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Corruption Prevention through Community Organizing: The Case of CCCs and YES Groups of Transparency International Bangladesh

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Abstract

Engaging citizens through a community-based organisation is not a new phenomenon. Research around the world has shown that citizen engagement is one of the most significant ways of combating corruption and promoting good governance. Transparency International Bangladesh (TIB) is undertaking similar types of activities through the Committee of Concerned Citizens (CCCs) and Youth Engagement and Support (YES) Groups. The question is, how much difference is it making in society vis-à-vis preventing corruption? Considering TIB as a case study drawing in-depth interviews, participation observation and document analysis, this paper has found that both CCCs and YES activities are dominated by coercive and mimetic isomorphism to prevent corruption is dominating in CCCs and YES working process. Second, TIB has managed to create significant awareness through engaging citizens, the whole process as a 'tortoise movement.' This suggests that the movement against the corruption of these groups is prolonged and time-consuming, and more importantly, it does not make 'direct impact' on service delivery. Third, it also suggests that donor-driven 'isomorphic' approach may prove to be less effective, considering the societal context of Bangladesh. Finally, this paper also identified some loopholes that are mainly linked with the 'tortoise movement.'

Keyword: Transparency International Bangladesh, Coercive Isomorphism, Memetic Isomorphism, Bangladesh, Community-Based Organisation.

Introduction

Anti-corruption initiatives through community activism in Bangladesh has become popular in the contemporary period. It is increasing, and countless government and nongovernment efforts have been familiarized thru Community-Based Organizations (CBOs) and other forms of the mechanism. Especially since its initiation Transparency International Bangladesh (TIB) mobilize citizens to participate in anti-corruption activities and awareness campaign through community participation. The question is, can community-driven efforts prevent corruption in Bangladesh? Murphy (1990) argues that it is relatively easy to organise poor people on 'need-based' issues, but it is hard to solve problems such as corruption that are 'rights-based.' Therefore, combating corruption always needs special efforts. However, experiences from countries like Hong Kong, Indonesia, Japan, Canada, USA, UK, India, Singapore suggest that engaging citizens in combating corruption is an effective mechanism to fight corruption by creating the social movement. These countries have significant success in corruption

prevention via engaging citizens (For Detail see Sakib, 2020). Thus, it is likely that Bangladesh will also get substantial results regarding combating corruption but need special efforts. This paper is aiming to find out the outcome of TIB led community engagement program driven by CCCs and YES in Bangladesh.

This case study drawing some evidence through in-depth interviews, participant observation and document analysis, argues isomorphism of ‘citizen engagement’ via CCCs and YES of TIB to fight against corruption is less effective and has a minimum impact in Bangladesh. The paper also discusses that the donor led isomorphic model done very little due to a range of factors. Thus, the entire initiatives have become a ‘tortoise movement’ which indicates many works are going on with a less significant impact. Finally, it shows that community engagement of anti-corruption in Bangladesh may be successful in solving identified loopholes or a different approach.

Unpacking institutional isomorphism¹

The dynamics of community organizing can be trace down through a well accepted theory as for example institutional isomorphism. As new institutional theorists (i.e. Hawley, DiMaggio and Powell) suggest that institutional isomorphism hold key to understand organizational dynamics. Therefore, DiMaggio and Powell (1983) essentially centre around institutional isomorphism as it is crucial where political pioneers take the all. Hawley (1968) defines institutional isomorphism as the similarity between associations mirrors the comparability of their surroundings and variety in association structures exhibits a decent variety of conditions. In this specific circumstance, the major systems through which isomorphic change happens is a critical issue. Hence institutional isomorphism recognizes these obliging impacts as coercive, mimetic, and normative isomorphism to clarify why organisations are headed to similitude and try to keep up their authenticity (DiMaggio and Powell, 1983);

The table below provides a brief overview of three pillars of institutional isomorphism; regulative (coercive), normative and cognitive (mimetic). It showed the basis of compliance, mechanism, logic, indication and legal basis of these three types of isomorphism. Institutions can adapt all three types of isomorphism following these criteria.

Table 1: Three Pillars of Institutions

	Regulative	Normative	Cognitive
Basis of compliance	Expedience	Social obligation	Taken for granted
Mechanism	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, laws, sanctions	Certification, accreditation	Prevalence, isomorphism

¹ For detail see Sakib N.H. (2020) Institutional Isomorphism. In: Farazmand A. (eds) Global Encyclopedia of Public Administration, Public Policy, and Governance. Springer, Cham.

Basis of legitimacy	Legally sanctioned	Morally governed	Culturally supported, conceptually correct
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Source: (Scott, 1995, p. 33)

Nevertheless, all three isomorphic mechanisms can influence organisational behaviour, this paper draws specifically on mimetic (cognitive) and coercive (regulative) isomorphism to explain the effectiveness of the TIB's citizen engagement process. It suggests why isomorphism does not turn out to be successful inside the case of preventing corruption.

Coercive (Regulative) isomorphism

Coercive isomorphism is best understood using academic jargon like power, pressure, force or persuasion (Park, 2014). Homogenization of association happens because of weight or unreasonable capacity to one association with other people. Hence, in coercive isomorphism activities can be obliged by the activities of others, all the more impressive units (Mizruchi and Fein, 1999). Ground breaking work of DiMaggio and Powell (2000b, p. 147) define coercive isomorphism in the following words:

Coercive isomorphism results from both formal and informal pressures exerted on organisations by other organisations upon which they are dependent and by cultural expectations in the society within which organisations function.

Hence, coercive isomorphism shaped by government regulation or regulatory agencies engages with organisations. Another example of a powerful organisation is the state, as rules influence organisations and legitimised by the state (Meyer & Rowan, 1977). Coercive pressure shapes through various components, for example, execution assessment, budgetary control instruments, and bookkeeping rehearse by mother associations (Chang, Mellahi, & Wilkinson, 2009; Yazdifar, Zaman, Tsamenyi, & Askarany, 2008). Furthermore, a higher level of funding and personnel dependence creates more influence and imposition (Pfeffer & Salancik, 2003; Powell & DiMaggio, 2012).

Mimetic (cognitive) isomorphism

Reliable with organisation theory, numerous researchers have broadly investigated mimetic isomorphism as a reaction to vulnerability as the foundation looks for authenticity (DiMaggio and Powell, 1983, 2000b; Meyer and Rowan, 1977; Mizruchi and Fein, 1999). Mimetic isomorphism proposes that any organized attempt to follow and the propensity of 'replicating' from another association (Park, 2014; Verbruggen, Christiaens, and Milis, 2011). The mimetic procedure may prevail through suggestions from donors, public consultations, and so on. Modelling other organisation activities would provide a viable response to uncertainty. This modelling may be unintentional or indirect through their working process but may lead to innovation (mother's gathering as in the case of CCC and YES). To describe the mimetic process DiMaggio and Powell (1983) provided the example of Japan's modernisation process and showed how they were successful following western prototypes. Similarly, drawing TIB's

community engagement dynamic this paper made an attempt to understand the effectiveness of the isomorphic approach to prevent corruption in Bangladesh.

Defining community-based organization and its challenges

Community organising sorting out recommends that the point is accomplishing something advantageous for the residents of the region (Sakib,2020). These are sort of organizations provides social services to the society at local level with no intention of gaining profit and worked completely volunteer basis (Chechetto-Salles and Yvette Geyer, 2006). The subject matter of this definition is that it limits CBOs on the neighbourhood level and just in non-benefit or a volunteer commitment. But, in present days CBO's are framed for non-benefit or volunteer purposes as well as to give some common advantage to the entire network by direct benefit. For instance; fish farmer relationship in Bangladesh at the waterfront zones framed CBOs to pick up benefit, not as a volunteer association. In this way, CBOs could be characterized as a composed network who is coordinated by some objective/s (social, political, financial turn of events) to serve the normal enthusiasm of the community (Sakib, 2019). They might be non-benefit or volunteer-based, however, they can be shaped to accomplish direct benefit as a community. Be that as it may, volunteer or benefit based association; the objective of the CBOs is to safeguard the most huge community interest.

Hence, CBOs are incessant and dynamic in advancing administrations and supporting neediness decrease, improving governance, upgrading manageability, improving productivity and viability, and building social capital and social services particularly in wellbeing, the environment, education, public safety, and so forth divisions (Jennings, 2005; Mansuri and Rao, 2004). However, the most significant problems of CBOs are to organise people as a community and sustain for a long time. It is primarily identified with authenticity, financing or resource, strategy and population (Walker and McCarthy, 2010). CBOs regularly worked by either improvement accomplices or NGOs or unique individuals' subsidizing and asset assortment. These CBOs either rush to satisfy those associations or its own objective/s or impact the CBOs action to accomplish their (IGOs, NGOs or Individuals) target. Moreover, CBOs can not get by without the help of nearby individuals. In this way, making fellowship or connection attaches inside a network to make social holding is urgent. While investigating the 'Global Justice Movement', Forno and Graziano (2014) argue that local organisation played as 'core activist' in the Sustainable Community Movement Organization (SCMOs) resulted in a thriving campaign re-embedding economy.

Another most significant problem of CBOs is a constant political intervention in their activities and lack of political support. However, there are some examples of community organisations around the world that may either be politically backed by either government or opposition. Even after a successful campaign, they form a political party. For example, in the case of Indonesia, Achwan and Ganie-Rochman (2009) showed that reforms of public governance were problematic due to legitimacy, networking, and political support; which creates a hindrance to performing their active role. They also found that political party creates pressure group or youth organisation and later these groups are being used to fulfil political goals. For example, in Thailand, local politicians and bureaucrats supported the establishment of Cooperative Community Groups (CCGs), which reduced more substantial administrative

burden and helped to win the election (Read & Pekkanen, 2009). In the USA, CBOs help to empower some of the country's poorest and least advantaged areas and seeks political power. Nevertheless, they never float away from the higher social setting. The coordinators join together and sort out individuals, develop pioneers, teach individuals, and encourage a deliberately ideological practice (Fisher, 1994). In this manner, governmental issues and CBOs have a success win relationship to accomplish their objectives.

While describing the growth of community organisation in Asia, Murphy (1990) identified ideological conflict among members and leadership are key issues to form a CBO and sustain for a longer time. He also argued that poor people could be quickly organized in matters like water, light, and footpaths, but it is hard to organised people on issues like land or jobs. Similarly, Walls (2015) thinks that; to serve community interest, these organisations do have many challenges and need some special efforts. Thus, he identified four key issues that may play an essential role in community organising;

- Power: Organizing a powerful organisation needs influential local leaders.
- Self-interest and values of the organisation that needed to clarify by one on one meeting.
- Development of organisers or leaders. And
- Training of the leaders

Finally, there are no alternatives to making CBOs as legitimate. Based on organisation theory, Walker and McCarthy (2010) showed that despite having many challenges in most cases organisations survived because of legitimacy in mobilising low and moderate communities to reduce inequalities and promote citizens' rights. In another research in a Bangladesh context Thompson (2013) showed that the sustainability of the collective action is more of a process, and it depends on the resource system, groups, institutions and external environment. Thus, legal support from the government is crucial in forming and effectiveness of CBOs.

Methodology

The case study method can be utilized for both exploratory and informative research. It can bring an extensive scope of elements into account (Halperin and Heath, 2012). Essentially, this exploration is additionally managing numerous components. For instance, the paper is concentrating on the citizen's engagement procedure of TIB through CCCs and YES as a CBOs to fight against corruption, their issues and approaches. In this manner, the case study is essentially founded on key informant interviews (KII), auxiliary reports and participant observation. However, case study research explores, the KII is perhaps the most ideal approaches to accumulate data from onlookers (Creswell, 2012). Thusly, bulk of the information for this paper has been gathered through in-depth interviews. Since the emphasis is on a miniaturized scale and just managing the exercises of the people's engagement in TIB's community organizations. The fieldwork was completed at the various areas in Bangladesh from September 2015 to May 2016. A sum of 16 top to KII has been utilized to coordinate the discoveries. Meetings were kept going 20-60 minutes, contingent upon interviewees skill, ability to take an interest and time. A meeting plan was readied following the rules of the University of Sydney Ethics. KII was led from various classes of the general public, including lawmakers, previous and present government representatives, ACC officials,

CBOs pioneers, scholastics and civil society individuals. Alongside the KII, participant observation strategy has been utilized while visiting CCCs, taking part rallies and classes and different exercises of TIB. Also, a significant number of data was accumulated from TIB and CCCs workplaces while leading top to bottom meetings and email correspondence.

The case of TIB's CCCs and YES groups initiatives

The Berlin-based worldwide NGO Transparency International opened Bangladesh Chapter (TIB) in 1996 is to speak more piercingly against corruption and to make requests for responsibility, straightforwardness and good governance. To advance and prepare against defilement activities, TIB began the Committee of Concern Citizens (CCCs) and Youth Engagement and Support (YES) Groups in 2001 through network arranging (TIB, 2012). These people group associations reinforced by TIB have gotten straightforwardly engaged with against defilement endeavours in Bangladesh.

Pope (2000) contended that institutional measures to forestall debasement must be compelling if dynamic and concerned residents developed to forestall defilement. Consolidate with Pope's contention TIB demonstrated that in Bangladesh at the nearby level, community commitment was expected to sharpen residents to their privileges, change residents' perspectives towards debasement and enable them to challenge defilement. In this manner, CCCs were presented on a pilot premise, and now they have become natural all over Bangladesh. The point and target of CCCs underlines this with the accompanying words;

This idea stems from the fact that since corruption is regarded by most citizens as an integral part of their lives the real challenge lies in changing people's attitude and behaviour so that they no longer accept corruption as an inevitable aspect of life. While the primary responsibility of tackling corruption essentially lies with the government, TIB recognises that it is the people who are the ultimate repository of power for exerting pressure for good governance (TIB, 2012).

By 2012, there were CCCs in 45 regions and 60 YES all through the nation (TIB, 2012). The CCCs utilizes various panels to perform their tasks. There are warning advisory groups, involving up to seven senior and famous residents, to give direction and counsel to the CCC. The principle CCC or the advisory group gives initiative and partakes effectively in conceiving procedures, planning plans, planning and actualizing programs. TIB gives just specialized and money related help to these advisory groups. The number of individuals from the focal council ranges from 9 to 21. Individuals are drawn from different expert gatherings, and representation of both gender is also considered. The most adequate, dynamic and excited individual with administration characteristics who is happy to give time and exertion to the general public is chosen as a president by the members and TIB. The tenure of the president is two terms and individuals review crafted by the president yearly and hold an election if important. Two vice-presidents are chosen, one of whom must be a lady. The CCCs likewise

establish different issue-based sub-advisory groups including 3 to 5 individuals. In each CCC, there is a gender sub-committee, endeavouring to advance women's support and the mainstreaming of gender in CCC exercises. Other subcommittees incorporate wellbeing, instruction, neighbourhood government, YES, procurement, finance and social issues (TIB, 2012).

Anybody somewhere in the range of 30 and 75 years old who is an occupant in the CCCs region, who harmonizes with TIB's vision, crucial, and targets and is focused on TIB Code of Ethics can be a part of the association. Individuals with any contribution in corruption or who have been indicted for a criminal offence including 'moral turpitude' are not permitted to become members. A public official getting a charge out of any unique status conceded by law or who are effectively associated with party governmental issues or liable of default of any open levy controlled by a court of law is likewise not allowed to turn into a part. Individuals who are close relatives of the official executive of TIB and other full-time individuals from the TIB staff are likewise not permitted to have CCC participation (TIB, 2012).

The YES works at school, school and colleges and TIB give them operational help, financing and guidelines. One of the sub-advisory groups from the CCCs offers vital counsel. Every YES comprises of 35-50 youthful individuals and every one of them are for the most part in the age gathering of 15-25 (TIB, 2012).

Activities of CCCs and YES Groups

TIB directs a scope of exercises through CCCs and YES. A portion of these activities is exceptionally new to the Bangladeshi society. In the process of involving citizens in the anti-corruption movement, CCCs and YES attempt two fundamental sorts of exercises.

A. Advocacy, Information, Assistance and lobbying

The CCCs and YES are engaged with a range of advocacy, data support and campaigning related issues. Various sorts of exercises like citizens report cards (CRC), mothers' gatherings, face-the-public (FtP) meetings, citizens' charters (CC), public hearings, Advice and Information Desks (AI-Desks) and support services through Advocacy and Legal Advice Centres (ALAC) (see Table 2) consistently observed by CCCs and YES.

The CRC is a sort of overview to gauge the quality of public services gave in a zone. It gives criticism from people in general to neighbourhood chose pioneers and specialist co-ops. Mother's gatherings permit moms to speak more loudly to improve the nature of education and play facilities. The objective is to make social responsibility to advance revelation, straightforwardness and responsibility in schools and diminish unlawful instalments for school administrations. It is likewise a valuable procedure for women's participation and empowerment. The FtP is composed to communicate mass residents' interests and suppositions to the open agents and authorities. The integrity pledge is a small scale level social responsibility procedure to advance participatory and responsible administration at the degree of neighbourhood administration conveyance by the intentional duty of partners. The citizens' charter is another activity for improving help conveyance at the neighbourhood level.

Table 2: Various Types of Activities of CCCs and YES from 2012 to 2015

Name of Activities	04/11-3/12	04/12-3/13	04/13-03/14	04/14-09/14	10/14-09/15	10/15-03/16
Meetings	1173	1180	1209	555	1153	589
Leaflets/ Vajpatra	125	153	129	30	148	107
Satellite AI-Desks	423	437	312	77	361	262
Special Anti-Corruption Campaign ² by CCCs	70	73	79	24	131	45
Special Anti-Corruption Campaign by YES	106	94	?	18	96	43
Theatre show/ Cultural program/ Folk show	323	327	207	24	73	126
Debate/Essay competition; anti-corruption Cartoon/ photography exhibition; anti-corruption wall painting/ wall magazine; Rally/bi-cycle Rally/ Human Chain	159	176	153	17	140	78

Source : (TIB, 2016a)³

The AI-Desks familiarised in 2003, was at first intended to be an outlet in the CCC workplaces to give data on demands got through close to home visits, calls or composed solicitations. The 'satellite' adaptation was made in 2005 in light of the need to take the AI-Desks closer to the individuals straightforwardly at the doorsteps of important establishments. From an underlying test in six distinct areas, the AI-Desk extended to each of the 45 CCCs by 2011. Driven basically by the YES members under the oversight of the CCCs, the AI-Desks give data on administrations gave by the applicable foundations; for instance, the expense of medications, specialists' hours, assessment charges and the financial plan of the Union Parishad (third level of the nearby government). They simultaneously receive reports of corruption, educating the public at the local level on their rights, entitlements, and duties in challenging corruption. AI-Desks are placed at CCC workplaces, and 'satellite' AI-Desks are put at schools, medical clinics, and nearby government workplaces (TIB, 2016b). Like the AI Desk, ALAC is a CCC office-based activity that gets grievances of corruption from casualties and observers of corruption, examines the case and help and counsel. The ultimate exercises would evoke the receipt of claims for individual or by calling, reaching out to affected

²Special anti-corruption campaign is local need-based initiatives- Information fair/ Seminar/ Workshop/ Roundtable meeting, meeting with different professional groups etc.

³ Author collected the activities of CCCs and YES Groups through e-mail communication.

communities, ensuring confidentiality, giving guidance on the most proficient method to look for change and making referrals to other care groups.

B. Awareness raising and capacity-building activities

CCCs and YES Group help to sort out a scope of more extensive mindfulness raising exercises at social occasions, for example, people theatres, folk shows, shows and road appears. People's Theatre is a basic support apparatus used to manufacture familiarity with the effect of corruption among the most powerless and ignorant individuals to advise them about corruption and spur them to reject and oppose the abuse of power. Different exercises like debates, essay competitions, anti-corruption cartoons, photography exhibitions, anti-corruption wall paintings, wall magazines, bicycle rallies and human chains include more youthful individuals from schools, universities and colleges in messages against corruption.

TIB likewise distributes a quarterly diary named *Nagorik Prottoy* ('Commitment from the Citizens') to layout the exercises of CCCs. Aside from this, each CCC distributes flyers dependent on their exercises and advancing neighbourhood crusades against corruption. CCCs and YES likewise observe different national and worldwide days, for example, International Anti-Corruption Day, International Youth Day and International Mother Language Day to make their essence felt.

With the assistance of TIB, a scope of inner direction, training and improvement workshops are held by CCCs and YES for the advancement of individuals, to make them progressively dynamic and make future pioneers. CCCs and YES compose neighbourhood need-based activities like information fairs, seminars, workshops, roundtable meetings, meetings with specific professional groups, surveys on client satisfaction, meetings with youth groups, petition campaigns and so forth. These are for the most part to build up their technique, mindfulness among residents and features rising corruption issues in the nearby settings.

Coercive and Mimetic Isomorphic Dynamic in Practice

The component TIB is applying to draw in citizen involves are coercive and mimetic isomorphism. In Bangladesh, TIB started the civic engagement program following rules of Berlin-based association TI and attempted to set up a donor-supported worldwide civic engagement. TIB gets it is subsidizing for network commitment from TI, which is currently bolstered by various sources, including donors (the UN, DFID, European Commission, Inter-American Development Bank, and so on.), governments and private establishments (TI, 2016a).

Worldwide civic engagement process like community relation department of The Independent Commission Against Corruption (ICAC) of Hong Kong, civic engagement in UK, USA, Canada through neighbourhood government have urged TIB to shape CCCs and YES at the nearby level.

TIB initiated their citizen's engagement program prescribed by TI, which supported mainly by donors. Both CCCs and YES did give primacy to the local context and invent some new ways

like mothers' gathering (part of a civic education which is widely popular in Hong Kong) to engage citizens in preventing corruption. Similarly, the concept of AI satellite desk and monitoring government offices through various activities are prevalent in Delhi, when India pass Right to Information Act in 2001. Parivartan (Change) of Arvind Kejriwal and Anna Hazare (engaging middle class) was very successful in monitoring "ration shops" and other government departments. At the same time, this concerned group also break the brokerage system by providing information, help to fill government forms via using RTI Act (Webb, 2012).

TIB followed these kinds of instruments that had been fruitful somewhere else and applied them in the Bangladeshi setting donors on pressure from TI and the worldwide contributors. The AI satellite desk is one of them, that provide information to mass people. The AI-Desks, presented in 2003, was at first intended to be just an outlet in the CCCs workplaces to give data on a solicitation recognized through close to home visits, calls or composed interests. The Satellite form was made in 2005 to take AI-Desks at the doorsteps of the pertinent organizations. From an underlying test in 6 distinct areas, the AI-Desk has by mid-2011 extended to every one of the 45 CCCs in addition to one in Dhaka. TIB, likewise monitoring climate finance through community engagement with the help of local people(personal communication, December 5, 2015). Some different exercises like face the public, observing special days (like women's day, anti-corruption day) and arrange seminars and workshops, cartoon, animation, social program, and so forth are likewise 'duplicate' adaptation of worldwide anti-corruption movement and somewhat altered in the neighbourhood setting.

Does isomorphic " Tortoise Movement" make any difference

The activities of the CCCs and YES (as of Table 2) shows there is some impact on society in various aspects. One of the notable highlights is, many of these CCCs and YES activities are based on semi-urban and rural areas. The study finding suggests that these committees found very active and more focused regarding their mission, vision, and activities. One of such CCC is Potiya (Southern part of Bangladesh residing Chittagong district), where members were found very agile and active. Most of them are participating in the meeting, giving their opinion at the meeting. During the fieldwork, many local people failed to mention or identify the name of the CBOs. However, in the case of Potiya, many ordinary people have been able to identify the presence of CCCs and YES. Many citizens evaluate their role positively. What it suggests is that TIB succeeded to bring anti-corruption movement in Bangladesh at the rural areas and create a foundation where people can raise their voice. Also, one of the anti-corruption officials at the regional level expresses that TIB has been doing an excellent job to create awareness at many schools through CCCs and YES Group. They provide funding to those schools regularly and promote organising awareness activities (personal communication, October 26, 2015).

The question is, do these activities make any difference? Are these CCCs and YES activities able to make any more significant impact on society regarding combating corruption? As an

answer, the process of the social movement of TIB via engaging citizens can be termed as “tortoise movement.”

No doubt, the different types of activities these organisations generally have created a foundation of awareness among people regarding various kinds of public service. These awareness activities are explaining the general people about their rights and what will they get without any cost (personal communication, December 5, 2015). For example; from AI Desk, people get information and advocacy to get the proper information in any services which set up people to raise their voice. Thus, the efforts CCCs and YES members are putting as a watchdog body; people are occasionally benefitted.

