the challenges and potential solutions. The study revealed that the roles of innovation teams are not always supportive to innovation. It was also found that the innovation guidelines are not followed properly in many cases. The innovation teams across the public organizations are not active and they are not well motivated. The study also found that there is a shortage of budget for innovation. The innovation teams have lack of capacities and incentives. They are not well motivated. Excessive workload and lack of authority are some other challenges faced by the teams. Absence of effective monitoring mechanism also hinders the process.

The study has shown that it is necessary to allocate more budgets to the innovation team. Providing incentive to the innovators and innovation team members will also

be required. Apart from this, providing sufficient training to the relevant persons, providing sufficient technical support, issuing a comprehensive guidelines for overall innovation and ensuring proper monitoring and supervision will also be required to overcome these challenges.

6.2. Recommendations

The agenda of ‘public service innovation’ is still evolving and this concept is very recent in the arena of public service delivery in Bangladesh. It is fact that the innovation teams face some challenges but prospects are also promising. However some realistic measures will certainly help make innovation teams more effective and efficient in the public organizations. Based on the key findings of the research the following measures can be taken in this regard:

- i) Sufficient budget should be allocated for innovation initiatives at the public organizations;
- ii) A comprehensive guideline for the innovation teams should be formulated;
- iii) A capacity development program should be introduced,
- iv) An M&E framework should be developed for effective implementation; and
- v) Incentives should be given to the innovation team members based on their performance.

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References

- Access to Information (2017).Public Service Innovation Lab+.Access to Information Programme, Prime Minister’s Office, Bangladesh.
- Belbin, M.R. (2012). Team Roles at Work, Taylor & Francis
- Cabinet Division (2013).Innovation Team Gazette.Government of the People’s Republic of Bangladesh.
- Chowdhury, A. (2017). Bangladesh is aiming to Lead South-South Government Innovation. International Policy Digest.
- Hussain, I. (2017). Citizen Friendly Public Service Innovation in Bangladesh, Access to Information Programme, Prime Minister’s Office, Bangladesh.
- Laundry, L. (2017). How to Build and Effective Innovation Team, North Eastern University

NESTA (2014). Innovation in the public Sector: How can public organizations better create, improve and adapt? Volume-1, London.

Nielsen, M.K. (2014). Public Sector Innovation. Thesis submitted in accordance with the requirements of the Norwegian University of Science and Technology for the degree of MSc.

OECD (2015). The innovation imperative in the public Sector: Setting an agenda for action, OECD Publishing, Paris.

OECD (2017). Fostering Innovation in the Public Sector, OECD Publishing, and Paris.

Rahman, S. (2018) Bangladesh on path to be recognized as developing country. Dhaka Tribune (online). Available at <https://www.dhakatribune.com/bangladesh/2018/03/17/bangladesh-path-recognized-developing-country> [Accessed 20/4/19]

Tahrima, S., and Jaegal, D. (2012) Challenges for Government Innovation in Bangladesh. The Korean Journal of Policy Studies, Volume 27, pp.143-173, Accessed http://s-space.snu.ac.kr/bitstream/10371/79019/1/07_Don%20Jaegal.pdf [Accessed 25 June 2019]

WIPO (2018). The Global Innovation Index, Tenth Edition, Switzerland.