Organising frequent seminar, workshop, rallies, etc. also prove the existence of the organisation and create a mindset among many stakeholders. For example, the Integrity Pledge (Anti-Corruption Oath) taking at school level create a positive mindset among school students to hate corruption. At the same time, when a new YES member or CCCs members are included, they must take the oath, and it creates a sense of anti-corruption mindset among them. Thus, such oath-taking activities will inspire school-going children to hate corruption. Similarly, the members from YES who are students also involved in these types of movement. They started to hate corruption mentally and become more ‘active citizens’ while they are participating in those activities. Regarding the involvement, one CCCs president thinks that it is not about financial benefits, it is about mental satisfaction, and it improves social values and mindset. So involving such organisation always helps to maintain appearance, approaches, and attitudes and most importantly, it keeps people away from corruption (personal communication, December 6, 2015).

So, the activities like ‘raising awareness,’ ‘social movement,’ and making mass people ‘active citizen’ are creating “tortoise movement”. The word ‘tortoise’ is used to mean slow and steady. It suggests that TIB supported activities are gaining slow and steady progress but making microscopic ‘impact’ regarding corruption prevention due to their isomorphic approach. It also suggests that it is slowly and steadily creating awareness among citizens which cannot be seen with blank eyes. Ultimately it is creating ‘moral foundation’ for many stakeholders through their campaign. According to one academic:

It is vital to arrange activities like rally, media report, seminars, etc. to keep citizens awake and prove the existence of an organisation. Both TIB and CCCs were able to do that with few limitations. Such activities will create resistance and people will be aware of doing corruption. So, it is ultimately building a strong base for the future generation to raise their voice (personal communication, December 5, 2015).

As a part of their activities, CCCs members made frequent conversation with Upazilla chairpersons and counsellors regarding public service delivery. They place citizens charters in hospitals and local government offices to reveal what kind of services are available and how much required for the services. While explaining, CCCs president gives a detailed idea about the whole process in the case of creating awareness and minimise the gaps in the public hospital under the following words;

In public hospitals, the members of CCCs and YES consult with the doctors and the service recipient or the patients to find the actual problems. Service recipient's share the problems they face, and the CCCs members organise an open discussion on those facts. Members from civil society are also participating in the dialogue. The goal of these types of activities is not too ashamed the doctors. Instead, it encourages them and helps them to develop the quality of the service. Such types of effort have made few changes as doctors were not aware of their office hours. When things are coming within a routine, they are gradually moving away from that position. They are trying to maintain time regularly (personal communication, December 13, 2015).

Moreover, citizens charter also helps to identify consultants and their expertise. These consultants oversee different rooms. As a result, patients can find them out, and they cannot ignore them (personal communication, December 6, 2015). Similarly, mother gathering is also doing a tremendous job to create a foundation of future generation regarding awareness campaign. Thus, it can be termed as “tortoise movement” as may be after fifty or sixty years’ things will be change and people will stop corruption by raising the voice.

Nevertheless, considering the present situation, this awareness campaign does not have any direct impact on preventing corruption. People involved with corruption gain benefits and take all. At the same time, the cultural setting of Bangladesh also heavily permits people to engage in corruption (Sakib, 2019). Thus, the other side of “tortoise movement” is dark because slow and steady movement like raising awareness does not always help in combating corruption. In other words, the activities that have been operated by TIB and with the help of CCCs and YES make a tiny contribution regarding ‘direct benefits’ or ‘problem-solving’. At the same time, people face the corruption situation in their public life. For example, there is a CC in every land office to know which services take how much money. However, when they try to get the services, they had to pay extra money either to the broker or officials. Thus, awareness does not always become successful in combatting corruption. As the Bangladeshi citizens are playing ‘dual role’ regarding reporting and resisting corruption; such awareness campaign does not prove to be an active element while the situation demands (Sakib, 2019).

Key Challenges of “Tortoise Movement”

This paper has identified the following factors that pave the way of isomorphic process and create hindrance for long term sustainable solution and remained as “tortoise movement”;

Resource Dependence: The donor's driven approach of creating awareness has resource dependence throughout the working process. Fernandez (2008) argues that organisations are driven to compliance with material resources (money, human resources), information, and social or political support. The survival of the organisation depends on managing the stream of supplies, autonomy and external groups. The concentration and provided resource importance increase the dependencies. Thus the organisation faces more significant constraining influences from their environment if they depend heavily on one or very few resource providers (Verbruggen, Christiaens, & Milis, 2011). TIB is not an exception to this. TIB supports all the activities produced by CCCs and YES, and they provide technical and

financial assistance. Thus, these CCCs and YES have to follow the procedure of the TIB and follow the prescribed format. Most of the cases, they must follow the orders from high command. Because they do not have an extra budget and way of generating funds for their activity's additional activities. Sometimes, members of the CCCs and YES made a voluntary contribution, but that does not prove enough in most of the cases. According to one interviewee, due to resource dependence, these committees cannot operate their awareness activities (personal communication, November 13, 2015).

Most importantly, now a day's free labours are not available all the time (personal communication, December 5, 2015). Funding dependency in most of the cases sloth the progress of an organisation, and this could happen anytime in the cases CCCs and YES. For example; if donors decided to stop funding such activities, then the future of these organisations will be uncertain. Resource dependence will make the entire process uncertain as it was not built through a bottom-up approach (not initiated by the local people; instead, the donors and TIB launched the program and formed these committees).

Failure to Involve People with Real Enthusiasm: TIB's civic engagement of anti-corruption movement failed to engage people with genuine enthusiasm (personal communication, November 22, 2015). Despite the fact that both CCCs and YES individuals are dynamic, discoveries recommend that scarcely just a couple of mass individuals participate in those exercises (personal communication, January 28, 2016). People who draw in and bolster those exercises are generally the individuals and staffs. Probably the best example is the Anti-Corruption Day - 2015, where just 50-70 individuals were available in the anti-corruption human chain. The human chain was sorted out at the heart of Dhaka University. Among them, a large portion of the individuals are TIB staff and different visitors⁴. That incident suggests that they failed to engage in anti-corruption efforts with real enthusiasm. Despite being a lot of media attention and daily news coverage and various activities on a special occasion, most of the people were not familiar with TIB activities. It is mainly happening for two reasons. First, NGOs are not treated well by the Bangladeshi community, as most of them are involved in the micro-credit program. Secondly; the middle-class in the Bangladeshi society is not growing that much, and most of them were not involved in TIB activities with passion. This is opposite in the case of Delhi, where Parivartan (Change) was successful.

Limiting in less vulnerable issues: These organisations are more involved in the awareness campaign and limiting in less sensitive issues like education, health and occasionally in local government. Recently they are working in the land sector as a pilot project. They are not involved in areas like law-enforcement and judiciary. Regarding this issue, one of the CCCs presidents mention that:

They cannot work sensitive issues directly as they [those sectors officials] do not want to share classified information. At the same time, local authorities do want to allow these sorts of cases. Thus it is hard to work correctly from the outside (personal communication, December 5, 2015).

⁴Participant observation at the Anti-Corruption Day human chain organized by TIB at the University of Dhaka on December 9th, 2015.

Even if they involved in that sector, their contribution regarding direct benefits is very minimum. For example; there is still massive corruption in the education sector in recruitment, stealing sub-scholarship money by the schoolteachers; doctors were not present in their duty station most of the time, there are not enough medicine and facilities in government hospitals. Even if there is CC, people must pay the bribe to get certain services from land offices, hospitals, etc. Thus, on the more significant aspect, their social movement is limiting in a “tortoise movement”.

Grouping within and outside committee: As per the guidelines of the CCCs people with any political affiliation cannot be involved with such organisations. However, these CCCs face tremendous pressure from the local political group. According to one interviewee, these committees at the local level have severe grouping against one another. It happens while they go and create a committee in one place. During that time, a group of people enters those panels and try to ruin everything. Although TIB does not want such people in their committees, they have to include people based on political patronage. When such kind of people enters into the committees, they damage the entire efforts of corruption prevention (personal communication, December 7).

Lack of support from other stakeholders: Along with grouping, there is a lack of support from the different stakeholders. According to one CCCs president, both political personnel and government is a big problem for these CCCs to work appropriately. Sometimes local people do not take these organisations easily (personal communication, September 16, 2015). These types of activities need government and local political support to make volunteerism successful. However, in the case of these CCCs, there is a negative mindset from the political parties and government employees. One of the best examples of a lack of support from political parties and government is when TIB commented on the present parliament in 2015. TIB’s criticism also affects the relationship between the ACC and TIB. Both were agreed to observed Anti-Corruption Day rally together. Nevertheless, after the comment against the government, the ACC did not observe the day with TIB.

Similarly, in the cases of CCCs and YES at the local level, they find it very hard to get support from the local politicians and government employees. As another CBO leader mentioned, some staff do not like their work and do not participate with them. Occasionally, they also reject their work (personal communication, December 6, 2015). Considering the social context of Bangladesh, citizens sometimes mislead the function of CCCs as most of the NGOs are treated not very warmly at the local level. Thus, these organisations also found a lack of support, especially from the lower and upper class of the society (personal communication, January 28, 2016). It is also linked with ‘dual role’ citizens as they become a part of the corruption when it is necessary.

Spending less time: Volunteerism needs expanded time, and with regards to against corruption. The assignment is a lot of troublesome as on account of CCCs and YES individuals unfit to give continuous time in the anti-corruption movement. As per one CCCs president, it gets hard for the individuals to give fitting time as the vast majority of the individuals of the CCCs are engaged with some other calling. There are lacking regarding

giving time to such activities. In this way time a noteworthy factor in volunteerism (personal communication, April 2, 2016).

Conclusion

Applying 'force' and 'copying' things from the developed world and using in developing countries does not always prove to be a useful process. Especially in anti-corruption, it is unlikely to have success. In the case of Bangladesh, corruption prevention needs a better framework, somewhat not just limiting those non-government initiatives driven by TIB or donors. It is mainly because of the 'dual role' of Bangladeshi citizens as they hate corruption in one hand and on the contrary, they accept and are involved in corruption whenever it gets the opportunity. That is also linked with the patron-client relationship, which shapes the politics, economy, and society (Khan, 1998). It is tough to break the link, especially for organisations like TIB as they are treated as an NGO and do not have a healthy relationship with the government. In addition, a functioning anti-corruption movement needs successful laws with legitimate authorization. Subsequently, community movement against corruption in Bangladesh generally relies upon the altruism of the party in power. On the off chance that the decision party in power stresses hostile to corruption, at that point such an isomorphic procedure of against corruption activities will liable to be dynamic and assume rotate job and make much 'direct effect' in fighting corruption.

There is no doubt that TIB's initiatives of forming these groups in the local areas have opened a new arena for mass people to be involved in the social movement against corruption in Bangladesh. Their movement not only aware local people to gain their right, but creating future leadership (Mahjabeen & Marinova, 2015). If the challenges mentioned above are taken care of properly, the 'tortoise movement' might become more promising and more efficient along with other types of community movement against corruption. Also, the sustainability and effectiveness of such citizens' engagement campaign may be more effective if they empower citizens at the grassroots level. In that case, spontaneous participation may be a better option rather than an isomorphic approach which is making more 'direct impact' in combating corruption. That largely depends on a friendly relationship between government and TIB (both need each other to fight corruption) to create a better framework to gather spontaneous movement into an organised, precise movement through the inclusion of different people at the grassroots level in Bangladesh.

Conflict of interest

The author declares that there is no conflict of interest.

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The nature, prospect and challenges of e-commerce: Experiential evidences from online shoppers of Dhaka city in Bangladesh

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Abstract

Recent studies have suggested that e-commerce has opened up a window of opportunities for the national economy of Bangladesh with minimum capital investment by digitalizing the information. Thereby, it is important to unravel the ontology of e-commerce for deepening the understanding of this digital revolution. To serve this purpose the study has conducted a small-scale survey on 29 females and 21 males, ranging in age from 16 to more than 55, who are all online shoppers both in the form of buyers and sellers. To supplement data to the survey, 10 in-depth interviews, five sellers and five buyers, are also taken. The study finds that e-commerce is gradually getting popular among the growing young generation of 24-34 age groups. Almost 100% of female shoppers prefer clothing, personal products to buy while male shoppers prefer electronic goods more. E-commerce creates a substitute marketing channel by terminating the manipulative role of middleman. Moreover, it serves as an empowering tool for women entrepreneurs. On the contrary, a few shoppers perceive e-commerce negatively for de-socializing people and creating false needs among young generation. In addition, a lot of virtual risks are explored associated with online business. Despite having these risks, e-commerce has made people's life easier and thereby people should welcome the positive sides to underwrite the gradual development of e-commerce for keeping pace with this fast-moving world.

Keywords: *Challenges, de-socialization, Dhaka, e-commerce, online, perception, prospects, shoppers*

Introduction

Electronic commerce, known as e-commerce, is gradually growing popular in an emerging global economy (Khan 2015; Nair 2017). E-commerce began in 1995 (Khan 2015). It is an electronic process by which people involve in transactions in multifarious ways such as buying, selling, transferring, or exchanging products, services and/or information (Turban et al. 2006). Breaking the flow of the conventional business model, e-commerce is undergoing

through a process of profound transformation to reduce the eminence of the physical infrastructure, such as big cities, markets, shopping malls etc. as an inevitable prerequisite for the successful performance of business (Anjum & Tiwari 2011).

E-commerce has turned out as a new business reality which has got much popularity among all demographic categories of people. This new trend has enormously increased due to its quick and easy way of exchanging goods and services (Vadwala 2017). Transactions in e-commerce is paperless and occurs through electronic data exchange, emails, and electronic fund transfers (Nair 2017; Islam 2018). A number of studies has highlighted the variety of benefits that e-commerce offers (Vadwala 2017; Dutta and Acharjee 2018; Ishtiaque et al. 2017). Business happens with the use of credit card, debit cards, smart cards, e-money, electronic fund transfer, and other online payment methods and applications without facing any hassle of carrying physical cash or cheques. Customers also have the advantage of doing transactions at their convenient time as services are on twenty-four hours a day all over the world (Vadwala 2017).

E-commerce started its journey in the developed countries and continued to grow vigorously for their suitable technological tools to support it. Therefore, initially the growth and prospects of e-commerce developed as a major research field for developed countries only. However, the increasing excess to the internet and gradual technological advancement gave rise to the practice of e-commerce in the developing world too (Nair 2017; Alyoubi 2015). E-commerce opens a new trend of global business and a new economic avenue of which people of the developing world have also become a crucial witness (Nair 2017).

Though e-commerce has emerged in Bangladesh in the late 1990s, it is still in the budding phase. The government of Bangladesh has proceeded with its considerable limitations to create an e-commerce friendly environment. National information and communication technology (ICT) policy, 2002, Information and communication technology (ICT) Act-2005, Industrial policy, 1999, the foreign private investment (promotion and protection) Act are few of the pioneer initiatives taken by the government of Bangladesh. Besides, some trade and commerce related legislation such as import and export policy order (1997-2002), the customs Act, 1969, sale of goods act, 1930, intellectual property rights, the money loan court and so on indicate government's strong will to expand e-commerce in Bangladesh. Besides, development in the telecommunication sector, which is an integral part of e-commerce, contributes to create a positive environment for the growth and development of e-commerce in Bangladesh (Debnath & Mahmud 2007).

However, success in e-commerce depends not only on the availability of the technical excellency, but also on the skill and fortitude of the entrepreneur in extracting the benefits and advantages of the e-commerce revolution. Adequate and appropriate marketing for the promotion and awareness-building among the mass people are required for the successful functioning and growth of e-commerce (Debnath & Mahmud 2007). Social media is playing an influential role in driving business through awareness generation. Both men and women without stepping out of their homes are generating shopping through WhatsApp, Facebook, Instagram and many other platforms (Hanafizadeh et al. 2012; Reuber & Fischer 2011). It provides consumers multiple options with detailed information online. It is now easier for the

consumers to compare price and choose products based on their requirements. This provides more satisfaction to contemporaneous consumers who seek convenience and pace (Yu & Wu 2007). On the contrary, e-commerce produces a lot of virtual risks and generates consumers' dissatisfaction.

However, the culture of e-commerce industry is serving as an empowering tool by giving chances for growth and development to women entrepreneurs (Dastourian et al. 2017; Gupta 2018). Women who are confined in household chores can earn profit by sparing limited time on e-business and can develop their self-identity. Besides, e-commerce is serving as a major driving force of social change. It is estimated in a recent study that at present around 1,000 e-commerce entrepreneurs are running their business nationwide and approximately 5-6 lakh parcel is distributed monthly. The study also predicted that within next five years, all commerce will gradually turn into e-commerce which will contribute to make the sector more mature (Islam 2018). Thus, at this phase of the massive development of e-commerce, it is important to deepen the understanding of the nature of this digital revolution in the context of Bangladesh.

Objectives of the study

Drawing on the above-mentioned background, this paper aims to unravel the ontology of e-commerce in the context of Dhaka city, Bangladesh. More specifically, the study intends

- a) to understand the socio-demographic information of both buyers and sellers
- b) to get acquaintance with the nature of e-commerce from the perspectives of both buyers and sellers;
- c) to analyse the perception of both buyers and sellers towards e-commerce to envisage both the prospect and challenges of e-commerce in Bangladesh.

3. Factors influencing the growth and development of e-commerce in Bangladesh

Islam (2018) examines both the development and challenges of e-commerce in Bangladesh. It attempts to portray the overall scenario of e-commerce by using qualitative research tools. The study highlighted the major constraints of e-commerce that included technological, socio-economic and political factors. The study also accentuated the challenges of traditional business. Socio-cultural issues such as knowledge about customers' attitudes, lack of recognition as entrepreneurs, socialization process was mentioned as a few influencing factors on e-business entrepreneurship development.

Bashir et al. (2015) explored five major variables including trust, time, product variety, convenience and privacy, determining consumer-buyer behavior in online shopping trends. Data was collected using a specified measuring instrument. The statistical analysis of the data reflected that trust and convenience had a great impact on the decision-making process regarding online shopping. Trust had also been found as the most relevant factor influencing the customer's buying behavior particularly for the younger generation.

Ishtiaque et al. (2017) elucidated an overview of the growth and development of e-commerce in Bangladesh. The study found that young consumers found online shopping highly reliable and were gradually becoming more involved in both dimensions of buying and selling through e-commerce. The study also highlighted few major barriers of e-commerce in Bangladesh that included consumer behavior, culture, and perceptions of e-commerce. Despite considerable barriers, the study explored a number of factors such as convenience, competitive pricing, range of products, dedicated service, improved payment security, onsite delivery and flexibility that directed consumers to favor online shopping over the traditional one. The study finally argued that in addition to high-speed internet access, connectivity, and lower cost of the internet, a shift in consumer behavior was one of the major turning factors that played crucial role in bringing success in e-commerce.

Ahmed et al. (2016) aimed to identify the noticeable features of e-commerce in Bangladesh. To measure customers' perception towards the performance of major B2C e-commerce sites, the study selected 11 attributes by following Martin Fishbein's multi-attribute attitude models. It was found that out of eleven attributed the sample respondents believed that the performance of the B2C e-commerce sites in Bangladesh was up to the benchmark in case of only two attributes that included easy information accessibility and graphics quality of the site.

Rahman et al. (2018) undertook a study to understand the behavior of online shoppers. By using a self-constructed questionnaire on 160 respondents from Dhaka city, the study found that consumers were not much accustomed with frequent online shopping. The study found no basic gender differences in the trend of online shopping. The survey revealed that consumers mostly received information from websites. They favored online shopping for saving time and for varieties of products and services. However, consumers also expressed their dissatisfaction for the inability to touch and feel the product before receiving it. For not having any physical contact between buyers and sellers, customers spoke out about their tension related to the security of the payment system.

A study by Khan et al. (2015) examined the consumer perception and prospect of e-retailing in Bangladesh. The study was conducted on 200 respondents who used to buy products from various supermarkets in Dhaka. The study found that people used to buy the product online as they took it as a fun. The study calculated the 'T' value, 1.569 which was lower than the reference value, indicating a positive relationship between fun-loving consumer and consumer-purchase-decision. Most of the respondents were found to be impulsive and confused while shopping online.

Using an interviewer-administered structured questionnaire, Mahmud & Hossain (2014) underscored factors influencing online buyers' attitudes. The study was conducted on 199 online buyers of Dhaka city. To test the hypotheses, exploratory factor analysis was conducted to reduce seventeen variables in order to use these for ANOVA. Website reliability, website design, website customer service, and website competency were identified to be the four dominant factors influencing consumer perceptions of online purchasing. The study also found that most online buyers were highly concerned about the security and privacy issues.

Datta & Acharjee (2018) aimed at identifying various factors that influenced young consumers' attitudes towards online shopping in Dhaka. This study collected data from Dhaka University students through a structured questionnaire using convenience sampling. A multiple regression model was run to measure the impact. The result signified eight major factors keeping positive impact on young consumer's attitude towards online shopping that included security (beta value: 0.160), after-sales service (0.062), time savings (0.191), return policy (0.170), website design (0.183), product quality (.053), previous experience (.084) and reputation of the online vendor (.197).

Literature on e-commerce mentioned above highlighted factors influencing consumer's behavior and perception towards e-commerce in Bangladesh. A very few studies are available analyzing the current trends of online shoppers, their choices, demands and priorities. This paper can be helpful for the starters who are seeking information about current online markets trends and are involved in a long-term process of market analysis. In addition to providing recent information about the online markets, this paper also attempts to explore the prospects and challenges to provide a fruitful insight about the growth and development of e-commerce in Bangladesh.

Methodology

The study is descriptive in nature using both quantitative and qualitative method. A survey was conducted in Dhaka city on approximately 50 respondents of different age groups ranging between 16 to 55+. Among them 29 were females and 21 were males (see Table 5.1). Respondents were representing both buyers and sellers at the same time as most of the online sellers are online buyers too as they prefer more direct purchases online. The researcher followed a non-probability sampling technique i.e. purposive sampling for selecting the sample size. A survey was conducted with a semi-structured questionnaire. Survey tools such as telephone interviews, mailed and online questionnaires had been exhausted when necessary. The technique of data analysis was SPSS. The authors could not manage to collect data from a large sample due to time constraints. To obtain greater depth of information, 10 in-depth interviews were taken purposively from five buyers and five sellers who used to make extensive transactions for purchasing and selling online via smartphone. In addition, secondary sources of information had been exhausted for supplementing primary sources of data.

Findings of the study

Sociodemographic characteristics of the respondents

Table 5.1 Percentage distribution of the respondents by age and gender

	16-24		25-34		35-54		55 or above	
	<i>f</i>	P	<i>f</i>	P	<i>f</i>	P	<i>f</i>	P
Age Group	15	(%) 30	29	(%) 58	6	(%) 12	0	(%) 0

Gender	Male	8	16	11	22	2	4	0	0
	Female	7	14	18	36	4	8	0	0

Source: Field survey, 2018
N=50

Notes: “f” stands for frequency and “P” stands for percentage.

It is observed in the above Table that 58% of respondents related to the e-commerce belonged to the age group 25-34 among whom 36% was female and 22% was male. Individuals belonging to the age group above 55 were not involved in e-commerce. Those aged 25-54 had occupied the highest share among online shoppers.

Nature of online shopping

Table 5.2 Percentage distribution of the respondents by hours spent online

Have a social networking site and stayed online	0-3h		3-6h		6-9h		9-12h		Above 12h	
	f	P	F	P	f	P	f	P	f	P
	(%)		(%)		(%)		(%)		(%)	
Postgraduate	11	22	3	6	5	10	1	2	0	0
Graduate	3	6	10	20	3	6	1	2	2	4
Higher secondary school certificate	2	4	5	10	1	2	1	2	1	2
High School certificate	0	0	1	2	0	0	0	0	0	0

Source: Field survey, 2018

Notes: “f” stands for frequency and “P” stands for percentage.

Table 5.2 shows the time duration that respondents used to stay online. About 22% of postgraduates stayed 0-3h and 2% spent 9-12h per day. Approximately 20% of graduates stayed online 3-6h. Only 4% stayed online above 12h per day. Respondents said that the more time they could stay online the best their sell would be. One of the sellers stated-

‘In fact, we need to remain attached to the smart phone 24 hours so that we do not miss any order. Moreover, we need to remain up-dated about the recent fashion trends. This is why, we are continuously surfing the internet to explore the innovative marketing strategies.’

-(A seller of 27, Trendy Sarees)

Almost all the sellers of in-depth interviews stated that they could not think a single moment without smartphone and network. This excessive use of smartphone sometimes interrupted their family interaction too. However, their family members accepted it for the sake of business. A female seller stated,

‘Due to the pressure of too many orders, I cannot feed my kids on time. Even I do not get time to teach my children regularly.’ -(Owner of Baking and Cooking)

Activities that respondents remained busy with included Facebook live, communicating and bargaining with customers, sending messages related to delivery, taking orders online, exploring the current market trends and so on. Thus, technology orientation is crucial in online shopping.

Table 5.3 How frequently respondents sell or buy things through e-commerce websites

Time	Frequency(<i>f</i>)	Percentage (%)
<i>Seller</i>		
Most frequently	17	34
Frequently	20	40
Rarely	9	18
Never	4	8
<i>Buyer</i>		
Most frequently	16	32
Frequently	26	52
Rarely	8	16
Never	0	0

Source: Field survey, 2018

Table 5.3 presents show frequently respondents sell or buy things through e-commerce websites. It was seen that 40% of sellers and 52% of buyers were frequently engaged in e-commerce. More than 30% of buyers and sellers were most frequently engaged in buying or selling their products. Respondents, who were most frequently engaged in online business, took it as their main profession and committed to give much effort and time on it. Besides, online shopping is time saving which has motivated many people to be involved in this process. One of the buyers stated-

Products	Male		Female	
	Frequency (<i>f</i>)	Percentage (%)	Frequency (<i>f</i>)	Percentage (%)

Clothing	15	71.4	29	100
Personal products (perfumes, beauty creams, razors, toothbrush)	15	71.4	28	96.6
Mobiles/ tablets	7	33.3	7	24.1
Laptops and accessories	6	28.6	7	24.1
Cameras	6	28.6	3	10.3
Books	12	57.1	10	34.5
Digital products	17	80.95	14	48.3
Others	12	57.1	24	82.8

'I was not that much oriented with online shopping few years ago. But recently considering jam and time factor, I have become a regular online buyer. I buy maximum household essentials particularly packaged goods from online shops.'

(-A male buyer of 43)

Table 5.4 Percentage distribution of respondents by the items they prefer to buy

Source: Field survey, 2018

Table 5.4 shows that all the female respondents preferred to buy clothes followed by around 97% preferring personal products such as cosmetics. Respondents stated that clothes and cosmetics were the most popular items based on sales. An almost similar trend was observed among male respondents as on an average 71% of men preferred clothing and personal products to buy. Men usually buy shaving gears, perfumes, screen protectors of mobile phones or laptops, wallets etc. unlikely women, men mostly preferred digital products (80.95%) such as laptops, tablets, smart phones etc. A buyer stated-

'I mostly prefer to buy electronic items particularly electronic gadgets online. All the specifications are clearly written. We can easily choose exactly what we want sitting at home. Even if the product is not available within the country, you can easily get it through international online market places such as Daraz or Amazon.'

(A buyer of 17, a student of class X)

Besides, industrial raw materials, birds, various services such as ac servicing, sofa cleaning, showpieces, kitchen materials, etc. were few other items/services available online to buy as mentioned by the respondents.

Table 5.5 Percentage distribution of the respondents by the items they prefer to sell

Products	Male	Female
----------	------	--------

	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Clothing	17	80.95	27	93.1
Personal products (perfumes, beauty creams, toothbrush)	12	57.1	26	89.7
Mobiles/ tablets	3	14.3	5	17.2
Laptops and accessories	4	19.04	5	17.2
Cameras	3	14.3	6	20.7
Books	6	28.6	8	27.6
Digital products	19	90.5	22	75.9
Others	20	95.2	21	72.4

Source: Field survey, 2018

In Table 5.5, it was found that buying and selling showed a similar trend in terms of transaction of products. About 93% of female and around 81% of male respondents preferred clothing to sell for its high rate of purchase. Again around 90% of females preferred personal products such as parlour items, body shapers, cosmetics etc. to sell as compared to only 57% male respondents. A female seller stated-

‘Before starting online business, I observed the nature of online shopping for two years and found that clothing and cosmetics were at the peak of online sale. I then decided to import clothes from abroad. Now I have a plan to run a side e-business on ornaments and cosmetics too.’

(Co-founder of Sarafan’s Boutique)

Men were engaged more in selling digital products (90.5%). Besides these major products, most of the respondents used to sell a variety of things such as industrial raw materials, showpieces, umbrella, raincoat, cleaning kit, detergent, mosquito spray, etc. which still people preferred to buy in conventional way. However, online exchange of grocery items was gradually becoming popular among the consumers as respondents mentioned.

Perception towards the future of e-commerce

Table 5.6 Percentage distribution of the respondents by the future of E-commerce in Bangladesh

Domain name	Frequency (f)	Percentage (%)
Very good	36	72
Good	10	20
Not so good	4	8

Do not have a future

0

0

Source: Field Survey; 2018

Table 5.6 describes that 72% of the respondents believed, the future of e-commerce was very good in Bangladesh as it was expanding very swiftly. They said that anyone could start e-business with minimum cash investment. All the sellers of in-depth interviews agreed upon the fact that the online shopping was flourishing and more profitable as compared to traditional offline shopping. One seller stated-

‘Our showroom is only for the people who live nearby. Sometimes people visit showroom to clarify the items or colour of the products. However, online shopping is the main source of profit as compared to offline shopping.’

(A seller of 26, TaTi online)

A similar statement was given by another seller who stated-

‘Online shopping is undoubtedly more profitable than offline shopping. For example, if we can sell 100 products online per day, only 5 to 10 products are sold offline.’

(A seller of 27, Trendy Sarees)

Thus, it is clearly evident that online shopping is growing faster than the offline traditional shopping. On part of the female sellers, they all stated that a feeling of empowerment and a sense of self-respect have been developed among themselves. A female seller stated-

‘Now I can feel my existence at home.’

-(A female online entrepreneur of 28, a member of Women and e-Commerce forum)

However, only 8% thought otherwise as they argued, many online exchange services were not reliable. Customers sometimes were disappointed for the poor-quality products and were sometimes cheated.

Table 5.7 Perception of the respondents towards the impacts of E-commerce

Content	Agree		Disagree		Don't know	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
E-commerce can provide a substitute marketing channel by terminating the manipulative role	43	86	13	26	0	0

of middleman						
E-commerce creates virtual risk	11	22	37	74	2	4
E-commerce creates de-socialization (with less and less direct contact with their peers, their co-workers and their community)	11	22	38	76	1	1
E-commerce creates a social, psychological and physical hazard	12	24	35	70	3	6

Source: Field survey, 2018

Table 5.7 explains that 86% of respondent thought e-commerce could provide a substitute marketing channel by terminating the manipulative role of the middleman. Respondents stated that direct communication with the buyers or sellers helped to keep the price reasonable which was not possible in the presence of a middleman, who sometimes played the manipulative role and exploited workers. Besides, another advantage of online shopping is that anyone can get a lot of copies of a single product online which is not actually available in the showroom. About 74% thought that e-commerce did not create any virtual risk though around 22% agreed with the statement. These virtual risks included creating fake online pages, publishing bad review comments, physical invisibility of the product, mismatch between the product description and actual product in hand and so on. One seller stated-

'A good review comment of a product can attract hundreds of new buyers. On the contrary, a bad review comments may eliminate a large number of buyers at a time. Moreover, creating false online page of fake products by the competitors sometimes ruins the impression of original online page and thereby increases the risk.'

(Co-founder of Sarafan's boutique)

Another seller mentioned-

'In case of clothing, the problems arise mostly with the colours and fabrics. Sometimes, customers return products without giving the delivery charge. In case of free delivery system, it is a total loss.'

(A seller of 26, TaTi online)

Thus, both risks and opportunities are high in online shopping. Despite having risks, various offers attract a lot of buyers. A buyer stated -

'Recently I have bought a washing machine online and I have got almost 50% cashback opportunity. But I think virtual risk is always there in online shopping. Therefore, I suggest, buyers should not take virtual risks in case of expensive items.'

(A government service holder of 32)

A large proportion of the respondents i. e. 76% disagreed that e-commerce de-socialized people for less direct contact with their peers, co-workers and their community. They argued, customers/sellers did not have much opportunity to bargain or to interact with the sellers or buyers in a conventional way by observing the facial expression of each other. But this is not advantageous for all types of products. An online ghee seller stated-

'Anyhow I have to manage money for renting a showroom so that customers get the opportunity to clarify the products. Most of the time, buyers bargain by comparing the prices of other pages. But the ghee that I bring from Pabna district is original and its smell is totally different from those of others. But the opportunity of taking smell of my product is not possible online.'

(A female online entrepreneur of 28, a member of Women and e-Commerce forum)

About 70% respondents disagreed that e-commerce creates social, psychological and physical hazards though a very few believed that e-commerce might be hazardous for the young generation by creating false needs. A buyer stated-

'My son cannot control himself whenever he finds a latest device (mp3, mp4, mobile, Ipad etc.) and keeps on convincing us to buy that product. Sometimes we the parents become trapped by the exciting presentation of the products.'

(A female buyer of 40)

About 24% buyers argued, online shopping sometimes caused wastage of money by alluring people to place orders of items which they did not need. Moreover, as they argued, e-commerce kept both buyers and sellers busy with browsing continuously for getting something new on the part of buyers and for the expectation of getting new orders on the part of sellers.

Discussion & Conclusion

Drawing on the findings it is clear that e-commerce is gradually getting popular as a sustainable livelihood option among the growing young generation which is evident in other studies too (Ishtiaque et al. 2017; Dillon and Reif 2004). More females are involved in e-commerce as compared to men. E-commerce is working as an empowering tool particularly for the women, who have young kids and do not have the opportunity to go outside for job. However, gender difference is still poorly understood in current setting of e-commerce (Lin et al. 2019).

The frequency of exchange in the form of buying and selling is good which indicates that the prospect of e-commerce is promising in the context of Bangladesh. Usually, female shoppers prefer clothing, personal products such as cosmetics to buy while male shoppers prefer digital and electronic goods more. Market analysis is important before starting a new business. Young entrepreneurs who are planning to start a new business, sometimes spend huge time in market analysis and to decide the nature of business. This paper can help the young starters to get an initial idea about the choices and priorities of online buyers of recent times.

E-commerce has a high prospect in society, as it has created an effective substitute marketing channel by eliminating the middleman who traditionally contributes to bridge the gap between production and consumption through market networking (Gadde and Snehota 2001). As sometimes workers become exploited by the manipulative role of the middleman, the absence of this person contributes to minimize workers' exploitation by keeping the price reasonable. Buyers also get the unlimited opportunities to compare price which is identified as one of the crucial factors motivating buyers to make their decisions with full satisfaction. Other advantages of online shopping include time saving nature, detail product description and varieties of products which have been found in other studies too (Ishtiaque et al. 2017, Rahman et al. 2018; Datta and Acharjee 2018). In addition, various cashback offers draw the attention of online buyers and make the decision-making process easier.

Besides these advantages, constant attachment to smartphone for the sake of profit making may turn into a smartphone addiction and may interrupt the process of family as well as social interaction. Moreover, people often perceive e-commerce negatively for creating false needs and thereby producing psychological hazards. It is also perceived that e-commerce dissocializes people by minimizing physical direct contact among e-shoppers and thereby creating a virtual risk. Buyers are deprived of getting direct physical visibility of the products and sometimes get confused after receiving the products. Khan et al. (2015) also identified the fact of confusion that arises among online buyers due to lack of physical visibility of products. The dissimilarity between online visibility and direct physical visibility of the products often create social conflict between buyers and sellers. Consequently, they become involved in online bullying which ultimately destroys the social image of both buyers and sellers. Despite having these risks, a good review of a particular page or product in online shopping help sellers to attract large scale buyers within a short period of time which is not possible in case of traditional shopping.

Everything good in this world has come with some negative sides. So, it is in the hand of humans to get the best benefits by exploiting all positives of e-commerce which has currently evolved as an important tool for the smooth functioning of life in this fast-moving world. Similarly, e-commerce, with a lot of risk factors, has opened up a new window of opportunities for both buyers and sellers by digitizing the information. However, e-commerce requires uninterrupted network services which is possible only in big cities of Bangladesh such as Dhaka. Thereby, further research is needed to explore the prospect of e-commerce in the small towns of Bangladesh where internet connection is slow.

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Effect of population dynamics on Livelihood Security in rural Sri Lanka

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Abstract

Out of 20.82 million total population of Sri Lanka, 81.70% of the population lives in rural areas (Quandl, 2015). From 2005 to 2016 government expenditure for agriculture based actions shows the trend of decreasing while the development policy gradually changes the path from agricultural based economy to an industrial based economy over last few decades. However, poverty head count measures in 2006/2007 of Sri Lanka indicate that the percentage of people living in poverty in the rural sector is significant and the percentage of underweight children in rural areas is 38.3%, which is considerably higher than that of urban areas (29.9%). Thus, this status brought about the primary research question of how does the country achieve livelihood security. Thus, the objectives of this research are, to examine the factors affecting livelihood security and to understand the view of rural communities' population dynamics on livelihood security. The research was carried out in mixed research design. The results show that access to livelihood resources also was not affected by gender, age, education and household income. However, in the analysis, both males and females were dissatisfied with the access to livelihood resources. Thus, in forming and implementation of development policies Sri Lanka needs to ensure community livelihood security.

Keywords: *Population dynamics, Human security, Human well- being, Livelihood security, Access to livelihood*

1 Introduction

1.1 Background

In the 2014 mission of “Our dream is a World free of Poverty”, the World Bank focuses on eradicating extreme poverty and promoting shared prosperity around the globe (World Bank, 2014). The World Bank's Millennium Development Goals are to cut the extreme poverty rate by half in 2015: however, one billion people are still living in extreme poverty (World Bank, 2014). They live on less than \$1.25 income a day (World Bank, 2014). The gap between rich and poor widens the distance between those who can and cannot access opportunities. Gini index which measures the extent to which the distribution of income or consumption of individuals or households deviate from a perfectly equal distribution and illustrates that compared to western countries South Asian countries lie far behind the equal income distribution (Quandl, 2015). Hence access to good education, healthcare, electricity, safe water and other critical services which have an impact on life remain mainly restricted to rich economies. In addition, the impact of global issues such as economic crisis, food insecurity, climatic change and natural disasters also create a struggling situation to vulnerable populations to get consistent access (or any access) to basic critical services.

1.2 Problem statement

King and Murray (2002) have proposed that human security can be defined as the longevity of future life that spend below the threshold of any key domain of human well-being. Moreover, UNDP human development report (1990) has emphasized that the main focus of development is the people of the state and people focused development can be done through improving health, education, and political freedom in addition to economic well-being. Hence, low accessibility to basic human needs of citizens resulted in them becoming marginalized by low access to health facilities, low opportunity to access livelihood resources and high vulnerability to diseases. Sing & Hiremath (2010) posit that sustainable livelihood can be achieved through wealth, food and cash which is utilized to physical and social wellbeing and has ensured the security of becoming poorer. However, unevenly distributed resources that matter the lives of poor has ill-managed over the time (Sing & Hiremath, 2010). With the above information it can be noted that not only poverty but also environmental degradation, drinking water contamination, health risks and war have had a severe effect on the rural villages which is evidently found in Sri Lanka as well. Lindenberg, (2002) (as cited in Bhandari and Grant, 2007) stated that at the family and community level the status of the life of people is addressed by livelihood security. De Sherbinin et al (2008) further stated that research on population dynamics in household level and the relationships of the phenomena that take place the major concerns in rural developing world. Further the author emphasizes that micro- demographics of the rural communities are vital in utilizing natural resources, providing foods and other resources and formulating policies on health, livelihood or environment. Thus the research problem raised as how does population dynamics of rural communities affect livelihood security in Sri Lanka?

1.3 Objectives

The objectives of this research are:

to identify the community specific demographic dynamics that affect the livelihood security of rural communities ;

to understand the community perception on livelihood security.

2 Literature review

2.1 Livelihood security

Chambers & Conway (1992) livelihood security is defined as the individuals' capability, assets or activities required for living. Common understanding livelihood security indicators consist income and consumption level, sense of insecurity or vulnerability, levels of health, literacy and education and access to assets (Chambers, 1997).

The notion of development of human security is focusing on downside risks (UN Commission on Human Security, 2003). However, the downside risk (eg: economic growth) does not guarantee human security. For instance, in developed European countries like Greece, people's

lives were threatened with economic crisis in 2011. Similarly, the downturn of the world economy also heavily affected East Asian and South East Asian countries like South Korea and Thailand. However, on the other hand human security is concerned with weightier life issues life such as daily survival, maintaining the dignity of men and women and empowerment of people to cope with sudden deprivation.

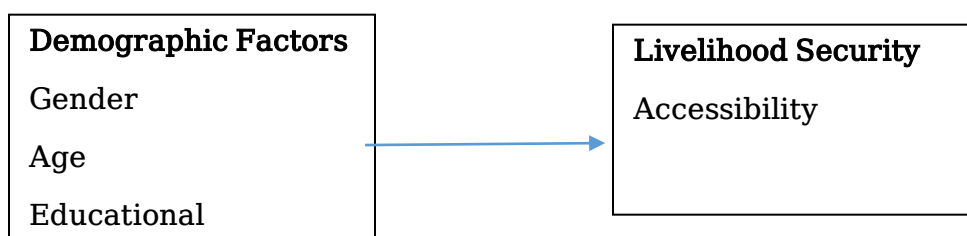
The people to enjoy freedom in the society, it is not only the GDP or individual income, but also social and economic arrangement; education, health as well as political and civil rights which are equally important. Sen (1999, p.27) noted that the trend of economic disciplines are moving away from the values of freedoms which in return undermine the role of market mechanism. However, Shani (2012) argues that the concept of development is still under the shadow of economics when it focuses on market orientation. In Duffield critique as mentioned by Ramsbotham and Woodhouse (2000), Duffield argues that issues of development such as inequality, economic growth, and resource distribution have a negative effect on the paradigm of “human development”. He further states that human development largely involves securing behavioural and attitudinal changes where people can cope with their situations.

Furthermore, Chandler (2012) argues that the communities, who are in the verge of vulnerability, have no capacities for resilience. Hence vulnerabilities lead to “un freedom” or “material and ideological restrictions”. Thus, Chandler (2012) finally states that paradigm of resilience stemmed with the assistance for most in need through empowerment and capacity building. In accordance with UNDP report (1994: 24), Chandler cited that to make their own living, every individual should have the chance to get most essential needs. Thus the access to livelihood, health, education and other basic requirements fulfilment ensure the community well- being. To prosper in livelihood activities such as farming, fishing or off- farm employment households mobilize the assets at their disposal.

2.2 Livelihood approach and population dynamics as Constructing Conceptual Framework

The paper uses livelihood approach which focuses on demographics and access to livelihood resources. Household becomes a production unit in most of the rural areas of developing region (Sherbinin et al, 2008). Thus Ellis (2000) posits that household is important as it is the place where social and economic interdependencies happen between group of individuals. As Sherbinin et al (2008) point out that demographics such as age and gender have the effect on household decision to engage in livelihood strategies. Moreover, the financial capital also has the impact on assets accumulation for livelihood strategies.

Conceptual framework



2.3 Hypotheses

H₀ There is no relationship between gender and access to livelihood resources

H₁ There is a relationship between gender and access to livelihood resources

H₀ There is no relationship between age and access to livelihood resources

H₂ There is a relationship between age and access to livelihood resources

H₀ There is no relationship between educational attainment and access to livelihood resources

H₃ There is a relationship between educational attainment and access to livelihood resources

H₀ There is no relationship between household income and access to livelihood resources

H₄ There is a relationship between household income and access to livelihood resources

3 Methodology

3.1 Research context

The North- Central province of Sri Lanka plays a vital role in the economy of Sri Lanka by producing large portion of rice for the food consumption. And interestingly, according to a household income and expenditure survey from 2009 through 2010, the Poverty Head Count Ratio of the North- Central province has decreased tremendously from 14.2% (2006) to 5.7% (2009) with respect to other provinces such as Sabaragamuwa (2009 PHCR of 10.6%), North-Western (2009 PHCR of 11.3), Uva (13.7%) and Eastern (2009 PHCR of 14.8%) (Department of Census and Statistics, Sri Lanka, 2011). However, the area continues to struggle with poverty.

Another problematic issue for North- Central province is Chronic Kidney Disease (CKD) which is a serious health issue for citizens in the North- Central province. According to Siriwardhana et al (2014) North- Central province which belongs to dry and intermediate climatic zones of Sri Lanka, has the highest prevalence of CKD in Sri Lanka. The majority of CKD affected people belong to the low- socio-economic farming. Chandrajith et al (2010) also point out Madawachchiya in Anuradhapura district is highly affected by CKD. In addition, by also sharing a border with the North Province (which experienced thirty years of war), the normal life pattern of inhabitants in Madawachchiya, has been highly affected by insecurity and underdevelopment. For instance, villages such as Mahakongaskada and

Thammanna Elawaka in the Madawachchiya region were subjected to terrorist attacks, spilling over from fighting in the North province in 1987 and 1991 respectively.

3.2 Location of the Research

The research was conducted in two villages i.e. Mahakongaskada and Thammenna Elawaka in Madawachchiya Divisional Secretariat, Anuradhapura District in Sri Lanka

Among hundred and four villages of Madawachchiya Divisional Secretariat, the research was carried out in two villages i.e. Mahakongaskada and Thammenna Elawaka which were subjected to annual drought conditions, stricken with poverty, affected by CKD.

3.4 Population and sample

The total population of the research is 968 (280 households) of both Mahakongaskada and Thammenna Elawaka. Out of 280 households 79 households (158 individuals) were randomly selected for the research. Moreover, the research sample composed of 39 households (male-39; female-39) from Mahakongaskada and 40 households (male- 40; female-40) from Thammenna Elawaka.

The sample representation of Thammenna Elawaka (50.63 %) is higher than Mahakongaskada (49.37 %). This is obvious that because the total population of Thammenna Elawaka (506) is larger than Mahakongaskada (462) (Resource Profile of Madawachchiya Divisional Secretariat, 2013). After 42 villagers were killed (when the villagers were sleeping) by terrorists in 1987, the attacked land area was abandoned by the remaining family members and some of the families of the village. After the attack most of the families displaced themselves to other areas and most of them never come back again. According to Informant 1, the area is still uninhabited. However, the incidence of Thammenna Elawaka is same as Mahakongaskada. In Thammenna Elawaka the attack was also nocturnal. It was happened in 1991 and killed 25 villagers who were attending traditional function of one farmhouse of the village. Even though, infrastructure damage was great in Thammenna Elawaka (i.e. nearly 45 houses were set to fire and 45 families were displaced at that time), the villagers did not abandon the village (Informant 1 and Informant 4).

3.3 Research method

The research was carried out in descriptive and quantitative research design. Quantitative research design was carried out using surveys and questionnaires. The surveys and Questionnaires in Sinhala Language in primarily, to better understand by the household participants on their own. In addition, to have in-depth understanding of the situation descriptive research design was carried out.

Secondary data were collected through website of Madawachchiya Divisional Secretariat. The secondary resource materials were in Sinhala language. In addition to Madawachchiya Divisional Secretariat resource profile which also in Sinhala language, was also used. Village

headmen, grass-root level government officers and middle managers were considered as key informants. The Focal group discussion was carried out with the key informants.

Individual interviews with household headman/ head-woman or both, were carried out by assigned grass-root level government officer. Moreover, the key informants (government officers) carried out interview with household participants were in Sinhala language and recorded the conversations in Sinhala Language too. And key informants' interviews also carried out in Sinhala language.

All the materials of primary and secondary resources and data translated to English later on.

3.4 Data Analysis

The Chi- square Cramer's V was used to analyze the intercorrelation of two discrete variables.

4 Analysis and discussion

4.1 Demographic factor analysis

The Result is analyzed according to Gender, Age, Educational attributes and Monthly income.

4.1.1 Gender

According to the Resource Profile of Madawachchiya Divisional Secretariat (2013), Table 4.1 shows the gender distribution of total population of two villages.

Table 4.1 Gender distribution of Mahakongaskada and Thammenna Elawaka

Village	No of Families	Females	Males	Total Population
Mahakongaskada	116	238	224	462
Thammenna Elawaka	164	269	237	506

Source: Madawachchiya Divisional Secretariat (2013)

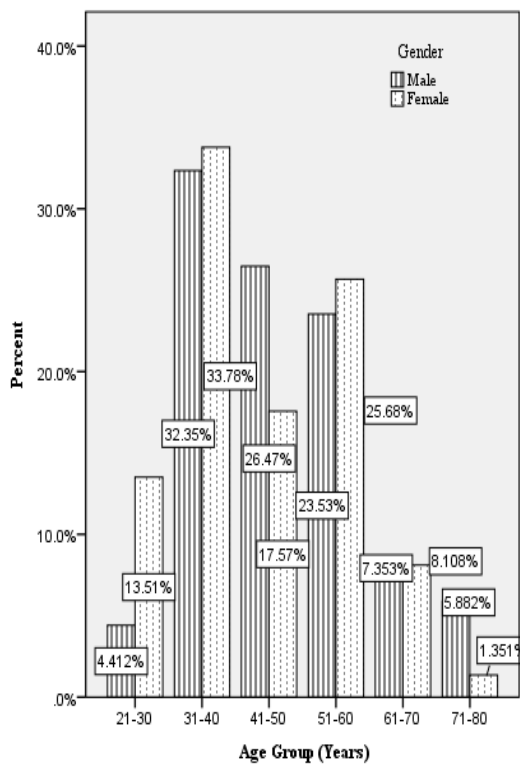
Similarly, the study sample consists of 48.7% male population and 51.3% female population. In both Mahakongaskada and Thammenna Elawaka, female population is higher than male population, i.e. 52.05% of female and 50.63% of male respectively. Even though the gap between female and male population is not that high (Which is more or less similar as total Sri Lankan population), the difference may be due to women headed families in the area not only because of the war but also other factors such as non- commutable diseases and lack of safe portable water. The finding is reasserted by Chandrajith *et al.* (2010) by stating that Chronic Kidney Disease which is prominent in Anuradhapura District has main influence on male farmers of low socio- economic class. Thus, this is clearly compatible with the non- traditional theory and narrow approach of human security which focus on individual human security.

4.1.2 Age

According to the study the majority of individuals (79.5%) were in between the age of 31 years and 60 years. However, the study sample was varied between 22 years and 78 years of age.

The majority of sample population consists of about 32.35% of male population and 33.78% of female population who are in between age group of 31-40 years (Figure 4.1). However, the community members who are over 60 years and below 30 years occupy the least percentages when compare to other age groups. As the study was carried out with the household husband and wife, population of age 21- 30 is low, as the marriage age for both females and males in Sri Lanka is age 18.

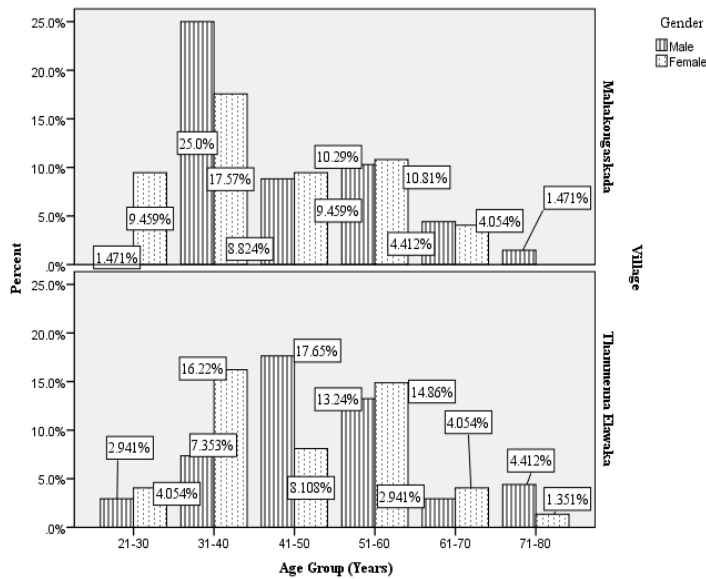
Figure 4.1 Gender Distribution within age groups of sample community



Source: Field Data

Majority of both males and females of Mahakongaskada is in the age group of 31- 40 years such as male percentage is 25% and female percentage is 17.57% (Figure 4.2). As Mahokongaskada is occupied by new families, make the village population is occupied by young males and females. Nevertheless, majority male and female population in Thammenna Elawaka shows interesting age distribution, where, 17.65% of males are in the age group of 41- 50 years while 16.22% of females are in the age group of 31- 40 years. This may be due to the reoccupying of Thammenna Elawaka by the families after terrorist attack in 1990s.

Figure 4.2 Gender Distribution within age groups of Mahakongaskada and Thammenna Elawaka



Source: Field Data

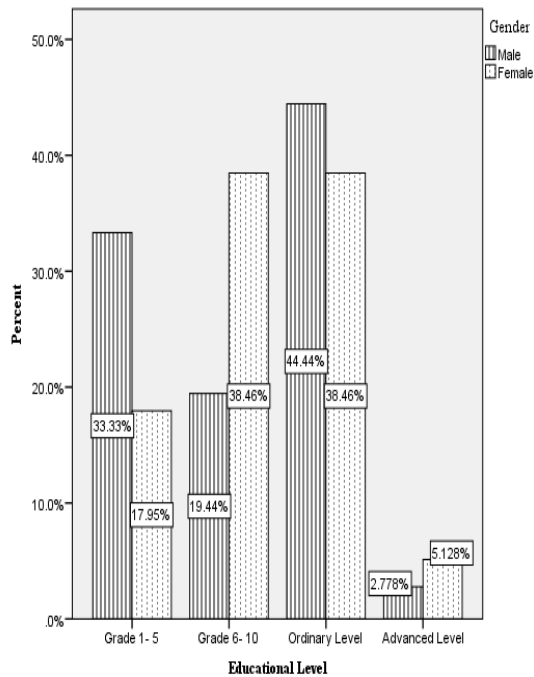
4.1.3 Educational Attainment

Compulsory education of Sri Lanka is up to age 14 (Grade 10). Almost all members in the sample were able to attend the school in their childhood. However, only 4% of the sample was able to attain till Advanced Level (till age 17) and no one was able to get the higher education. Interestingly, 41.33% community members were able to get through the Ordinary Level Examination (education till age 15). However, more than fifty percent (54.7%) of the community were only able to get education up to grade 5 and up to grade 10 (25.33% and 29.33% respectively). The total literacy rate of Sri Lanka is 91.9% (according to the Department of Census and Statistics, 2011, age 15 and over can read and write). Comparing to the national level the literacy rate is much lower in the two villages which may be due to low accessibility to the schools and adult's attitude of schooling children. Informant 1 mentions that Mahakongaskada has a school up to grade 5 and Thammenna Elawaka has a school up to grade 10. Moreover, Informant 2 states that parents have negative attitude of sending children to the school as the children are main labor force of the family's livelihood.

The highest percentage of male sample population has attended the school education up to ordinary level (44.44%) while, 38.46%, the highest percentage of females has attended up to

ordinary level as well as up to grade 6-10 (Figure 4.3). And among the community members who got through advanced level, the female percentage (5.128%) is higher than male percentage (2.778%). In the national level, the male literacy rate is 93.2% and female literacy rate 90.8%. As mentioned above low rate of educational attainment of both genders can be due to low accessibility to the educational facilities and attitudes. In older generations if there is no safe accessibility facility to the school parents avoid the risk of sending especially girls too far from home. Moreover, girls tend to take care of young siblings of the family when parents away for farming. In addition, large drop out of males during early stage of education can be largely due to engage and assist in livelihood activities of the parents. Anyway females who tend to get higher education up to age 17 can be largely due to their commitments.

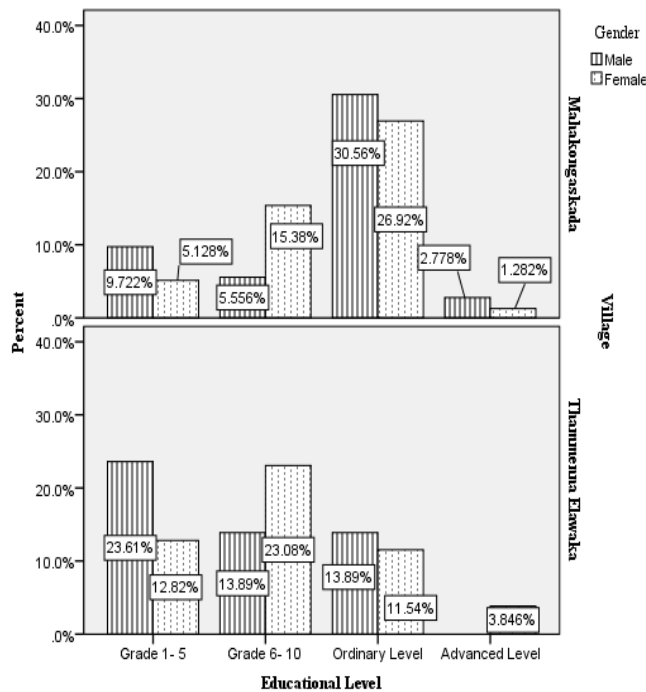
Figure 4.3 Gender Distribution of Educational Attainment of Sample Community



Source: Field Data

In Mahakongaskada, the largest percentages of both males and females have got through ordinary level; 30.56% and 26.92% respectively (Figure 4.4). It is interesting that even though Mahakongaskada has a school up to grade 5 and the school with other higher grades is 7 km away from the village, both male and female tend to have at least compulsory education. This may be due to that Mahakongaskada population consists of younger generation who value the education when compared to Thammenna Elawaka population. However, in Thammenna Elawaka, largest population of males has had the education up to grade 1 to 5 and 23.08% of female population has studied up to grade 6 to 10. Surprisingly, none of the men in Thammenna Elawaka has got through advanced level.

Figure 4.4 Gender Distribution of Educational Attainment of Mahakongaskada and Thammenna Elawaka



Source: Field Data

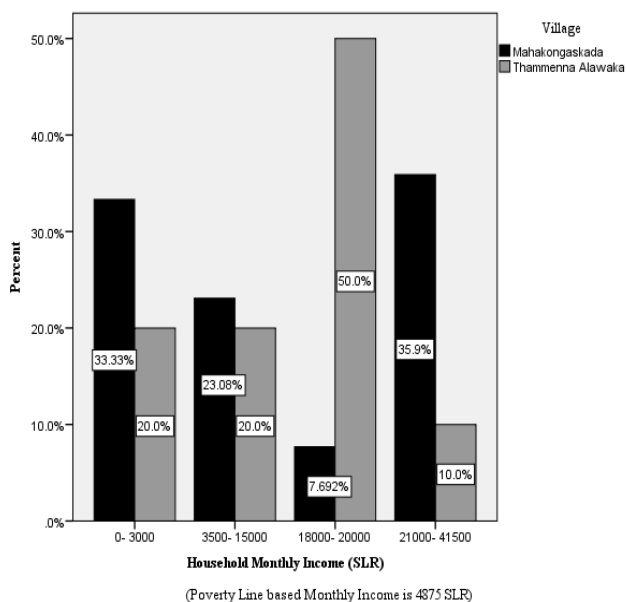
4.1.4 Household Income

In 2014 household monthly income of Sri Lanka is around 4875 SLR (Official PL is 1.25 US\$; 1 US\$= Approximately 130 SLR in 2014; $130 * 1.25 * 30 =$ LKR 4875)

One quarter of the population (26.6%) in study community lives with LKR 3000 per month. And 22.8% of the population monthly earns at least LKR 18 000. Nearly, 29.1% of the population has monthly income of LKR 18 000- 20 000.

Interestingly, exactly about 50% of Thammenna Elawaka population has the income of more than 18000 SLR/ month and less than LKR 20000 / month (Figure 4.5). The monthly household income which is less than LKR 3000 and less than LKR15000 comprise of equal percentage of households of Thammenna Elawaka (20%). In Mahakongaskada majority of households (35.9 %) earn more than LKR 21000 monthly. And more or less similar numbers of households (33.33%) live on less than LKR 3000 / month too, which denotes more than 60% of the population is in two extremes i.e. higher and lower income, compared to Thammenna Elawaka where only a few households (7.692%) earn in between LKR 18000 and LKR 20000. However, this income in Thammenna Elawaka is constant as they engage in government related employments.

Figure 4.5 Household Income Distributions of Mahakongaskada and Thammenna Elawaka



Source: Field Data

Furthermore, within case and cross case analysis of income distribution of households reveals that the majority of households in Thammenna Elawaka engage in government connected employment (Table 4.2). And some households have two income generating activities too (Cases 5 and 6). Surprisingly, almost all those households of Thammenna Elawaka do not have intention to mention their income sources which are from agriculture (Farming own land or rented land with paddy and vegetables) or animal husbandry (raising cattle or goats), though they earn some income from them (except Case 6). For these livelihood activities both husband and wife have engaged in income generation. And old aged people who are with grown up children or with a single son or a daughter, the children take care of the parents. In case 7, thirty-three years old son takes care of the parents and once the income was asked, the head of the household mentioned about the son's income as their income.

Table 4.2 Income Generating Activities of Households in Mahakongaskada and Thammenna Elawaka

Income Source	Cases	
	Mahakongaskada	Thammenna Elawaka
Non- pensionable or casual government employment	4, 5	6, 7, 8, 9, 10
Self- employment- Agriculture based	1, 3, 5	
Agriculture and other sources	2	6

Source: Field data

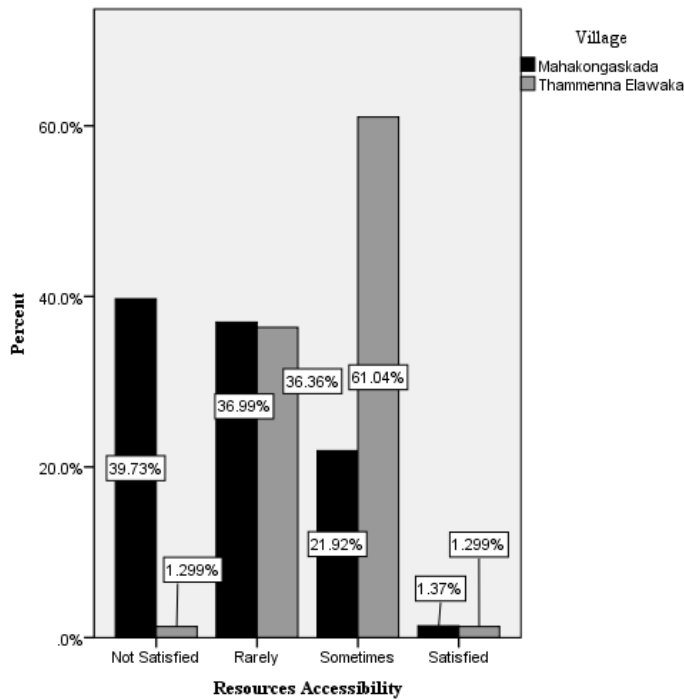
4.2 Access to livelihood resources analysis

Only 1.3% of the community members satisfied with opportunities to access to resources for their livelihood. And 20% of the population did not satisfy with their opportunities to access for resources. However, majority (43.3%) of the population has positively responded for accessing resources for livelihood. Access to livelihood resources is one of strategies to get rid from poverty which is one of narrow approach discourse of human security. Thus dissatisfaction of rural community in livelihood aspects means the deprivation of resource accessibility of rural people for their livelihood. On the contrary, Razaak (2007) has mentioned that livelihood aspect of human security in Sri Lanka is relatively better when compared with other South Asian countries. According to Informants 1 and 5, the dissatisfaction of people in accessing to livelihood resources, is mainly due to dependency syndrome.

Moreover, according to King and Murray (2002, p. 587) “development was defined broadly as expanding people's choices in almost every relevant way.” And the argument is further enhanced by Sen (1999), by stating the development in the terms of expanding individual's freedom.

Interestingly majority of Thammenna Elawaka population has positively satisfied with access to resources (61.04% or more) (Figure 4.6). And 39.73% of Mahakongaskada population did not satisfy at all for the chances to access the resources. The reason behind the satisfaction of Thammenna Elawaka people may be due to their engagement in government related employments which provide them with constant income. However, as the land extent of Mahakongaskada is smaller than to Thammenna Elawaka also can create dissatisfaction, by possessing limited extent of land for their main livelihood (Informant 1). And Mahakongaskada people engage in agriculture have the threat from drought conditions as the narrow approach of human security mentioned. Thus, uncertainty of livelihood due to natural calamities creates threat to human security in rural communities.

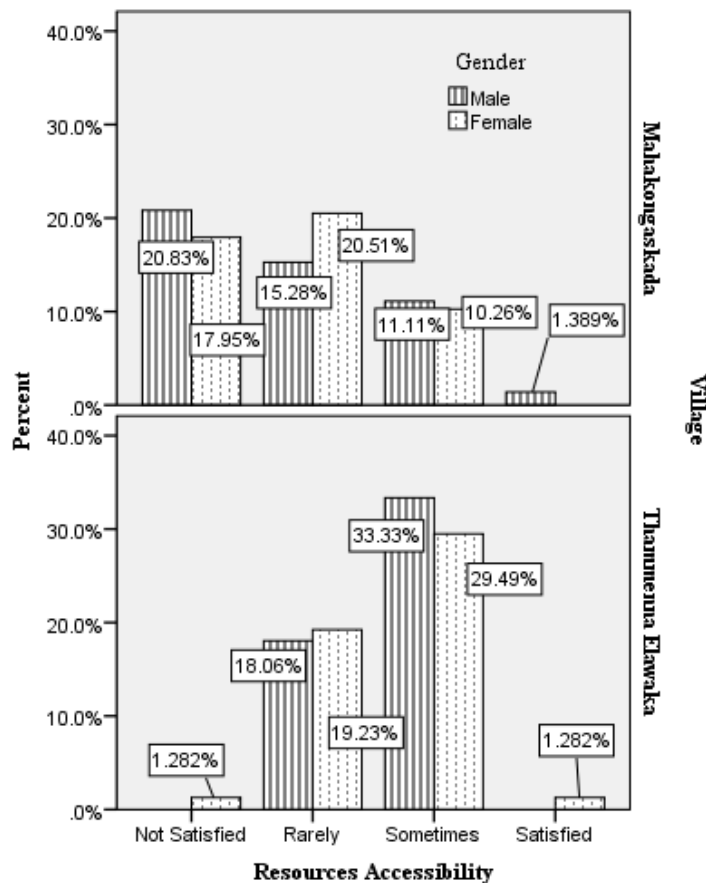
Figure 4.6 Resource Accessibility of Mahakongaskada and Thammenna Elawaka



Source: Field Data

In Thammenna Elawaka both males and females have positive view of satisfaction to access resources for the livelihood, 33.33% and 29.5% respectively (Figure 4.7). And 1.28% of females in Thammenna Elawaka satisfied with the access to livelihood resources, and same percent of female in Thammenna Elawaka, dissatisfied with opportunities to access the resources. And a phenomenon is similar with male counterparts of Thammenna Elawaka. Zero percent of male either satisfied or dissatisfied with accessibility to livelihood resources. However, in Mahakongaskada only 1.4% of male members satisfied with the opportunities to access the resources. Both females and males in Thammenna Elawaka as a household receive uniform income throughout the year from government service, disregard of environmental conditions (non-traditional theory of human security). The certainty of income ensures human security of livelihood of both males and females.

Figure 4.7 Gender Distribution of Resources Accessibility of Thammenna Elawaka and Mahakongaskada



Source: Field Data

4.3.3 Relationships of Access to Livelihood Resources

4.3.3.1 Gender and Access to Livelihood Resources

The 1st hypothesis is that there is a relationship between gender and access to livelihood resources.

Table 4.3 shows the result of a cross tabulation analysis between gender and access to livelihood resources in rural communities. According to Table 4.3, gender did not significantly affect opinion on government response to rural issues. The χ^2 value is 0.352, which is not statistically significant at the 0.05 level. The value of Cramer's V is 0.048 (also not significant at 0.05 level), which indicates there is no relationship between gender and access to livelihood resources. Table 4.3 shows both males and females dissatisfied with the access to livelihood resources (54.2% and 59% respectively) even though, through government policies the government showed gradual investment on livelihood activities. However, Shah & Shah (1995) put forward that in patriotic society male and female response in livelihood investment is different. Even though, females were reluctant to response in front of males, when the females were separated they took quick and positive response to the investment. However, Sri

Lanka also a male centered society, both males and females' perception are same and negative, due to the dependency syndrome.

Table 4.3 Gender and Resources Accessibility

Resources Accessibility	Gender		Total (N)
	Male	Female	
Not Satisfied	54.2%	59.0%	56.7% (85)
Satisfied	45.8%	41.0%	43.3% (65)
Total	100.0%	100.0%	100.0%
N	72.0	78.0	150.0

χ^2 : 0.352 (Observed significance level is 0.553)

Cramer's V: 0.048 (Observed significance level is 0.553)

Source: The Author (2015)

4.3.3.2 Age and Access to livelihood resources

There is a relationship between age and access to livelihood resources is the 2nd hypothesis of the research.

Table 4.4 shows the result of a cross tabulation analysis between age and access to livelihood resources. Age did not significantly affect access to livelihood resources. The χ^2 value is 0.983, which is not statistically significant at the 0.05 level. The value of Cramer's V is 0.083 (also not significant at 0.05 level), which indicates there is no relationship between age and access to livelihood resources. Lee (2003) has pointed out that maximum level of human security can be achieved by providing equal opportunity to self- fulfillment. Thus, without any age limit anyone can access to the livelihood opportunities in Sri Lankan context.

Table 4.4 Age and Resources Accessibility

Resources Accessibility	Age Group (Years)			Total (N)
	21-40	41-60	61-80	
Not Satisfied	51.7%	59.1%	62.5%	56.3% (80)
Satisfied	48.3%	40.9%	37.5%	43.7% (62)
Total	100.0%	100.0%	100.0%	100.0%
N	60.0	66.0	16.0	142.0

χ^2 : 0.983 (Observed significance level is 0.612)

Cramer's V: 0.083 (Observed significance level is 0.612)

Source: The Author (2015)

4.3.3.3 Educational attainment and access to livelihood resources

The 3rd hypothesis is there is a relationship between educational attainment and access to livelihood resources.

Table 4.5 shows the result of a cross tabulation analysis between educational attainment and access to livelihood resources. According to Table 4.5, educational attainment did not significantly affect access to livelihood resources. The χ^2 value is 0.044, which is not statistically significant at the 0.05 level. The value of Cramer's V is 0.017 (also not significant at 0.05 level), which indicates there is no relationship between educational attainment and access to livelihood resources. And result ensures the non- traditional approach to human security. Informant 4 mentioned, "Although people are educated and do well by their own, they are still expecting the assistance from the government."

Table 4.5 Educational Attainment and Resources Accessibility

Resources Accessibility	Educational Attainment			Total (N)
	Less than Grade 5	Grade 6- 10	Higher than Ordinary Level	
Not Satisfied	55.3%	56.8%	57.4%	56.7% (85)
Satisfied	44.7%	43.2%	42.6%	43.3% (65)
Total	100.0%	100.0%	100.0%	100.0%
N	38.0	44.0	68.0	150.0

χ^2 : 0.044 (Observed significance level is 0.978)

Cramer's V: 0.017 (Observed significance level is 0.978)

Source: The Author (2015)

Moreover, in Case 1 who got government assistance for livelihood of LKR 615, both husband and wife had studied up to Ordinary level. And in Case 3 who studied up to only grade 7 also gets double government assistance of LKR 750 and LKR 240.

4.3.3.4 Household monthly income and access to livelihood resources

The 4th hypothesis is there is a relationship between household income and access to livelihood resources.

Table 4.6 shows the result of a cross tabulation analysis between household monthly income and access to livelihood resources. According to Table 4.6, household monthly income did not significantly affect access to livelihood resources in rural context. The χ^2 value is 3.512, which is not statistically significant at the 0.05 level. The value of Cramer's V is 0.153 (also not significant at 0.05 level), which indicates there is no relationship between household monthly income and access to livelihood resources. This was further confirmed by Informant1

and Informant 4. The 1st Informant stated, “People are waiting for the actions of government, even though, they have the ability to well off. For instance, the people are waiting for distributing the fertilizer by the government and taking their harvest by the government, without cultivating the land productively. Moreover, people tend to buy goods unnecessarily which show off their wealth and which do not assist in well-being of their lives.” And 4th Informant also mentioned that even though people are leading prosperous life, still they are expecting assistance from the government. And he further mentioned that there are some exceptions too. For instance, as she mentioned, some households return the government assistance coupon, when they success in their self-employment. Quandl (2015) also indicates that according to Gini Coefficient, Sri Lanka has risen the equality in income over past few years (2006- 40.3 and 2009- 36.4). However, Nagy (2013b) has also pointed out that financial crisis is also one of non- traditional security threat to human well- being. De Sherbinin et al (2008) point out that accumulated finance and investment generate the economic opportunities and overcome the constraints. Thus, good income unbalancing and not maintaining expenditure will cause the threat to livelihood security.

Table 4.6 Household Monthly Income and Resources Accessibility

Resources Accessibility	Household Monthly Income (SLR)				Total (N)
	0- 3000	3500- 15000	18000- 20000	21000- 41500	
Not Satisfied	62.9%	63.6%	45.7%	58.3%	56.7% (85)
Satisfied	37.1%	36.4%	54.3%	41.7%	43.3% (65)
Total	100.0%	100.0%	100.0%	100.0%	100.0%
N	35.0	33.0	46.0	36.0	150.0

χ^2 : 3.512 (Observed significance level is 0.319)

Cramer's V: 0.153 (Observed significance level is 0.319)

Source: The Author (2015)

Conclusion

In rural communities, gender, age, education or income of the household do not have an effect on ensuring livelihood security. The research infers that the population demographics do not have the role to play in seizing access to livelihood opportunities and resources except community attitudes.

According to the research, income source variation of two communities reveals that the necessity of assistance of government for economic security for the villages is also different. Nevertheless, majority of household diversify their income to achieve livelihood security, but they still dissatisfy with economic security. Thus, local policy of villages will be more

effective in ensuring livelihood security for locally originated threats. Furthermore, income disparities of household can generate life threat to the community. The income inequality is not only because low income earning of the households but because low income management of the households. However, income difference charges livelihood security threats to individuals which leads to human insecurity in broader aspect.

Moreover, in spite of resources and facilities available in the region, exogenous factors such as lack of primary infrastructure facilities such as access roads and mode of transportation trigger the livelihood insecurity of individuals in rural communities. Thus addressing basic common needs of the community can achieve at least minimum level of livelihood security.

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Capacity Building of Bangladesh Army Corps of Engineers in Nation Building Projects: An Evaluation

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Abstract

Bangladesh Army Corps of Engineers contributes to various nation-building projects of Bangladesh where Engineering Construction Battalions (ECBs) play the lead role. Besides performing its regular job, ECBs at present day are greatly involved in various complex projects which put additional pressure on their existing capacity. Keeping this in mind, the major objective of this study is to analyze the contribution of ECBs in nation-building projects with their existing workforce and equipment. The key research objective of this paper is to show how capacity building of Bangladesh Army Corps of Engineers can enable them to contribute more in nation-building projects. This study is based on content analysis of mostly secondary material. To substantiate this, a small quantity of Interviews, Focus Group Discussions and Case Study were also carried out. The findings identified that ECBs are not self-sufficient enough to implement any nation-building projects without subcontracting with their existing manpower and equipment. Due to the simultaneous involvement of ECBs in regular as well as diversified nation-building projects, capacity building of ECBs is often overlooked which does not enable them to equip for future projects and higher requirements in the construction sector. Based on the findings of the research, it was recommended that ECBs may arrange regular capacity building for their personnel to equip them well.

Keywords: *Engineering Construction Battalion, Nation-building Projects, Capacity Building, Project Management, Bangladesh Army*

Introduction

The Government of Bangladesh has taken numerous projects in infrastructure development in the recent past. These structural works are in line with the Sustainable Development Goals 9 and 11, which are the two key drivers for ongoing and upcoming construction projects. Bangladesh Army established its reputation by participating in nation-building projects since its inception. Phenomenon of rendering service to nation-building by Armed Forces personnel also prevailed in many developed and developing countries (Koonings 2002). In almost all cases, members of the Corps of Engineers have been engaged in implementing engineering projects. While working through various projects, capacity building becomes an inclusive part of any development work. However, individual and organization can benefit out of any development work, only if capacity building is embedded within the system.

The Corps of Engineers in Bangladesh mainly participate in nation-building projects with their existing workforce and equipment. However, recent project works undertaken by the Government, demand some additional capacity and skill set. To cope with the imminent inflow of development projects, it is imperative to analyze the prospects of capacity building

for nation-building projects, identify the challenges and determine the means of mitigation. An inclusive capacity building of the Corps of Engineers will not only increase the contribution of the Bangladesh Army in the construction sector and but also ensure a quality service to the nation. It is perceived that the present capacity of the Corps of Engineers may not develop overnight, but a start during present construction boom will surely facilitate for the future.

Literature review

Involvement of ECBs in various nation-building projects is not elaborately discussed in open source resources. Moreover, the capacity building of ECBs is always an overlooked topic in policy discussions. After the relevant study of resource material, it is evident that this particular topic was not addressed in any of the related articles, books or papers. There are few write-ups in online where the issue is not discussed from the viewpoint of Bangladesh Army Corps of Engineers. More so, all engineering project works have mainly focused on the employment of civilian resources. Some of those existing literature was reviewed to get some insights into those previous research works.

Table of Organization and Equipment (TO&E 1994) elaborately discusses the existing capacity of ECBs. A related study finds out that during peacetime and wartime, ECBs maintain their mission and goal, keeping this TO&E in perspective. Working procedure of ECBs always follow their TO&E to complete any project work (Saleh 2015). However, if any additional equipment is required that is processed separately. Construction work of national highways requires higher classifications than that of ECBs. During the war, ECBs are expected to construct roads up to class 12 only (Special Works Organization 2008).

In an op-ed of The Daily Sun titled “Bangladesh Army in Nation Building Activities” Tariqul (2019) revealed the contribution of ECBs in many projects like construction of Marine Drive Road, roads in Chattogram Hill Tracts and number of flyovers in the country. In many of the occasions, ECBs have hired consultants for the construction of few complex projects like Marine Drive Road, Hatirjheel Project, construction of flyovers etcetera. A research conducted by Rukanuzzaman (2010) stated that in such cases, the designs are sought from Bangladesh University of Engineering and Technology (BUET) or any other recognized consultancy firm.

Land acquisition is very important and integral part of any project work under implementation. Our country needs a well-formulated resettlement policy to address the issues and problems associated with land acquisition (Atahar 2010). However, ECBs do not have any skill required for such an important undertaking related to land. Furthermore, Rukanuzzaman (2010) stated that a majority of the initial works of any project undertaken by the Government agencies often involves partial subcontract to private agencies. This clearly brings out the fact that the capacity of ECBs is not fully- developed to undertake such important project works alone with their existing state.

On the question whether other nation’s Army Engineers can take self-sufficient construction projects or not, Reza (2018) concluded that Government of many countries assigned Army Engineers for accomplishing national level projects directly. Besides, some of the organisations adopt partial outsourcing while others solely employ their integral resources.

However, none of those projects was implemented by complete outsourcing. Hossain (2009) carried out a study on the challenges of ECBs in Infrastructure Building and found that it is time to get out of the traditional context of project work as the level of expectations have increased.

Review of the literature further shows that few studies have so far been conducted in Bangladesh for finding out the challenges of ECBs to work better. Although some of the studies did find a few relevant factors behind the lacking of ECBs to take up self-sufficient national level projects; however, for improving the capacity of ECBs, knowing those limiting factors are not enough. Instead, a comprehensive study is needed that will unveil most of the underlying challenges of ECBs to undertake self-sufficient construction works to contribute more. Hence, this study will help to fill this void found in the literature by addressing the areas that will boost the capacity of the Corps of Engineers to complement the nation-building projects.

Problem statement

The capacity building focuses on developing human resources as both individual and organization to take more responsibilities. Every member of an organization may have great potentials those need to be developed for organizational prosperity. Concept of capacity building values the employees for organizational growth. Armed Forces around world nurture capacity building in terms of training for skill development. To illustrate, many regional Defence Forces conduct regular seminars on capacity building and awareness to evaluate and update their systems. The United States Army also conducts scenario-driven exercises to examine its Human Resource Command capabilities (Masi 2009). In line with other armies of the world, Bangladesh Army also focuses on its human resource capacity building and takes responsibility in developing them at all possible levels.

The employment of the Corps of Engineers in peace and war are critical in terms of engineering works. Three types of battalions work under the banner of Corps of Engineers, they are; Division Engineer Battalion, Riverine Engineer Battalion and Engineering Construction Battalion. Among these three, Engineering Construction Battalions (ECBs) play a pivotal role in contributing to large-scale nation-building projects. Predominantly, the ECBs are organized for the construction and maintenance of roads and temporary airfields. The very nature of their assignment implies continuous engagement in construction work in the form of On Job Training (OJT). Inherently, peacetime employment of ECBs in various projects helped to uphold the image of Bangladesh Army and bridging the gap between the military and the civil population. Nonetheless, the present-day participations of ECBs have surpassed far beyond their capabilities where they are involved in a wide range of subcontracting, consultancy and assistance from foreign experts. Such a wide array of involvement has caused a significant shift in the involvement of ECBs from 'Direct Employment' role to 'Supervision and Quality Control' role. As such, the development of the existing capacity of ECBs is the necessity of time. Appropriate steps to enhance the capability of ECBs will ensure more involvement of troops in construction work along with modern equipment handling.

It is predicted that upcoming projects would be more diverse and critical in nature due to the technology intensity and resource management. These projects will have additional requirements to be met by the implementing authority. The existing workforce and equipment of ECBs are not formed and ready to deal with those requirements. As such, it cannot develop all the skills needed for such large scale and critical projects. The ever-growing requirements of infrastructure development can only be met by a rapid improvement in their project implementation skills. Keeping this in view, ECBs are now in dire need to expedite their capacity building, or else it will be difficult to contribute directly to large scale nation-building projects.

In that connection, present and future nation-building projects promise a favourable platform to augment the process of capacity building. At present, ECBs are involved in various projects like the construction of canals, flyover, national highway and so forth. Such diversity and multitude of their employment offer great opportunities for capacity building. Different aspects of capacity building can take place like training, leadership enhancement, team building, and career planning. Officers of the Corps of Engineers may obtain real-time expertise on Design and Architecture, Project Management, Account Management, Contractual Agreements and many more. Apart from the officers, the junior leaders may also develop their skills in Supply Chain Management (SCM), Quality Control and Assurance (QCA), Design Integration and Risk Management and technical skills to operate high-end equipment. Despite all the opportunities offered by nation-building projects, substantial progress in capacity building of ECBs could not be made so far due to various challenges.

Objectives

In this context, this study focused on the following objectives:

- To analyse the contribution of ECBs in nation-building projects with the existing workforce and equipment.
- To analyse the scope for capacity building of ECBs to meet critical requirements of future nation-building projects.

Research Questions

This paper considered the following research questions:

- What is the present state of the contribution of ECBs in Nation Building Projects?
- What are the opportunities and prospects of capacity building through Nation Building Projects?
- What are the challenges faced by ECBs in capacity building through the implementation of Nation Building Projects?
- How to overcome the challenges of capacity building in the potential areas offered by Nation Building Projects?

Rationale of the study

Bangladesh is developing rapidly which offers a large-scale investment opportunity to the world. Due to the rapid change in socio-economic dynamics, all relevant stakeholders of the government are in the competitive track to contribute more for the nation. Bangladesh Army being the role model of a successful contributor to nation-building projects cannot be held in the queue to participate in the influx of development opportunities. As such, it is imperative that military outfits also develop its capacity to contribute to the nation more and generate a diverse human resource as a skilled workforce. In the near future, the number of national development projects will increase, and the Bangladesh Army has to play a significant role to meet the expectation of the nation. More so, members of the ECBs will be skilled enough to contribute to the nation-building even after their retirement. Due to the diversity and multitude of projects being implemented by ECBs, capacity building through the nation-building projects has a bright prospect in this regard.

Conceptual framework

The concept which pivots this paper is the contribution of ECBs in nation-building projects by enhancing their capacity. At present ECBs are engaged in various construction projects with existing workforce and equipment. Future projects along with the ongoing ones will provide the opportunity to enhance their capacity. While fostering their contribution to nation-building projects, ECBs need to overcome few challenges to reap the benefits fully. This overall framework is diagrammatically presented in figure below :

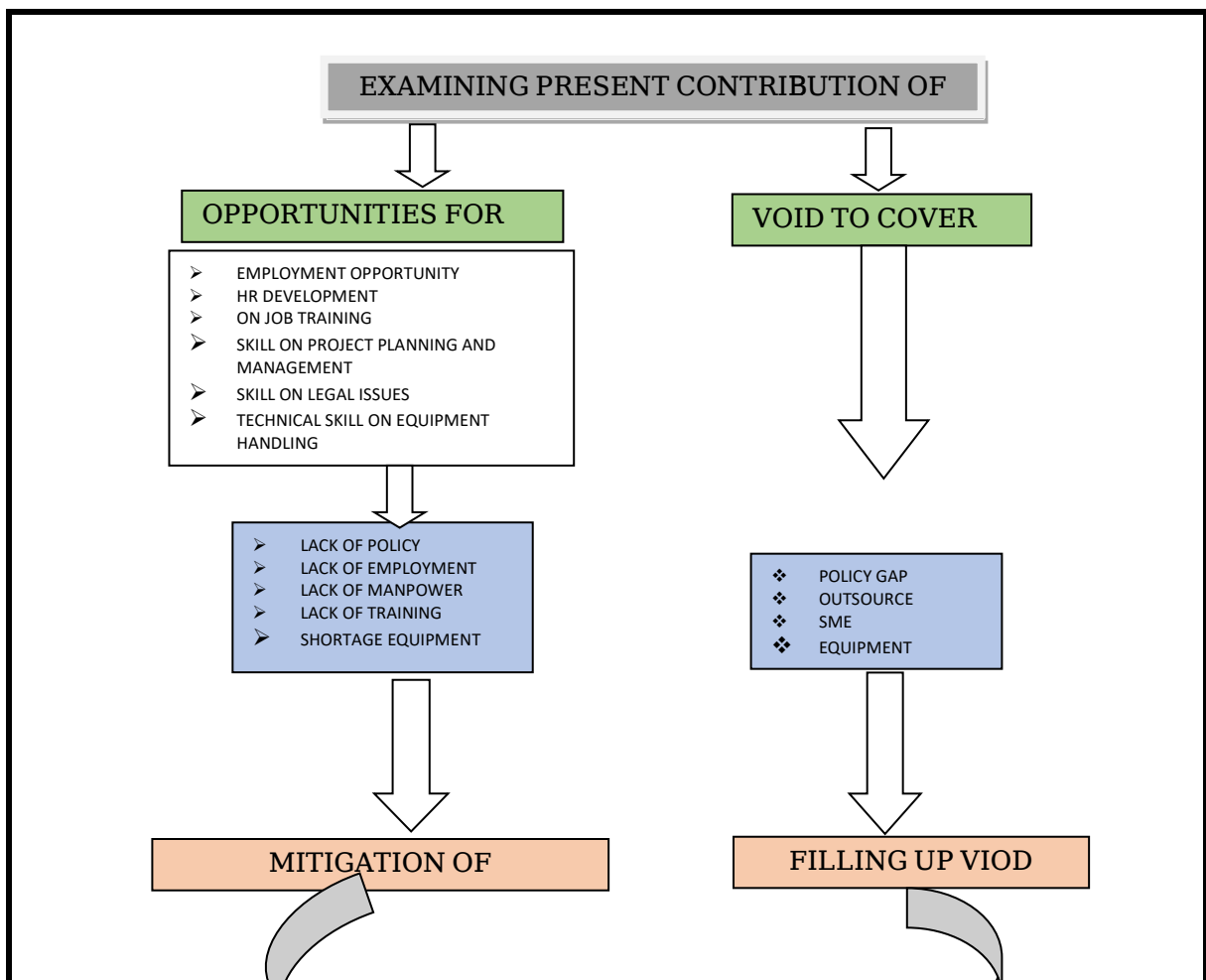


Figure 1: Conceptual Framework

Methodology

Convergent mixed method research design was followed to gain the in-depth understanding on capacity building of ECBs. Quantitative research method was deployed to acquire general understanding on present role and responsibilities of ECBs. Qualitative research was inevitable in my research for solving the puzzle of how the capacity of ECBs can be enhanced further to take on national level projects. Quantitative data collection was done using close ended survey questionnaire instrument basing on random sampling. Interviews, Key Informant Interviews (KII), Focused Group Discussion (FGD) were conducted to collect qualitative data basing on purposive sampling. Unstructured questionnaire was designed as Interview and FGD Instrument. Few relevant case studies also done to reinforce theme emerging from quantitative and qualitative data. Content analysis was carried out to extract required data from secondary sources.

Quantitative data was analyzed following descriptive statistics analysis and qualitative data was analyzed following thematic analysis approach. Microsoft excel and google form were used in quantitative data analysis. Collected data was analyzed and interpreted in parallel for the convenient use.

State of ECBs' Contribution in Nation Building Projects

Mission of ECBs is stated in TO&E “to plan, organize, control, supervise, implement and maintain various construction works during war and peacetime”. Present capabilities were also identified after further analysis of TO&E. They are enumerated below:

- Construct and maintain road up to class 12 specification.
- Provide technical manpower, engineer plant and equipment for construction and maintenance of roads.
- Construction and repair of temporary airfields.
- Laying concrete and bituminous surface to a limited extent.
- Denial of sea beaches, airfields and roads to the enemy.
- Under special necessity, perform combat engineer tasks as and when instructed by the superior authority.

Present employment of ECBs has involved them in implementing a wide variety of mega projects. Many of the employments like integrated development, construction of overpasses and flyovers impose requirements beyond their existing capabilities.

ECB personnel remain constantly involved with various projects. The officer in charge of administration opined that their system of Human Resource Development (HRD) is primarily based on OJT. Besides, some training courses are regularly arranged to train the personnel on construction works. As per the official document study, it reveals that the final aim of ECBs is to make all ranks physically fit, technically sound and ready to act within the shortest possible time (E in C's Branch 2018). The study also found that career planning in terms of promotion and posting is primarily focused on the combat engineering aspects for which the ECBs invariably face a shortage of skilled HR (Reza 2018). As such, it is difficult to cope with the increasing trend in qualifications related to nation-building projects.

At present, ECBs are facing rapid growth in the nation-building project implementation due to a number of mega projects like Padma Multipurpose Bridge, Mass Rapid Transit (MRT), few Power Plants and Deep-Sea Ports. There was an abrupt increase in the cost of projects undertaken by ECBs in the last decade. As an example, the escalation in project costs of 17th ECB (from 2011 to 2017) is shown below in Figure-2. At this rate, future projects would exceed the capabilities of ECBs and higher requirements will evolve in the construction sector.

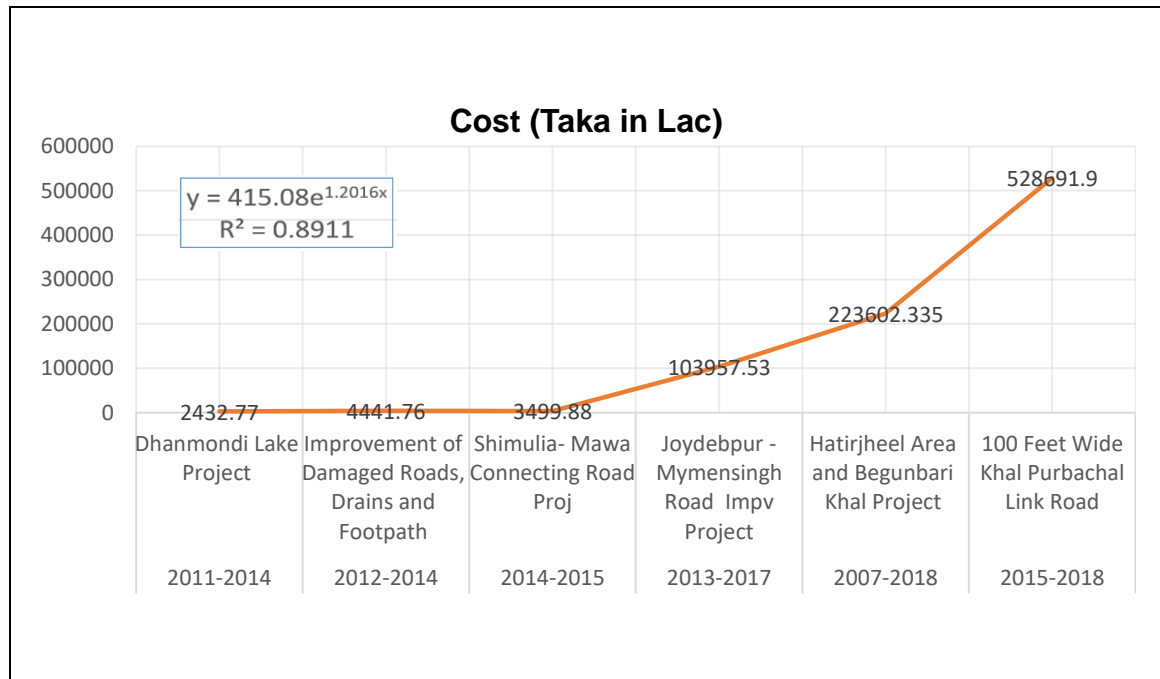


Figure 2: Growth in Project Implementation Cost of 17th ECB

Along with the increased budget, development of infrastructure will be at an intense rate in the next three years to graduate from Least Developed Country (LDC) to Developing Country in 2024. Hence, upcoming projects duration for ECBs would be even lesser. Respondents' view in this regard is shown at Figure-3.

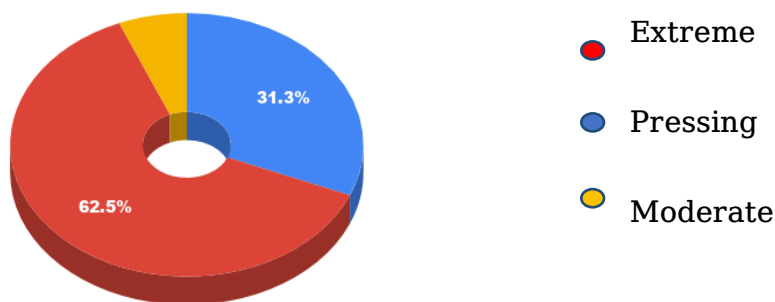


Figure 3: Respondents' View on the Requirement of Speedy Implementation

ECBs have been involved in different projects for long and have developed a workable state of HR by now. However, keeping the future requirements in view, it will be difficult to handle the large scale and multidimensional projects with the present state of HR. In a survey among officers, majority of them opined that the present system of HRD is insufficient in fulfilling the future requirements. Details of the survey respondents are shown in Figure 4.



Figure 4: Response showing the Concerns About Present state of HR

The above findings suggest that the existing system of HR needs rapid improvement. Present and future nation-building projects offer exceptional platforms for capacity building of ECBs. Through nation-building projects, the construction skills of a unit can be tested and developed. With the continued involvement in nation-building projects, ECBs can gradually develop a set of highly skilled HR (see Figure 5).

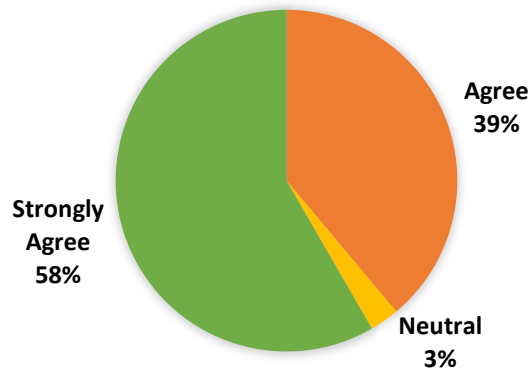


Figure 5: Responders' View on NLP as a Platform for HRD

Opportunities and prospects

ECBs have outsourced experts from BUET for construction of few complicated projects like Marine Drive Road, Hatirjheel Project, and Fly Overs. However, the inclusion of officers in such projects after their completion of BSc in Civil Engineering (CE) or Architecture from MIST will generate a scope of developing Subject Matter Experts within the Army. In this process, ECBs can build their capacity in design, architecture and consultancy. Respondents' view in this regard is shown at Figure-6.

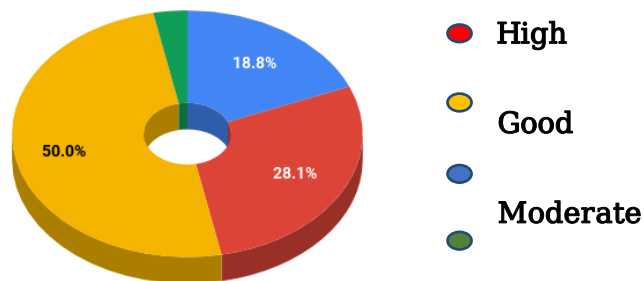


Figure 6: View on Developing Design, Architecture and Consultancy Skills

At present, ECBs are involved with the projects right from the beginning that includes acquisition of land. In our country, land acquisition is a colossal and time-consuming process that encompasses delicate dealing with locals and Government officials. As such, capacity building with regard to land acquisition, contractual agreement and tendering can enhance the

knowledge of legal aspects. Most of the respondents opined in favour of developing legal proficiency.

Project and fund management are two crucial parts of any project. Nation-building projects involve large funds, which is normally allocated from sponsor ministry/department to the project account. Here comes the requirement of proficient knowledge by ECB personnel to ensure zero audit objections. Accounts Officer of one of the national level projects views the account management as a prime job for any Project Officer. Hence, nation-building projects offer the opportunity to enhance accounting handling skills. On the other hand, these projects also provide an opportunity for management of time, manpower, equipment and contractors. It gives a platform for Junior Commissioned Officers (JCOs) and Non-Commissioned Officers (NCOs) to improve their managerial ability in many folds. Figure-7 below reflects the respondents' opinion in this regard.

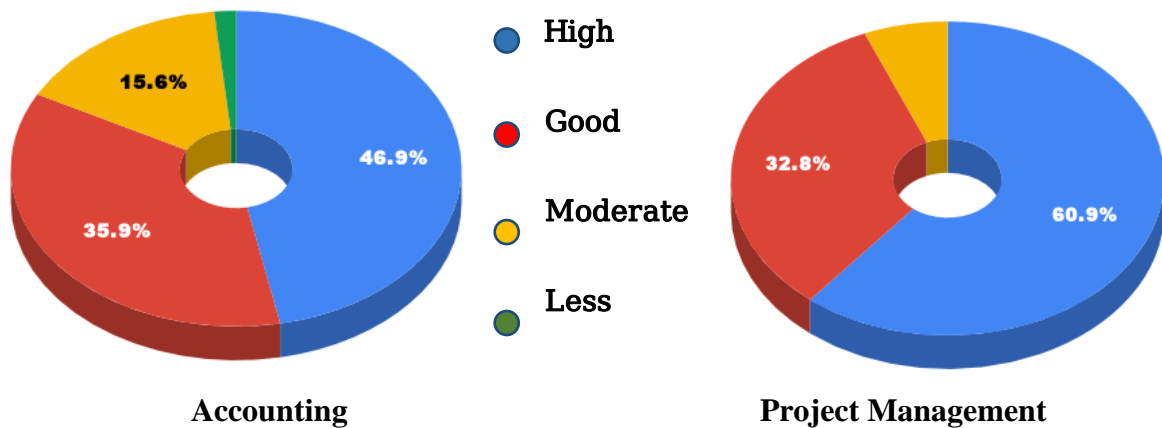


Figure 7: Chances of Developing Accounting and Project Management Skills

Civilian contractors prefer to work in a peaceful environment rather than a wartime scenario. On the contrary, ECBs are entrusted with the wartime construction requirements. Thus, nation-building projects will enhance their combat readiness by engaging them in rapid construction in peacetime.

ECBs work with the government agencies very closely in nation-building projects. Development of capacity on negotiation, contractual agreement, and land acquisition will help ECBs to establish mutual trust with various government and non-government agencies.

Retirement of army personnel at an early age involves them to look for post-retirement jobs. Capacity building by nation-building projects provides a scope of securing the post-retirement solvency for ECB personnel. One of the Senior Warrant Officers of 17th ECB opined that capacity development while working in projects boosts their morale and motivates them to perform better.

Challenges faced by ECBs in capacity building

Diverse assignments of ECBs over various projects at the same time endanger their capacity building. Commanding Officer of 17th ECB mentioned that apart from various minor projects, 17th ECB is currently involved in nation-building projects like Dhaka-Mawa highway, 100 feet wide artificial canal and landscape development of Hatirjhil. The multiplicity of these projects demands different technical considerations and makes it more difficult to focus on capacity building. The researcher identified the simultaneous involvement of 17th ECB in various nation-building projects facilitated them to handle six projects concurrently. Figure 8 illustrates it more.

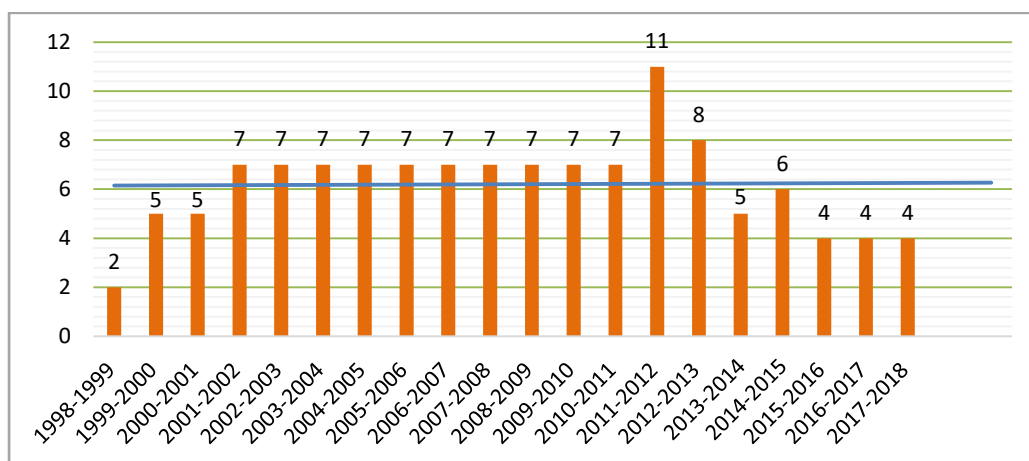


Figure 8: Number of Projects Implemented per Fiscal Year

Involvement of ECBs in contemporary projects in different areas divides their equipment and manpower. One FGD was conducted to know their concerns over this issue. The findings of FGD show that majority of the officers consider their workforce to be overstrained. As such, these over-tasks troops gradually lose concentration, inquisitiveness and interest to learn from different project activities.

ECBs suffers shortage of manpower, especially the officers corps. About 69.2 % of the respondents replied positively about the shortage of officers in the ECBs, while 29.2% of respondents replied negatively. Furthermore, the researcher collected a recent state which shows that, on an average, only 21% of the officers remain posted in the unit (Reza 2018).

As per the present trend, officers are posted to ECBs with a considerable time-gap after accomplishing BSc program. This long duration affects their engineering proficiency without any real-time exposure to CE works. Majority of the respondents replied positively about the impacts of time-gap before posting to ECBs, while very few opined negatively.

Engineer in Chief's Branch opined that ECBs are not self-sufficient to implement any nation-building projects without subcontracting (Interview). Their present state of manpower and

equipment is not capable enough to handle the increased number of projects. He further added that most of the projects are being implemented by large scale subcontracting where members of ECBs only supervise, manage and pursue the works. As such, it becomes difficult to identify the limitations and needs for capacity building for ECBs. About 80 % of the respondents agreed with the facts that present manpower and equipment is not enough to take any project only by ECBs, while 20% of respondents did not agree.

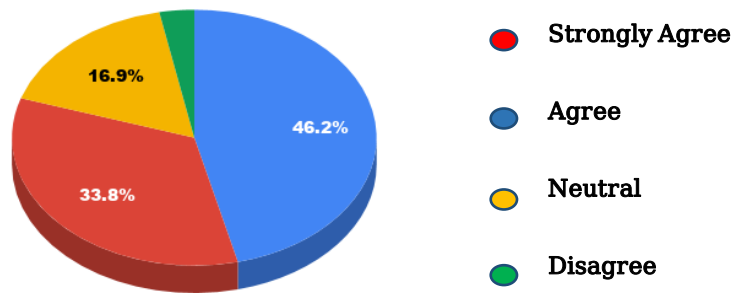


Figure 9: Response of Officers about the Negative Impacts of Outsourcing

Overcoming the challenges of capacity building

Present curriculum for officers does not include Account Management and legal aspects like Contractual Agreement that are very much pertinent to large scale projects. These projects also require careful screening of Development Project Proposal (DPP) or Project Implementation Plan (PIP). However, officers of ECBs underperform in these two areas due to lack of knowledge on DPP and PIP. Existing professional curriculum is also inadequate in developing officers' proficiency in Design and Consultancy, Transportation Systems, Traffic Forecast Management, Highway Project Management, and Procurement Management. One of the Commanding Officers of ECBs mentioned that due to lack of expert officers in these fields, some of the mentioned expertise is outsourced while most of them are overlooked.

Apart from the officers, JCOs and NCOs also play a vital role in implementing project works. One of the trainers of JCO and NCO opined that the existing syllabus of basic and advanced trade training does not cover the technical knowledge base required for large scale projects. Junior leaders face a multitude of problems in tackling assigned tasks owing to the absence of required training. According to the Training Officer of ECBs, inadequate technical training is the highly pronounced impediment for capacity building. Inclusion of training on Supply Chain Management, Quality Control and Assurance, Design Integration and Risk Management may further enhance the capacity building for nation-building projects.

One of the Engineer Construction Brigade Commanders expressed that the present capacity of ECBs needs to be enhanced to take part in nation-building activities in future. To materialize his view on capacity building, ECBs need to undertake large structural projects where their capable manpower and equipment will take part only. On those projects, ECBs need not

outsource engineering firms for Structural Design and Architecture, Project Management, Account Management, Contractual Agreements and many more if their capacity is developed from now on.

It is also noticed that ECBs are capable of doing all necessary base and sub-base works for road/bridge construction. However, due to lack of expertise in design and architecture, ECBs cannot take the superstructure part of any bridge construction. It is the field where outsourcing is required more. Study of two Construction Brigade organograms shows that existing TO&E does not allow ECBs to have this expertise. Interview with the Project Officer of Mawa Road Project under Padma Multi-Purpose Bridge also reckons this view. Though ECB is capable of doing necessary piling work with local workers, their lack of expertise in the structural part let them outsource this job. Project Officer also opined with the researcher that ECB can undertake any project if their present capacity is developed by necessary inclusion in their TO&E.

Conclusion

The growing contribution of ECBs in the nation-building projects offer an opportunity to think about its capacity building aspect. Engineer Construction Brigades should comprehend the remarkable potentials of nation-building projects with regard to capacity building. Involvement of ECBs in large scale projects has opened a wider arena to grow expertise in construction. Traditional project works of ECBs does not require additional development of capacity. With the increase of participation in larger projects, the need for capacity building comes to prominence. Hence, ECBs should take necessary steps in developing their manpower for taking up nation-building projects at their own, without sub-contracting them to the outsourced companies.

Recommendations

Basing on the findings of the research, the following recommendations may be put forward for consideration:

- Engineer Construction Brigades may arrange regular ‘Executive Development Programs’ on Project Management, Geographic Information System (GIS) and Public Procurement Rules (PPR) for officers, JCOs and ORs of the ECBs.
- ECBs may include practical oriented program related to Project Management which will be useful for junior officers of ECBs.
- Engineer Construction Brigades may carry out a study to develop a set of blueprints for further validation under a pilot project.

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Reviving Opportunities through Socio-Spatial Parameters for Community Interaction: An
Assessment on Neighborhood Ponds of Old Dhaka

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Abstract:

Within urbanized areas, the importance of neighborhood ponds should be assessed and investigated with its socio-spatial parameters (access and linkage, sociability, uses and activities, comfort and image etc) since such water bodies act as retention basin during floods, reservoir for lean period and responsive socializing agent to measure community interaction which are generally been neglected by city government, threatened by developers but taken care by neighborhood people in Old Dhaka. Most of the inner city small neighborhoods ponds have been encroached and filled up upon demand on land as the pond were not integrated in the city planning. The main objective of this research is to assess the significance of such water bodies and revive the spatial relationship of neighborhood ponds with its nearby residents. Therefore a socio-environmental survey (quantitative and qualitative) is held on neglected and threatened small neighborhood ponds of Old Dhaka with direct observation, in-depth interviews of the residents to compare the environmental, ecological and social contexts and explore the opportunities. An integrated assessment for enhancing sustainability and creating opportunities through community participation has been suggested to rejuvenate the ponds with attention for wetland preservation and to integrate into community development programs or planning.

Key words: *Old Dhaka, Neighbourhood Ponds, Socio-Spatial Parameters, Community Interaction*

Introduction

Dhaka used to be referred as the “Venice of the East” for its water bodies, which were interconnected and formed a convenient network of communication. Over the last four hundred years of urban development, Dhaka has completely lost its image of ‘Venice of the East or the *City of Channels*’ as remarked by James Taylor (Dani, 1962) and presently stands as ‘City of concrete’. Studies have proven that more retention areas are needed since “the city has lost hundreds of hectares of wetland in last ten years” (Islam, 2009). Historically Dhaka’s urban life and living was interwoven with the system of rivers, canals, lakes and ponds scattered and crisscrossing the city (Mowla, 2008). However, in the frenzy of urbanization, Dhaka, in the last 30 years or so, has seen a drastic reduction of its water bodies (lakes, ponds and canals) as well as wetlands. It is evident that Dhaka’s citizens forgot about the existence of most of the inner-city waters. In such perspective restoration and conservation of small stagnant ponds are ecologically very important. They provide habitat, sanctuary and food for many species of fish and wildlife and are also a source of process water to a myriad of industries (Dinar *et al.* 1995). Urbanization of Dhaka during recent times has left a deep scar in the city’s environment. It needs some strategic decisions and quick actions to remain livable. Thus the study attempts to trace present settlement pattern around neighborhood water bodies in Old Dhaka and explore the socio-spatial features to ascertain an appropriate role of such water bodies (ponds, khals, lakes, rivers etc.) in the rejuvenation and integration of the city fabric.

Objectives and Methodology

Dhaka has ponds of different sizes spread within its municipal corporation boundary (under institutions like university, Govt. offices, under mosques & temple, under various garden and within neighborhood level) which are used as multiple resources and have great ecological importance in urban environment – from microclimate control to biodiversity. But most of these inner city small neighborhoods ponds are mainly neglected, have been encroached and filled up upon demand on land as the pond were not integrated in the city planning. These small ponds and have undergone human-derived changes that have increased threat of pollution. So therefore the objectives of this study are:

1. To investigate socio-spatial configuration (access & linkage, sociability, uses & activities, comfort & image etc) for communal interface,
2. To provide an integrated transformational basis within present situation to revive and conserve degraded small neighborhood ponds for liveable Dhaka.



Figure 01 (a): Ponds are locked into densely populated area (Source: The Daily Star, April 09, 2008/Dhaka Tribune, May 23, 2013/Authors)



Figure 01(b): Land grabbers continue to fill the pond at Amaligol in Lalbagh in old town of Dhaka (Source: New Age.May 16, 2014/ Dhaka Tribune, May 23, 2017)

To assess the above objectives, we identified neglected and threatened small stagnant neighborhood ponds of Old Dhaka, observed the spatial relationship of urban neighborhood ponds with its nearby residents and explore the opportunities along with its socio-spatial context for sustainable ecological and socioeconomic development on a neighborhood/community. A socio-environmental survey (quantitative & qualitative) is held on DIT Pukur Paar, Dhupkhola Pushkuni Paar, Sikkatuli Pocha Pukur, Bangshal Pond & Gol Talab of Old Dhaka with direct observation, in-depth interviews of the residents to compare the environmental, ecological and social contexts of the five ponds.

Theoretical background

Definition and Importance of Neighbourhood Pond

A Pond is generally described as a water body of a smaller size, commonly dug (man-made) or developing it from its natural origin (Ray & Majumdar, 2004). Big ponds are called “Dighi” in our country. In the present study the term neighborhood pond has been used as smaller water body in the urban and peri-urban area. The term pond refers to a relatively shallow body of water, contained in an earthen basin, artificial or natural and can vary in surface area from about one meter squared to a few hectares (Journal of Wetlands Ecology, 2009). The role of the ponds in urban milieu is multifaceted such as social, ecological and economical importance. The major use in our contextual setting is no doubt bathing, cleaning and other requirements. The major productive activity related to these ponds is fish cultivation. Environmentally these small stagnant ponds play role as controllers of microclimate, biodiversity and receptors for rainwater harvesting. In neighborhood scale, these stagnant ponds are also act as a centre of local social and cultural activities. Finally, these ponds bodies act as a source of water for fire fighting in the crowded and over-expanding urban areas.

Contemporary scenario of ponds of Dhaka

In the past, water bodies were the main transport corridors, streets being secondary and have historically played an important role in the spatial development, life and liveability of Dhaka. There were flights of steps, locally known as Ghats were community spaces as well and provided a hydraulic character to the settlements in the area (Mowla, 2010). These were major community spaces where the daily activities taking place such as bathing, washing or religious or commercial activities. Because of unplanned urban development, Dhaka has become an overpopulated metropolis where wetlands reclaimed and converted into building construction sites. Encroachment upon our water bodies and unscrupulously polluting those canals, creeks and rivers in and around the Dhaka are destroying our ecological balance and making Dhaka less livable and enjoyable as a city. Several studies have documented to determine the loss of wetland in Dhaka over the period 1989-1999 (annual rate of loss of 1.23%) and 1999-2003 (annual rate of loss 5.67%). Study showed that Dhaka is still left with 19.3% of wetland (The Daily Star web edition, 2006). From another study it is found that Dhaka possess 101.12 acres of pond which is served 0.024acres per 1000 people [table 01]. According to the DAP, at least 21 percent area of the city must be protected as water bodies where no one should be allowed to develop any form of infrastructure. Dhaka is only left with around 19 percent of its original wetlands, which is an alarming figure.

Types of Open Spaces	Areas in acres	Areas(acres) per 1000 people	% of total area
Agricultural	4871.00	1.150	12.12
Garden	362.00	0.086	0.901
Park	358.46	0.082	0.892

Playground	156.46	0.037	0.390
Pond	101.12	0.024	0.252
Lake	60.71	0.014	0.151
Urban Forest	8.00	0.002	0.020
Vacant Space	2004.63	0.470	4.991
Graveyard	14.50	0.003	0.036
Swamp	731.00	0.173	1.820
Total	8668.23	2.040	21.573

Table 01: Distribution of open spaces in Dhaka City (Bhadra & Shamim, 2001, people report on Bangladesh environment 2002-2003, MoEF-US)

Old Dhaka for an instance is a severely crowded area with compact urban form. Yet the existing small ponds in those areas create an atmosphere to bring serenity into people's lives. Streets and Walkways by the water generate spaces for social gatherings (Bashneen & Karim, 2016). Most of the ponds in new Dhaka are under institution and mosques which have a lower rate of local people accessibility and usability. Residents taking baths, children enjoying jumping and dipping – in a neighborhood pond like Bangshal, Gol Talab ponds etc. and surrounding trees act as reminiscent of rural tranquility among the busy urban life. Ponds also act as a social platform such as fishing festival occurred every year at Nawab Bari Pukur also known as Gol Talab (Figure 01a). Most of the ponds are also in death throes due to negligence of the authorities concerned. Although, according to the Field, Open Space, Park and Natural Water Body Protection Act 2000, filling up of any water body including pond is illegal, it's going on unabated. The negligence of government has been evident through filling the 150 years old neighborhood pond Pushpa Saha Pond with soil (Figure 01b). The Daily Star found 63 Ponds in the maps of undivided Dhaka City Corporation (DCC) in its 28 wards out of 90. But many of the water bodies were filled up before the period and also even after the survey (Alam, H. 2017).



Figure 02(a): Mitali School Pond is now a playground (Source : The Daily Star , July 05, 2017)

Figure 02(b): Once a gathering place, Pushpa Pukur has fallen victim to urban sprawl (Source : The Daily Star , July 28, 2017)



Figure 02(c): The slow ripples of the water of this pond still soothe frazzled nerves. The water body is used by youths and elderly alike for swimming. Though the around 200-year-old pond in the capital's Dhupkhola has stood the tides of time, it needs protection from the threat of encroachment and pollution (Source : The Daily Star , July 02, 2017)

Figure 02(d): A Blessing in Disguise: Bongshal Pond (Source: The Daily Star, October 14, 2016)

Socio-Spatial Parameters and Community Interaction

In evaluating thousands of public spaces whether in city scale or neighborhood scale around the world, PPS (Project for Public Spaces) has found that to be successful and interactive they

generally share the following four qualities: they are accessible; people are engaged in activities there; the space is comfortable and has a good image; and finally, it is a sociable place: one where people meet each other and take people when they come to visit. PPS developed The Diagram below portray the socio-spatial parameters as a tool to enhance the community interaction around the neighborhood pond. According to PPS, 2000 access & linkages, uses & activities, sociability, and comfort & image are the four main elements of public space that make the public space (urban green/blue/grey spaces etc) interactive and joyful for people [Source: PPS, 2000, how to turn a place around]. In this paper socio-spatial parameters contain the above mentioned parameters to revive the opportunities along neighborhood ponds of Old Dhaka.

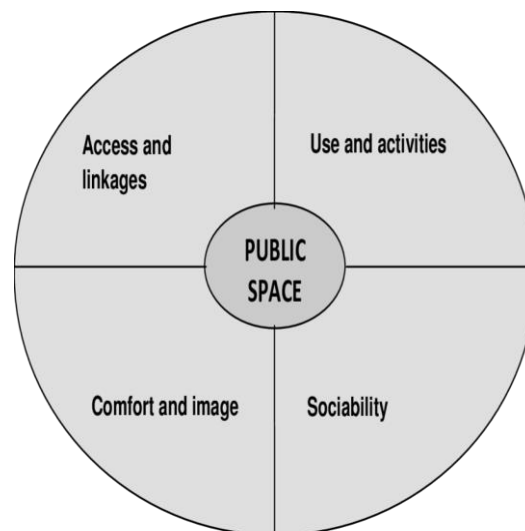


Figure 03: Key qualities of successful public spaces Source: PPS, 2000 (ChitrakarR.2015)

To evaluate the socio-spatial parameters of each of the selected neighbourhood ponds, each pond was assessed according to the established criteria of PPS’s matrix consist of the following (Buckman S.2016):

Access & linkage: the accessibility of a place by its connection to its surroundings, both visual and physical. Community interaction can be enhanced if the public space which is the neighborhood pond in this paper is easy to get to and get through; it is visible both from a distance and up close.

Comfort & image: whether a space is comfortable and has a good image. Comfort includes safety, cleanliness and availability of place to pause or to it etc.

Uses & activities: activities are the basic for any successful and interactive places. Activities attract people to visit the place and continue to return to the space again and again, are also makes a place special and unique.

Sociability: when people see friends, meet and greet their neighbors, and feel comfortable interacting with them, tend to feel a stronger sense of place or attachment to their community.



Figure 04: Activities in and around the ponds

Old Dhaka for example, is an extremely crowded area with compact urban form. Yet the small ponds create an atmosphere which brings calmness into people's lives. Streets and Walkways by the water create spaces for social gatherings. Public perception of an urban waterway is also highly dependent of its size, where width shows a relevant role, affecting notions such as scale, distance, visual contact, depth, reflection, attractivity, enclosure, among others (Cano, 1985; Moughtin, 1999). Wilkinson (2007) defined three dimensions of social cohesion: the (psychological) sense of community, the attraction and the neighboring. The sense of community refers to a strong attachment that people may experience towards each other (Davidson and Cotter, 1993, quoted by Wilkinson, 2007). It conveys the notion of belonging to a community, the existence of shared values, a common identity (Jenson, 1998), and the involvement in the community organization and in local actions. Neighboring is the sum of actions residents may perform to build a social network within the neighborhood and to support one another, either psychologically or materially (Forrest& Kearns, 2000; Helly et al., 2003; Van Marissing et al., 2005). Gehl (1987) defined two main types of social interactions: active and passive interactions. A contact is considered to be active when people have a conversation (focused interactions) or greet each other (unfocused interactions) (Giddens & Duneier, 2000, quoted by Bin Kang, 2006). A passive contact is considered to be a contact without any talk or greeting; it is rather a physical presence: being among people, looking at or just seeing them, listening to or hearing them (Huang, 2006).

Case studies

Five small neighborhood ponds [Figure 04] have been selected (0.77 – 2.04 acres) according to their ownership patterns, access & linkage with the neighborhood, sociability, uses & activities around the ponds and ecological perspectives. These Five ponds are spread over different wards of Old Dhaka area. They are:

Pond 01: DIT Pukur Paar

Pond 02: Dhupkhola Pushkuni Paar

Pond 03: Sikkatuli Pocha Pukur

Pond 04: Bangshal Pond

Pond 05: Gol Talab (figure 05)

At all the ponds, the number of users for various uses was counted between 8:00 am to 5:00 pm for one day. The maximum duration of each observation was fixed at 15 minutes. A number of users were surveyed through prepared questionnaires at each pond. Besides, other relevant data about the ponds were collected from the users, from the local people, from the principal or the managing organization, if any.

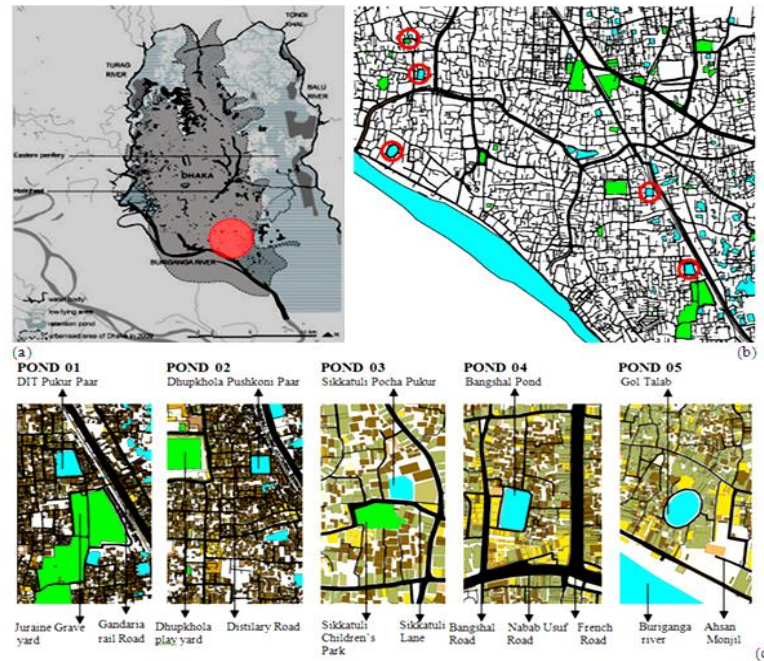


Figure 05: Map showing five selected ponds of Old Dhaka (Source: GIS Map, 2006)

The study revealed the following important information. Landscape features and the surrounding land use within 30m of the pond were recorded along with the degree of visibility, proximity to housing, footpaths and the amount of public access. A sketch of each pond of old Dhaka was made in order to get a good insight of it and a first impression on the way the space is used through photographs which include the shaping of the space; accessibility to the ponds, spaces for communal interaction (circulation space: the Street & non circulation space : the Pond), tree cover (trees, shrubs, herbaceous plants, grass etc.); the presence of facilities and equipment related to specific activities (ghats, fishing deck, walkways, benches, food stalls, physical barrier etc.); the presence of physical traces of use, evidences of activities(active hours) in the place like negative to pond side ,leftovers, erosions; and the state of positiveness (maintenance of the space ,lightings, comfort etc.). [Figure 05]

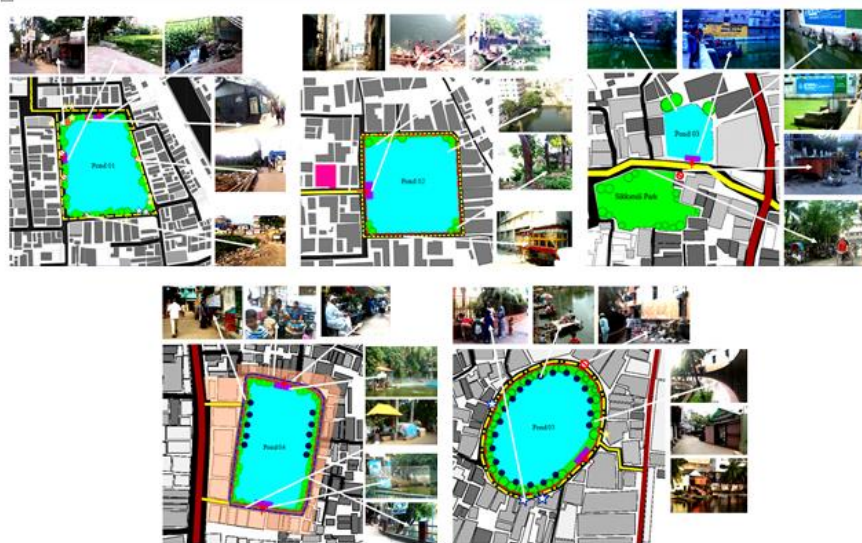


Figure 06: Surrounding areas and spatial organization of five ponds of Old Dhaka

Findings and discussion

Influence of circulation (streets) versus non-circulation spaces (pond space) on communal interactions: Access & Linkage

It is evident from above that the surrounding areas and spatial organizations of old Dhaka ponds are mostly organic. All the four ponds are accessed by a continuous street and linked by several narrow lanes except Sikkatuli Pocha Pukur . Among these five ponds Bangshal pond is easily accessible by local users as well as by other neighborhoods. The aperture of Sikkatuli pond is larger than the others as the main connecting street is parallel to the pond whereas one has to access to the Dhupkhola pond through a linear axis (Fig. 07).



Figure 07: Access and Linkage of Pond 03 (Sikkatuli Pukur) and Pond 02 (Dhupkhola Pond)

The frequency of focused activities mostly conversations was relatively high in case of Bangshal pond & Gol Talab but sometimes lower than non circulation spaces (Sikkatuli pond & Dhupkhola pond), particularly the spaces containing facilities, as described previously. Focused activities performed in non-circulation spaces (people met inside the pond) appeared to be sometimes very short and non-spontaneous than in circulation spaces (people met in surround streets); they were mostly long and spontaneous. 80% of communal activities occurred near the entry point of the ponds. Indeed, people used the circulation spaces for their primary function, i.e. to walk through so that they did not stay in the area. In Dhupkhola pond, for example, nobody was observed using the path as a meeting point but inside the pond, people & children met spontaneously, particularly for swimming or bathing. It has been noticed that father is fishing in Sikkatuli Pocha Pukur while child is playing in Sikkatuli Park just opposite the pond. Nevertheless, some spontaneous and long focused activities occurred in the circulation spaces, as in the non circulation spaces. For example, children have been seen improvising cricket match or cycling in the middle of the street of DIT Pushkuni Paar. Both types of interactions in circulation space and non circulation spaces are important in using the ponds. Indeed, if some interactions enable to strengthen already existing relationships, some are opportunities for new interactions to be created.

Influence of the presence of facilities in ponds for communal interactions: Sociability through Uses & Activities

The ponds sampled in the survey demonstrate a variety of potential social aspects with amenity values. All were located in close proximity to housing [Figure 08] .Users' group contain of migrant laborers or poor local inhabitants, people working in markets, small factories, living in slums or in poor housing conditions as well as middle income people. Most of these ponds are used for bathing and fishing. Various facilities such as ghats, fishing decks, sitting spaces, provision for walkways, tree coverings and vegetable gardens were found in and around the ponds studied. The findings of the observations showed that, in Bangshal pond and Gol Talab containing such facilities was successful in terms of focused interactions and the frequency of focused activities was very high.



Figure 08: Various activities around the selected ponds

Bangshal pond and Gol Talab offer opportunities for relaxation and physical activity with various sitting provision as well as community gathering and fishing competition. Newspaper wall at Bangshal pond also create social gathering where both local people and other people share their views with each other. These two ponds support fish, plants, and other aquatic life which are major enhancement to the quality of life in neighborhoods. Every year (June –July) Moulavi KhazaAbdullah Welfare Trust organizes fishing competition at Gol Talab. A series of coconut trees with other tree covering has found on both ponds. Such facilities are not found in Sikkatuli Pocha Pukur of Old Dhaka though the steps of Sikkatuli Pocha Pukur ghat use as relaxation place. The time context influenced the use of these facilities in or around the ponds. Indeed, the warm afternoons were the ideal time to play with water, as it was the case in Bangshal pond. Clubs and temporary small vegetable markets are seen by the side of DIT Pukur Paar .The frequency of focused activities was not so high at DIT Pushkuni Paar because of the extreme deterioration due to excessive growth of water hyacinth and presence of waste A majority of physical traces of maximum use is seen on the surround street than inside the pond.Vegetable gardens maintained by nearby residents of DIT pond have also been noticed. Absence of boundary encourages people to pollute water by dropping polythene, garbage etc In DIT Pukur Paar & Sikkatuli which degrade the water quality of these ponds.



Figure 09: Physical environments around the selected ponds

The existing facilities, like benches, enable long and spontaneous social interactions (people mostly meet at those spots & surrounding streets). Moreover, areas with facilities showed the highest frequency of focused activities (e.g. bathing, swimming & fishing). Circulation spaces seemed to stimulate the occurrence of very short and not spontaneous communal interactions (people mostly meet before using the space), as compared to the non-circulation

spaces. The circulation spaces still exhibited a high frequency of focused interactions (Bangshal pond), but not more than non-circulation spaces.

Sociability					
Ponds	D.I.T. Pukur Paar	Dhupkhola Pushkuni Paar	Sikkatuli Pocha Pukur	Bangshal Pond	Gol Talab
Communal Interactional space: (a) Circulation Space/Street & (b) Non Circulation Space /Pond	Circulation Spaces	Non Circulation Spaces	Non Circulation Spaces	Circulation Spaces & Non Circulation Spaces	Circulation Spaces & Non Circulation Spaces
Activities & Interaction types: (a) Active or Focused Interaction (b)Passive or Unfocused Interaction	Bathing, Washing, Waiting	Bathing, Swimming	Fishing, Waiting, Sleeping, Washing	Bathing, Swimming, Fishing, Making Conversation , Community gathering	Fishing (Competition) , Swimming, Boating, Relaxing, Waiting,
Sociability	Average	Average	Poor	Very good	Good
Available facilities at present					
Presence of Ghat	On North & West side	On North only	On South only	On North & South side	On North-West only
Fishing Decks	Absent	Absent	Absent	Present	Present
Provision of Sitting	Absent	Absent	Absent Ghat Steps use as sitting	Shaded & Open types	Absent
Tree Coverings	Heavy covering on west side	Tree Covering on the four corner	No covering at all	Heavy covering that surround the pond	Heavy covering that surround the pond
Vegetable Garden	Present	Absent	Absent	Absent	Absent
Security	Moderate	Sometimes unsecured	Moderate	Secured	Secured
Presence of Artificial Lightings	Inadequate	Moderate	Inadequate	Satisfied	Satisfied

Table 03: Communal Interaction with presence of facilities of the ponds

Recommendations

This research aimed at exploring how neighborhood pond, through a particular integrated design approach, could facilitate their use and social cohesion between residents of a neighborhood. The observations showed that some elements of the design of the green spaces could stimulate the occurrence of certain types of social interactions like provision for walkway, fishing decks, sitting etc. To revive and assess the sustainability status of existing ponds without compromising on the social, environmental and economic interests an integrated approach should be introduced through detail survey and findings on existing space planning, use of spaces, pattern of social interaction and direct community participation. Improving the health of Old Dhaka's ponds with the power of partnership and the spirit of community is inevitable. For different pond with different context the following typology of integrated strategies can be implicated.

Protective	Defensive
Taking preventive actions to preserve, revive well-functioning ponds before they are threatened by change or development: <ul style="list-style-type: none"> • Identification of Heritage Areas (Gol Talab & Bangshal pond) • Necessity of Open Spaces :Pond, Khal, Lake, River, Park, Field 	Implementing actions to defend ponds that are suffering from development pressure: <ul style="list-style-type: none"> • Actions & participations (Govt. org-local org-private org.) • Protection from Adjacent Land Uses
Offensive	Opportunistic
Taking remedial or restorative actions to reintroduce functions where they do not currently exist: <ul style="list-style-type: none"> • Additive Sustainable Functions • Ecological Restoration 	Recognizing the potential for ponds to be managed or structured differently to provide specific functions: <ul style="list-style-type: none"> • Research & Findings • Implementation of Existing Ideas

Table 04: A typology of integrated planning strategies for neighborhood pond

As it is found that both Bangshal pond and Gol Talab have better physical (environmental) as well as social cohesion opportunistic planning strategies should be included recognizing the potentials around these ponds whereas in case of DIT Pushkuni and Sikkatuli pond are needed defensive strategy to implement actions to revive from extinction. Development and alteration of the existing water bodies should consider the natural hydrological conditions so that the changes can cope with the artificial intervention. So sustainable management framework for each ward is required to have better water quality as well as encourage social and economical activities along these ponds. The prescribed recommendations are as followings:

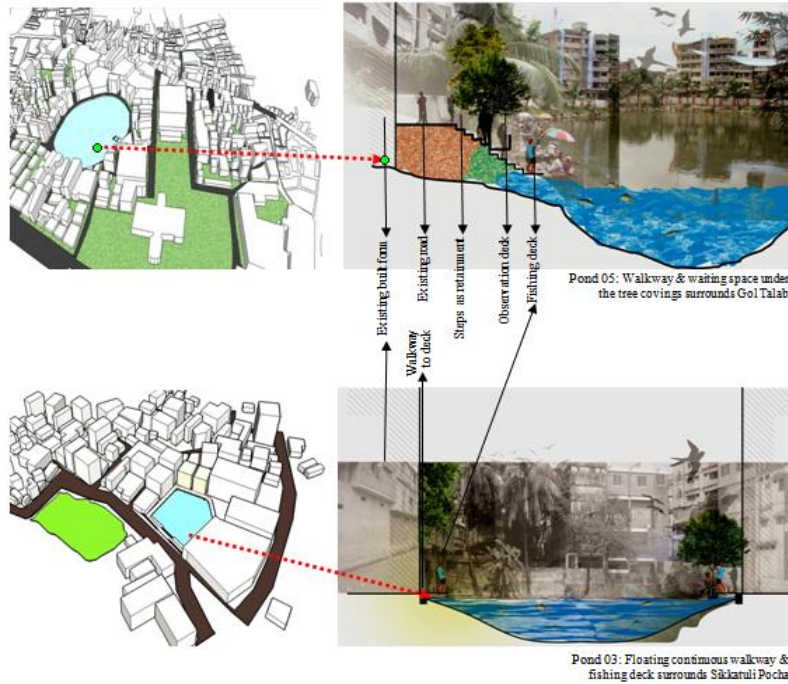


Figure 10: Regenerative design opportunities along Gol Talab and Sikkatuli Pocha Pukur to improve communal interactions

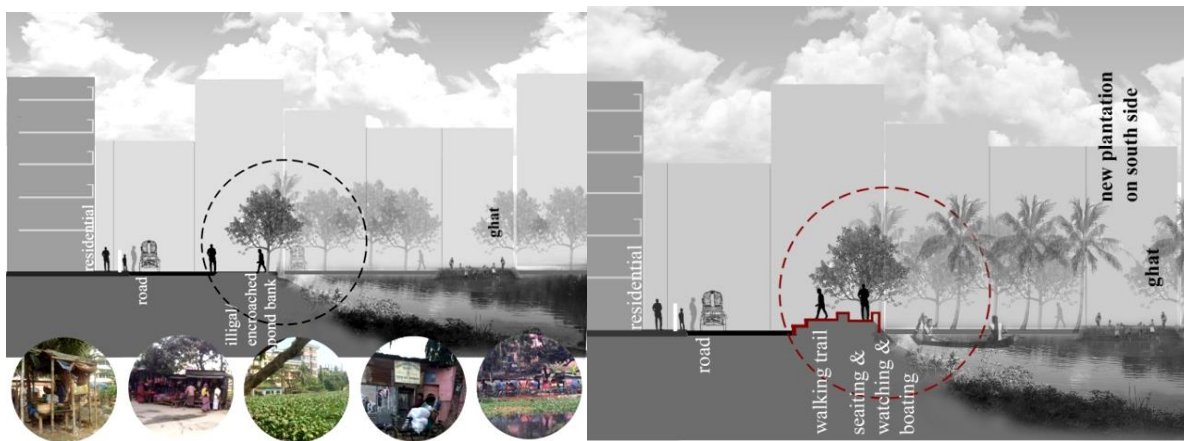


Figure 11a & 11b: Existing physical environment around DIT Pond proposed ideas to regenerate activities around DIT Pond

(a) Restoration and conservation of degraded small neighborhood ponds

Local people should be encouraged to preserve their ponds for water supply and environmental purposes and discouraged to not o filled up the ponds. Their participatory action can create huge impact on restoration and conservation of such ponds that is evident from the Bangshal pond which is exceptionally well maintained by the Bangshal Boro Masjid committee.

(b) Guidelines for transformation of existing ponds to sustainable ponds

- Water aeration which will increase the oxygen saturation of water.
- Introduce Fish cultivation for economical sustainability
- Enhance the community garden with small market facilities
- Overabundance of aquatic vegetation such as algae, water hyacinth should be controlled.
- To combat this deadly loss of dissolved oxygen, pond owners often turn to aeration.
- Moderate plant (algae, moss or water grass, water lily, smart weed, arrowhead etc.) growth is essential to water bodies for oxygen, food and cover for fish and other aquatic organisms.
- Boiling Potassium-Di-Chromate should imply for reducing COD level up to zero.

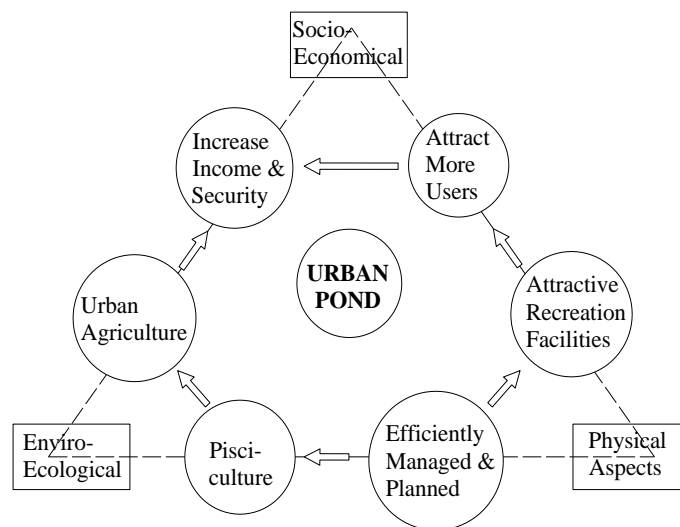


Figure 12: Sustainable Urban ponds unites ecological, economical and physical aspects

(c) The effective pond landscape includes the pond and its immediate catchment

- Enhance the community gathering by promoting walkway, cycle paths, sitting
- Create a place for people for watching bird and wildlife, for fishing, and other outdoor activities, such as swimming, if the pond is large enough, it can be explored by boating also (Figure 12).
- Implement sustainable landscape management strategies is an effective way to reduce the number of potential
- pollutants found on a landscape site by removing animal waste from ,controlling these inputs at the source, soil testing for intelligent fertilizer use, using phosphorus-free detergents to keep nearby ponds healthy.

(d) Evaluation of carrying capacity of old Dhaka ponds

- Biological carrying capacity: the capability of ponds to sustain certain activities before the degradation of water quality or impacts to aquatic life occurs.
- Social carrying capacity: the maximum combinations and intensities of human uses without unacceptable diminishment of people's enjoyment of the lake due to the presence and activities of other users.
- Physical carrying capacity: the maximum intensity of human use that a pond can accommodate.

(e) Implementation of regularity framework & policies

- National Water Management Plan, 2004
- Bangladesh Water Development Board Act 2000
- Urban Water Body Protection Law 2001.
- Irrigation Water Rate Ordinance 1983
- National Water Policy, 1999
- Bangladesh Environment Protection Act 1995
- Water Resources Planning Act 1992

• Playground, Open Space, Park and Natural Water Reservoir Conservation Act 2000
 'Natural wetland' means- the place declared as the flood flowing land as River, canal, beel, pond, stream, fountain indicated in master plan by the government gazette or government and flowing water and the land which conserve the rain water should be included here. Filling up of any water body including ponds is a recognizable offence regarding Playground, Open Space, Park and Natural Water Body Protection Act 2000. According to the law, an accused can be sentenced to either five years of imprisonment or a fine of Tk50,000, or both, if found guilty of grabbing any water body.

(f) Progressive evolution of Dhaka's landscape through City development program

Dhaka North City Corporation (DNCC) has taken 'Modernization, Development and Greening of Open Places' project at a cost of Tk. 280 crore and started work on 26 parks and playgrounds whereas Dhaka South City Corporation (DSCC) is also developing 31 parks and fields under the 'Jol Sobuje Dhaka' at a cost of around Tk. 200 crore for healthy development and refreshment of city dwellers, particularly for young. For maintenance, they are preparing to make a co-management system comprising local people and DSCC staff and adding plan to make ponds beside the parks which would make the area more beautiful and thereby take a step closer to make Dhaka city covered with water and green. 63 ponds are found in the maps of undivided Dhaka City Corporation (DCC) in its 28 wards out of 90. Therefore It is important to bring neglected water bodies under such initiative by creating relation between infrastructure, landscape and settlements to enrich the physical environment of an area in the need of the residents to enjoy the water by designing a system which will include urban agriculture, productive park as well as reinforcing community participation among local users and transforming these stagnant small ponds as an area of business, culture and leisure.

CONCLUSION

Water Bodies in Dhaka need to be revived and integrated with city fabric to make city sustainable and liveable. Implementation of laws and proposed planning decisions are also urgently needed to save the city. The co-ordination between assigned government authorities for these ponds and private organizations should be addressed to overcome this alarming situation which will help to enhance the sustainability of the existing ponds throughout Dhaka. Moreover, the coordination of local people with the improvement projects and empowerment of local bodies are also urged. Greater environmental as well as socio-economic success or advantages

from these neighborhood ponds can be achieved through Regenerative design opportunities and ecological understanding (habitat patterns) with cultural archetypes. If they are not assessed, revived and managed properly, they can turn into a liability.

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Where will our children go? A Study on the Impact of Children's Day Care Services on Working Parents

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Abstract

Working parents in Bangladesh are facing tremendous challenges to be self-dependent both socially and economically in addition to raise and to educate their children in a sound and secure way. Regarding the issue, caring for the children has been appeared as a vital social demand due to the increasing number of working parent's attachments to a variety of economic and social activities which displays timely Day Care service requirements. To find out the present condition of the daycare centres in Bangladesh and to know the impact of daycare centres on working parents in Dhaka city, a research has been carried out in Dhaka city based on qualitative data. In this rigorous process, data has been gathered from 30 respondents, which includes working parents who have babies, experts, owners of Day Care service centre, and staff. The study found that almost all the respondents are satisfied with the services are providing by the private sector's daycare centres and the working parents who keep their babies in Daycare service centre, they can continue their work and job unworriedly by keeping their babies in Day Care Centres. Both father and mother are contributing to their family, their standard of living is increasing, and economically working parents are getting solvent. Findings revealed that the enhancement of working parents creates the demand of healthy daycare centres exponentially. The endorsement has been made to augment the services provided by these daycare centres with the aid of proper amenities. Lastly, these types of services can play a significant role in promoting a suitable, healthy, and secure childhood environment for our children, and even it can be the essential stakeholder of Sustainable Development if it is flourished and patronized properly.

Keywords: Children, Childhood, Development, Daycare, Family, Working Parents.

Introduction

The increasing literacy rate has augmented the rate of women's participation at the workplace being engaged in various professions. This situation forces working mothers to be separated from their young children that creates anxiety among them about their taking care. It becomes more difficult when both partners are working parents and they do not have options of keeping their elderly parents with them (Karim, 2019a). Moreover, traditional system of keeping maidservants has been in differently identified with the scarcity of women because their engagement in structured unskilled labour market like readymade garments. The total situation forcefully permits working mothers to accept the daycare centres as the best solution. They accept the system for their children during the working period. Daycare centre refers to in which the kids are being cared for all through the absence of their parents, and it can start from an early age until the child is old enough to care for him/herself. It is found that many countries have laws that it is illegal to leave children who are underage and unsupervised without the presence of an

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adult. To attain a children's psychological and intellectual development, a parent must ensure stabilized and high-quality surroundings. There are three types of non-parental child care that parents can look into; whether it is a family member, a friend, or a daycare setting, the most important factors are which non-parental child care would be the best for their children's development (Non parental child care and working parents, 2018)

As the young children infants in particular are separated from mothers for a quite long time when the need of mother's care is very crucial and urgent, mothers feel psychological pressure that produces guilt, worrisome about child's growth. Tension between childrearing and working at office is primarily minimized, the daycare system in Bangladesh has not been much popularized and practiced. Nevertheless, the scenario is found continuously changing and the number of daycare centres is increasing in Bangladesh because of organisational involvements from both public and private sector. The study aims at measuring the impacts of daycare centres on working parents in capital city and finding out problems faced by the benefit takers and the centres.

The purpose of this study is to understand the effects of the children's daycare services on working parents in Dhaka city. This study has been designed to explore answers of critical questions like; What is the current condition of daycare centres in Bangladesh? Moreover, what services do the private sector daycare centres provide for the working parents in Bangladesh? What are the impacts of daycare centres on working parents?

Literature Review

In conducting research, reviewing the literature is significant to know the previous facts and findings about the research problem. It helps to draw the understanding and perceptions of various research's to establish the logicity of the taken research alongside some terms of the definitions need to be understood in order to grab the research concept properly. Which helps to smooth the complicated research's terms to the researchers and to readers also for developing the study properly.

Terms of the definition:

Working Parents: A working parent refers to a parent who is accountable to raise his/her children going parallel with his/her career. A working parent is a father or a mother or both who are engaged in work life, alongside their duties as a childcare provider. There are specific structures like single father, a single mother, and also married parents who dual-earner of the family. A number of family structures are found within families, but it does not stick to single, working mothers or single, working fathers. There are also married parents who are dual-earners, in which both parents provide income (Williams et al. 2012).

Daycare: Daycare refers to the group of young children that include toddlers, preschoolers and school-aged children. Care provided in their homes, or in the home of relative or care giver or a place where the service is available (Health of Children, 2013). Daycare, by definition, is usually run at daytime at a place outside of their homes for taking care of their preschool children, the elderly, and those having chronic disabilities of working parents. Thus, daycare expands its horizon of definition as it appears to be a beneficial facility of caring disabled or dependents children and adults. It is an alternative services provided to the people who need it. Typically it is two kinds of daycares which are characterized as adult daycare centre and childcare centres. The

adult daycare centre is meant for daycare service to the adults which is specialized non-residential facility provided for the elderly and physically challenged people. Researchers found that these are mostly run 10-12 per day with a provisions of meals, recreational facilities, general supervision and medication. This type of daycare is operated as social and healthcare model. Shonkoff et al. (2000) mentioned that adult daycare centers offer social, recreational, and health-related services to individuals in a protective setting who cannot be left alone during the day because of health care and social need, confusion, or disability.

Child Day care centres: Child care, alternatively known as daycare, is the place where children are taken care of during day by someone other than family members. This system is usually provided by the organisation or government with a broader objective of both better nourishment of young children and better services from the working mother without the mental agony of their children. Thus, the daycare runs daylong as long as the office time practiced in a country. (Leach et al. (2008) pointed out service provided by someone outside of the legal guardians. He explained daycare centre as the care of a child for the day by someone aside from the child's legal guardians, typically executed by a person external to the child's instantaneous family. Here comes the explanation of legal guardian. A legal guardian is entrusted person with the legal authority for taking care one's personal property and interest. Apparently, there are three situations where this term can be used: guardianship for a disabled senior (due to old age or illness), protection for a minor, and guardianship for developmentally debilitated grownups (Larson & Aaron 2016).

Child development: Child development refers back to the biological, psychological, and emotional modifications that arise in people between the start and the give up of adolescence, as the person progresses from dependency to increasing autonomy (Smith et al. 2011). It is a continuous system with a foreseeable collection but having a completely unique path for each child. It does no longer develop at the same proportion and the preceding sorts of development torment every stage. Some age-related development periods and examples of defined intervals are newborn (ages 0–4 weeks); infant (ages four weeks – 1 year); toddler (ages 1–3 years); preschooler (ages 4–6 years); school-aged child (ages 6–13 years); adolescent (ages 13–19) (Kail 2011). However, organizations like Zero to Three and the World Association for Infant Mental Health use the term infant as a broad category, including children from birth to age 3.

Early childhood education: Early childhood training is an important branch of education theory relating to teaching the young children of maximum eight years either formally or informally (Powel 1989). As the daycare is concern where child's mother cannot give time for caring, early childhood is an important issue in this regard. Early childhood training usually denotes the schooling of children from birth to age two. Researchers identified in recent time that early childhood schooling has ended up an everyday public coverage issue, as municipal, state, and federal lawmakers do not forget investment for pre-school (Barnett and Frede 2010). Parents can pick two types of child care alternatives. Either they can go for center-based care (inclusive of crèches, daycare, and pre-schools) or home-based care, also referred to as nanny or family daycare.

Licensed home daycare or family childcare: Licensed home daycare is maintained as family child care. Basically, licensed and regulated providers take-care children in their homes. This type of daycare center is not so much large bestowed upon with safety and security like home. It has several advantages, such as lower expenses, spending more hours on child care, flexibility. Working parents seem it very satisfied if children would be nurtured with special care (Licensed Home Day Care n. d.).

In-home care: Under the in-home care, a child/toddler is nursed inside the home of their own or in the home of caregivers. Here, exposure to outside kids or ailments is restricted under the caregivers' supervision. These in-home services are being furnished by way of nannies, au pairs, or associates and family (Custom University n. d.). The child forms a close relation or bond with the caregivers and enjoys the interface or connection he/she has made with the care provides under in-home care.

Informal care: Informal care denotes childcare where family members are involved in the system like grandparents and siblings. It is mostly an inexpensive form of childcare services preferred by relatively poor. A variety of reasons exist behind the utilization of informal daycare by the parents. Usually, informal childcare is for those families with insufficient funds to spend for their children to be kept in quality daycare service. The study revealed that a group of working people with special characteristics opts to adopt the childcare facility. They include low income earning households, working people of utilizing long working hours, having rigid schedule that forced them to accept this system for their children. Several studies shown that children having the quality daycare facility are likely to have future success which means daycare has a long term positive effect on children mental development (Rochman 2012). Furthermore, individuals who spent their younger years in a high-quality setting had more natural transitions to elementary school and beyond. Traditionally, parents were found more involved in children's primary and secondary school programs, those with their children stayed in daycare. Faber (2017) found that children who attended a prominent daycare were more likely to move on to college, have a job, and shelve having children. It has a clear link with the demographic transition and social structure. Women's involvement in the paid labour force has increasingly been observed in the past 30 years resulting in dual-earner families replacing traditional father- provider families (Bonny et al. 1999; Karim, 2019b). It is noted that increase of women's participation in the labour market, including Bangladesh has fostered the growth of daycare system both in private and public sectors. Thus, the development of children's physical and mental state has been an important issue to emphasize. Vandell (2010) recognized that standardized cognitive score, language skills, task completion and preparation for schools have found improved in preschoolers who are educated with better educated teachers. This findings contradicts with the children nourished in childcare. However, it has become a mandatory option for a good number of mothers with an increasing rate in Bangladesh because of the growth of nuclear family, career-consciousness and better outward career benefits. These social and individual issues greatly impacted and forced to adopt the daycare facility (Wasia 2008). In addition, this facility is strengthened by the medical care and feeding during the daytime used as an alternative to hospitalization (Ashraf 2007). The Government currently runs 32-day care centres across the country, including seven centres opened in July, 2016. The 1995 labor laws urge the organizations to set up daycare centres for working mothers' babies if they at least 25 women. However, the Government is planning to lower the number to 20 (Islam and Khan 2015). In the United States, as the percentage of women in the workforce has grown over time — in 1974, it was just 47%, and by 20017 was nearly 71% (Islam and Khan 2015). As a result, the demand for affordable childcare options has gained vast media and public attention. Making daycare arrangements is now one of the primary economic and logistical concerns for working parents, with profound career implications, especially for women. According to the Bureau of Labor Statistics, 28% of mothers with young children, worked in 1975, with that more than doubling to 60% by 2013. Over the same period, the number of daycare industry employees increased by nearly 250%. According to Feldman (2015), it indicates that parental satisfaction with daycare is a significant predictor of parental stress and that low quality of care moderates the relation between low family income and high parental stress. The results underline the importance of daycare quality and of parental satisfaction in regulated daycare and the

significance of interventions designed to enhance quality in daycare settings where levels of quality are low. These results are particularly important in a context where a regulated nonprofit childcare services network is mostly funded by the government to ensure equal opportunities for all (Bigras et al. 2012)

The ABS conducted a survey and found that a significant amount of time used by the young children in childcare comparing with the time spent in school. It shows that 14% children had 12-hour long daycare followed by 8% children 8-hour-car (Baxter 2015). The reasons of choosing childcare centre varies among the parents which are usually location, cost, availability and staff of the centres. The prefer whether the location of daycare is close to home or work, the cost includes charge; these are available day time and even until parents reaching from workplace, the qualities of staff to suitably supervise children. The following diagram explains the factors that led to working mothers in terms of choosing the daycare which also dictates them to decide on their career as well:

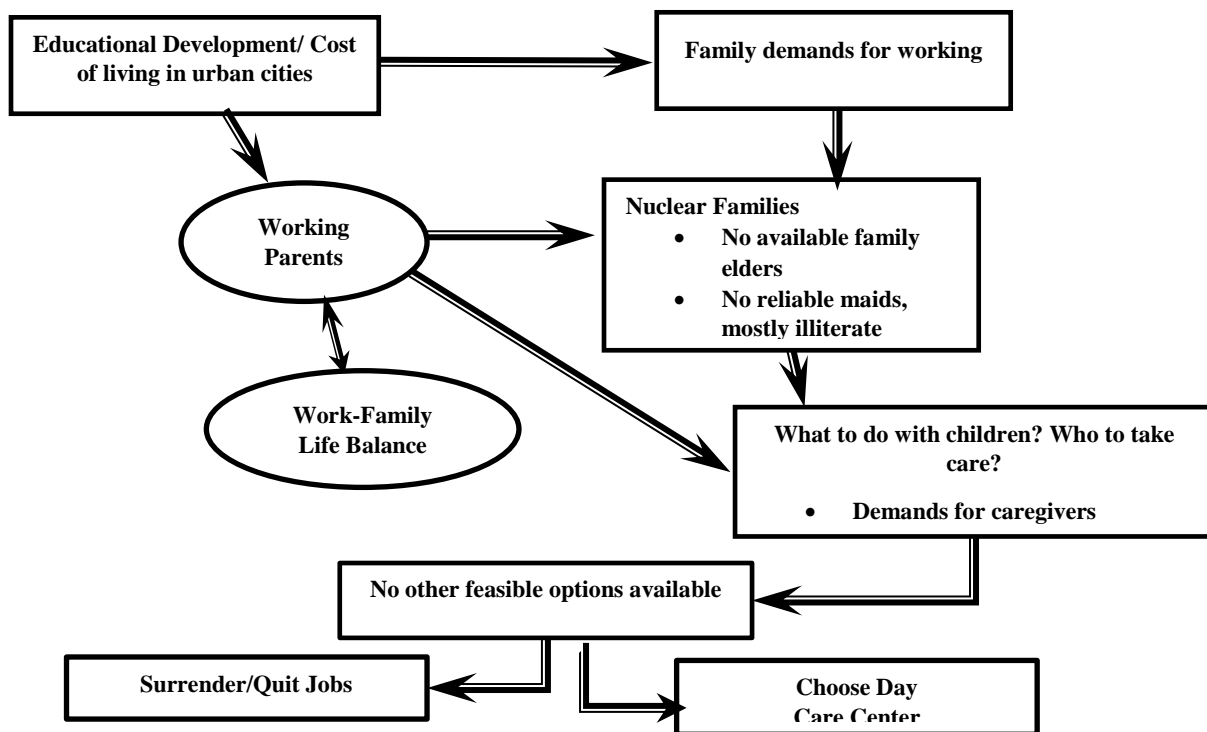


Figure-1: Factors Behind Working Parents and Child Day Care Centers (Developed by authors based on field study)

Bangladesh scenario

In Bangladesh, daycare centers did not establish overnight. It took a long time to establish and gaining popularity of daycare centers in Bangladesh. Following is the phase to show the development of the daycare center in Bangladesh. Traditionally Bangladesh society follows a culture of extended family that includes father, mother, grandfather, grandmothers, aunts, uncles, cousins and even distance cousins. This extended family culture spared no scope of thinking

about children to leave in other's place for their caring. This culture automatically works as the care giver and mothers of young children could easily utilize their time for productive purposes. As the globalization hits, development elevates and urbanization expands, the need for child caring has emerged. Apart from this increased number of women in the work place and dual earner concept has forced to find the system of caring children. Now-a-days, it is becoming a popular system among the working mothers particularly in the city area like Dhaka.

Women in Bangladesh are a long way behind than men in outside activities. But for the time being, with the spread of education, many women are taking part in jobs which also includes reputed jobs in the society. As a result of families becoming nuclear over time, it is difficult to run joint families in the cities. Now, the problem arises when these working women become mothers and do not have scope of taking care of their infants. Although, government has introduced six-month maternity leave, after that they are still young and require mother's care. This situation forced them to adopt the facility of daycare. Besides, government and private organisation are providing the facility for children eventually for the organisations in order to get the better service from mother.

Not everyone in Bangladesh welcomes daycare centres for babies. Daycare centres in our country are still seen as the last resort when working parents have absolutely no other option available. However, with the emergence of more and more nuclear families, and with the busyness of city life seeping into every aspect of our lives, it will not be long before the popularity of the daycare centers shifts to top gear. However, still, we are unaware of the time of picking this trend up. Prof. A.H. Mohammad Feroz, former Director at National Mental Health Institute, says: "Daycare centers are good for working mothers. Nevertheless, they are bad for babies." (Care for Kids 2014) "Such children can suffer from an inferiority complex," he observes. Mohammad Shawkat Ali, an official in charge of the daycare centre project at Women Affairs Ministry, disagrees with the mental health experts. "This is a great advantage for working mothers. They can leave their children in the care of dependable people and work with fewer worries." The knowledge gap of this study, according to the past researches, is there is less focus on the parent's impact on the daycare centres.

Study method

This is an empirical study. The study, by its nature, gathered in-depth information from the study field. This study is based on social context and developed through both primary and secondary data. The approach of the study was qualitative in nature and conducted through various data collection methods like case study, interview, observation and document analysis. The study location was daycare centres in Dhaka city, focusing a Case Study approach to incorporate data gathering strategies like document collection, surveys, participant or non-participant observation, interviewing. Respondents were working parents who send their children to daycare centres, authority of daycare centres, and experts. Sample size was 30 numbers, and sampling method followed using purposively and snowball technique. Secondary data was collected from books, research reports, Journals, Newspapers and relevant studies.

Study findings & analysis:

Daycare centres emphasized on children of working mothers in Dhaka city, both from public and private sectors where latter one is much noted because of class. The need for a well-knack childcare becomes inevitable. Age of children is usually from six months to six year. The cost of daycare varies based on the time and duration and the ownership of the centre. It is found that middle class women do not feel much comfortable to use daycare facility because of the poor service. Researchers findings approve the notion of unwillingness of middle class working women because of quality childcare centre with improved amenities. This is discouraging although government are increasing the number with the provisions in the city areas and private organisations are joining together. Apart from the above mentioned key reasons, poor nursing and unaccepted behaviour of maids working in the daycare centre is deemed as important cause (Islam & Khan 2015). Researcher comments,

"If a child is kept in the care of a quality daycare centre instead of a maid, he or she will stay much better both physically and mentally."

The notion mentioned above is surprising as the age of children keeping in the centre is the age of growing and mental development who need a pleasant environment with their cohorts. Keeping children near to mom's workplace brings the happiness to working mother feeling that they are close to them. It is also important for children so that they can get their mother in case of any emergency. Considering the both mother's mental support and children's wellbeing, daycare centres are set near to workplaces. This situation helps maintain auto supervision. Department of Women and Children Affairs, the advocating this system, identified that daycare centre has positive effect on working women and thus brings welfare of their kids too. Here comes the issue of human rights as well where the Human Rights Implementation Organization has pointed out the establishment of daycare centre in either public or private organisations as a mandatory option in order for betterment of mothers and children. Thus, the initiatives are popularized among the parents and organisation to use the talents of working mothers.

The necessity of daycare centre seems quite significant which is exponentially increasing. Apparently, apparels industries are the key areas where establishing daycare centres are felt necessity. There are some organisations too facing the difficulty with working women having young children. It means to understand the problem and handle it well. Considering the contribution of women folk, setting up and maintaining quality of daycare centres are demanded so that working mother feel comfortable and encouraged to work with full devotion without agony of their children. It is noted that daycare centres are located inside the Bangladesh Secretariat, Khilgoan, Mirpur and Mohakhali area, plus in divisional towns for both middle class and lower middle class people. The nature of jobs, lack of support from relatives for taking care of children create the situation for working mothers of private sectors to utilize daycare centres. This scenario prevails among those areas where garment industries are located including Narayanganj and the industries which are women-labour intensive.

The study revealed that BRAC bank is the only bank having the facility provided to their working mothers whereas Bangladesh Bank enforced policies to make arrangement of this facility. In this regard, Bangladesh bank issue a circular on 20th March of 2013 with an immediate effect in each bank. It is mentionable here that bank are treated as the organisations of using long working hour which means children of bank workers suffer a lot. Bangladesh has great contribution, Deputy Governor mentioned:

"We have repeatedly requested the other banks to set up similar centres under their CSR (Corporate Social Responsibility) program, but we are yet to get any response."

At the Bangladesh Bank, the Bank bears 65 percent of the cost. Furthermore, the center has residential facilities for 30 children. There are four maids, three teachers, and two cooks for their welfare. Every mother has to pay a monthly fee of Taka one thousand and seven hundred for each child. Hosne Ara of Bangladesh Bank says that because of the daycare centers, she can work peacefully.

"Besides, I can check on the child, whenever necessary. At the end of the day, I can pick her up and go home."

Besides, there are many other children there, where they receive their first lesson in socialization. It is very imperative to rear a child with utmost care in order to ensure proper development of every aspect of a child. Many women have found to surrender their jobs as they do not find any appropriate caregivers for their children. This is a hindrance to the progress of women as well as the economy of the country, which is a national loss and should be treated as such. Furthermore, daycare centres should be set up across the country to cope with it.

In Bangladesh, the number of working mothers, dual earners are increasing with the faster speed with the increasing number of educated women. The working environment and life of working people are encircled by the number issues which are also modified time to time in line with the external and internal demand. Once they are in the service and family is formed, adopting childing and their rearing and caring becomes important issue. Thus, it creates the necessity of setting daycare centres in workplace in Bangladesh, Daycare centres, where working mothers can leave their babies on payment, are coming up - both in government and private sectors. A significant number of this labor force is working in the garment sector, the country's highest foreign currency earner. Over 90 percent of the garment workers are women. There is a massive prospect for working women in cities. Many of the working women have small children. They have to rely on housemaids to look after their kids while they are away. Therefore, it is necessary to set up an adequate number of quality daycare centres both at government and private levels so that women can get to work without concern for their kids. Unfortunately, this matter has got little attention. As per the National Labor Act 2006, there should be a daycare centre for children in an organization where 40 women work. However, few organizations do have any daycare centre. Then again, most of the centres already established at government and private levels are based in capital Dhaka.

The study found that most of the garment factories do not have the daycare facility although a considerable number of women are employed in this sector. In June 2007, an NGO had surveyed 55 offices and found daycare centers only in 15 of them. Working women barely feel it encouraged to keep their kids in the existing daycare centres, and many of them are being compelled to give up their jobs to take care of their children. According to psychologists, a child needs a mother's company more than dad for his or her proper mental growth. If there is a daycare centre in one's workplace, it is good for both the child and mother, as the mother gets mental peace for being close to the kid and can be more attentive to her work. This also makes the child happy. The kids who are taken care of by maids develop various problems Human Rights Implementation Organization has pointed out establishing daycare centres in every government, and private organization will have to be made mandatory for protecting the interests of mothers and children. So, initiatives need to be taken to resolve the problem to make the best

use of women's potentials and talents in nation-building activities. During the survey, 15 parents were asked from respondents to have answers for some specific questions. This study identified that 46.66% are taking services for the last 6-12 months; at the same time, only 33.33% of customers are taking services for the last 2-3 years. Moreover, the number of daycare centres rises, which clearly indicates the growth of the daycare centre.

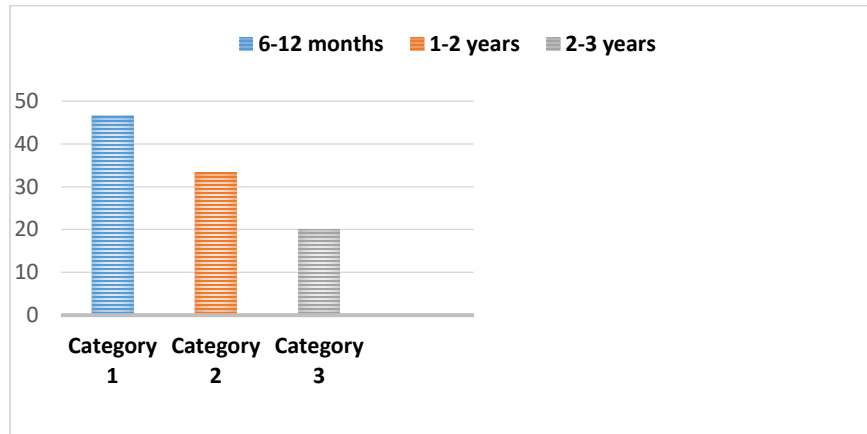


Figure 2. Duration of taking services from daycare centers

Again looking at the age of the children revealed that mostly 3+ years children are kept in these daycare centers (60%)

Table- 1: Age distribution of children kept in daycare centers

Age of the children	Frequency	Percentage
Between 1 and 2 years	6	20
Between 3 and 4 years	18	60
4+ years	6	20
Total	30	100

There are some reasons for utilizing daycare centres such as 1) no one in their home to take care of the children 2) lack of trustworthiness on their maids and 3) daycare centres provide better treatment. About 50% respondents agreed with the first one where 30% working mother are with the second one and only 15% are with the treatment purpose.

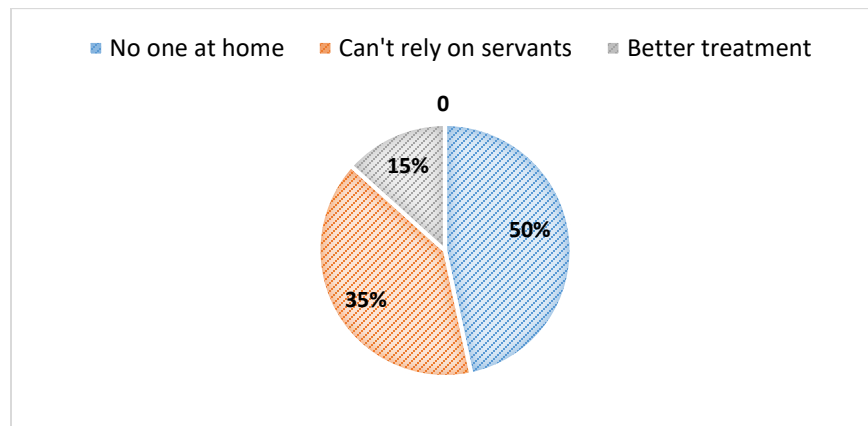


Figure 3. Reason for keeping children in daycare

Every parent is conscious of his/her child's developmental growth. Pre-school age is the best time for the development of children. Everyone tries to give his/her child excellent care. It is easy to look after the child at home. Then parents can ensure if their children are getting proper care or not. They can notice and correct every single activity of their children. Nevertheless, for the working parents, who have to send their children to daycare centers, it is not possible all the time to check if their children's developmental growth is going on the right track or not. Most of the parents agreed on a point that a well-organized, careful daycare center always tries to give the best care to the children. While talking with the parents who have been receiving services from the daycare centers, it was found that almost all of them are satisfied with their children's growth. They said that they might not send their children if they saw adverse effects on their developmental growth. In order to know the experiences and the impact of daycare centers on working parents in Dhaka city, quite a few questions were asked regarding their expectations, getting services, their satisfaction level, etc. When asked what attracted them mostly to pick daycare services was the security provided by the centers. Some of them also said about educational activities, recreational facilities, and healthful meals. Only a few said that they had chosen their daycare center for a good reputation.

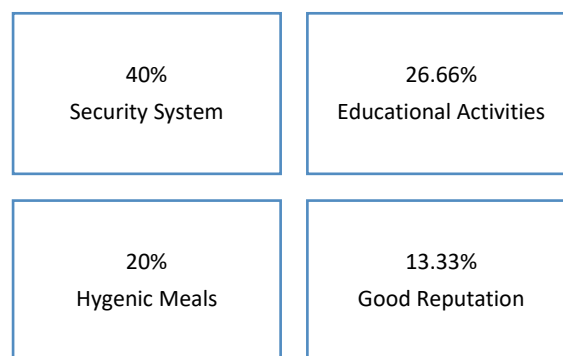


Figure 4. Services attracted to choose them

Service receivers were also asked about the provided meals, educational facilities, developmental activities, cost, and so on. Most of them are satisfied with the services provided by the daycare centers. It is evident that the daycare centers are trying to meet the consumer's satisfaction level to keep their reputation reasonable.

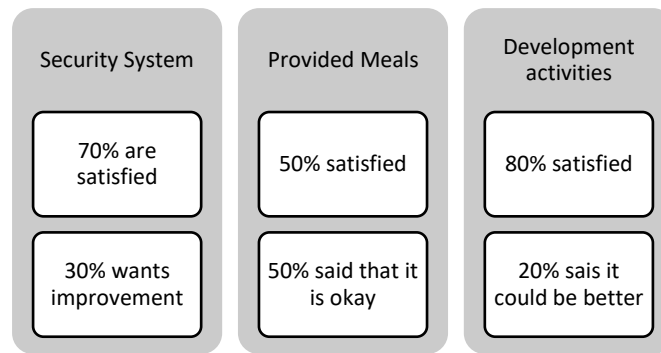


Figure 5. Satisfaction level of respondents regarding provided services in daycare

Respondents parents were asked that by taking the day care services, is their economic state of the family improved or not? All respondents replied that in past there was only an earner for their family. Most of the time they had to struggle to meet the needs of the family. Now both mothers and fathers of the babies have been working and earning money. That is why economic betterment has reached to their family alongside they are unworriedly working by keeping their babies in a day care center. For certain, daycare centers of Dhaka city have positive impacts on the parents. Maybe the private sector is doing good as they charge much money too. On the contrary, the government sector daycare centers might not be as good as the private sectors, according to the journals and other research papers. The study was conducted mainly to understand the experience and impact of daycare centers on working parents in Dhaka city and found that the result positive. Yes, there are a few negative sides that are obvious. Daycare centers cannot meet all the expectations of the parents regarding their children. Nevertheless, the respondents accept the limitations and great-full to the daycare center's authority for taking care of their children during their work. This study also reveals that the condition of the daycare center in Bangladesh is getting better day by day. Services provided by the centers are satisfactory in the private sector. However, the public sector needs to be more developed to meet customer's expectations.

Conclusion and recommendation

Childcare at the early stage brings numerous benefits that serves as better outcome for his whole life and contribute their whole life. The base of child development is seemed the early child care that helps children to grow mentally and physically fit person. As working mothers keep them busy with their office and hardly get time to engage fully with their children, daycare becomes an option for them. A daycare which has become an mandatory necessity for working mothers, is specialized arrangement for the infants for their pre-schooling, developing peer group learning development. More importantly, this framework serves as an extension of home care, although this can not treated as substitute to home care. The inbuilt framework gives the chance of being supervised by someone other than the parent or guardian that necessarily lacks of home care, the kind of parenting from a system. Although it can't be substitute to home caring provided by parents and grandmothers, grand mothers, the increasing number of women employment and dual earners, scarcity of maidservants, daycare system has been popular among the working parents particularly in cities. Aligning the necessity of the employment conditions, international demands, need for the society, government has taken initiatives which are still inadequate. The study suggests taking proper steps to implement the Labour Law 1995 in both structured and unstructured private organisations. In taking this steps government has a major role to materialize. Apart from the government's enforcement, organisations, irrespective of public and

private, should practice standard norms and abide by the rules relating to the family friendly policies so the benefits are enjoyed by the organisation and its employees, mothers in particular. Maintaining family friendly policies is the prime issue for growing happy babies and their development. It is also recommended that the existing daycare centers enter should also improve their services with ensuring security for toddlers, hygienic and healthy environment, pre-schooling facilities through trained nannies or employees.

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