# ADDRESSING COMMUNITY BASED PROBLEMS: EXPLORING THE ROLE OF CBO THROUGH PARTICIPATORY APPROACH

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#### **Abstract**

Urban and rural communities in a country are sometimes confronted with many problems which are well understood by the community residents itself. A Community Based Organization (CBO), in this regard, can play the major role to solve these problems by selfinitiative participatory approach. Community Based Organization (CBO) is such a non-profit institute which operates within a community to provide the local services and is usually run by the local people of that community. Rather depending on local/central government, the community itself can solve certain problems with the assistance of local people and CBOs. In such backdrop, this research was intended to unfold the role of CBO in improving the urban community through Participatory Reflection and Action (PRA) method. The study is based on an urban CBO of Lalbag Thana in South Dhaka, Bangladesh. This research was intended to identify the major problems, their causes and effects on the study area and possible solutions of those problems through active participation of both CBO and its people. Several PRA tools were employed to obtain the objectives. Sewerage and drainage problem, poor water quality and water supply, narrow and poor condition of access roads etc. were the major problems. Effective solutions came forth from the locality for solving those problems such as: provision of water extraction pump and reservoir, drain cover and street dustbins and enforcement of building bye-laws etc. Whilst having the potential, the CBO was found inadequate to implement the solutions due to lack of resource mobilization. However, success of this research is a clear indication that community improvement is possible through mobilization of CBO and ensuring public participation.

**Keywords:** PRA, CBO, community participation, community improvement

#### 1. Introduction:

A community can be defined as a group of people who shares an interest, a neighborhood or a common set of circumstances irrespective of the acknowledgement of the membership (Smithies and Webster, 1998). Development of these communities ensures a developed urban or rural area as a whole. However, this development cannot be sustainable unless people's participation is made central to the development process (Kumar, 2002). Economic Commission of Latin America (1973) considers participation as people's voluntary contribution in the public programs and their complete exclusion from the decision making process. Community Based Organization (CBO) is a non government, non profit organization that is driven by the active participation of community residents in all aspects of its existence

(NCBON, 2004). It can be registered or non registered and its functions are aimed to develop the community area by solving its planning related problems.

Usually national and local government bodies are responsible for an areas maintenance and development. Due to ponderous procedure of bureaucracy, belated aid from government makes the daily life of community people miserable. The cities of Bangladesh has the similar scenarion. The local community has to depend upon the local/central government authority for solving any kind of problems of the community. But many of these problems (like: insufficient water supply, poor road condition etc) can be solved by the local people themselves which does not require any expert's advice. Rather very effective solutions can be elicited from the community people themselves to solve the endemic problems. To institutionalise their participation, a CBO can be set up. Different studies, both in home and abroad, have shown the success of participatory approach in solving local problems. It was found that, PRA techniques have strengthened low income urban communities in UK, Sri Lanka, India and South Africa (McCracken and Narayan, 1998) for solving community problems. In Bangladesh, PRA tool was applied to find out the causes of the extinction of Jamdani Weavers community in Kajipur (Jamdani Weavers' Community, 2008). These paradigms concretize the fact that, effective sharing of participant's knowledge and experience can be achieved by applying various Participatory Reflection and Action (PRA) tools in the CBO. If all the CBOs try to manage their local planning related problems as such, then it will improve the national condition as a whole.

This paper is based on addressing the local planning related problems through community participation by applying various PRA tools on a local CBO of Dhaka city called *Lalbag* Society. The role of this CBO has been explored to understand the capacity of participatory approaches to serve and improve a community.

# 2. Study Area:

Dhaka, the capital city of Bangladesh, is going through a rapid development (Hussain, 2008; Enam and Choudhury, n.d.; Ahmed et al. 2009). Southern part of Dhaka has developed in an unplanned way (Mridha, 2008). Such slapdash developments have hindered the subsequent planned development process. Lalbag Society is a CBO located at the southern part of Dhaka city. At present there are 92 wards in Dhaka city (Haque et al., 2013) and study area belongs to ward number 26. The study area (Figure 1) is about 8400 sq.m which accommodates 1500 people. Population density is 722 persons/acre. There are about 85 to 90 households in the study area. Most of the high and middle income people are businessmen and service holders respectively. There are a few low income people who are street hawkers, mechanics, tailors and garments workers. Since 1968 the establishment of Lalbag fort or Aurangabad fort influenced the surrounding of Lalbag to grow as an urban area. Consequently many people started to live here making it a densely populated area. During reign of the British East India Company Lalbag was modernized under the British rule. Several educational institutes, public works and township were developed. Many hindu and biahri people lived in its surrounding who left the place after the end of the war in 1971. (Banglapedia, n.d.)



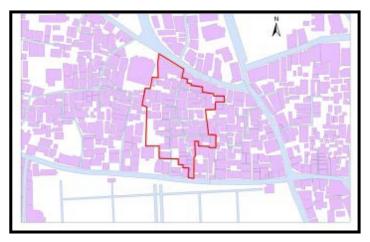


Figure 1: (a) Lalbag thana within Dhaka city; (b) Study area within Lalbag thana

Year	Event	Remarks Influenced by construction of Labag Kella			
1678	Birth of Lalhag area as a residential area				
1940	Presence of Police Baroque inside Lalbag area				
1947	Pakistan army also used this Police Baroque	Attracted Bihari people to live in this community.			
1947	Up to this period every house had 2 wells for water.	1 well served drinking purpose and 1 well served other purposes.			
1947	Forest of almost 2000-3000 trees.	Many fox and monkeys lived in this forest. Sometimes the monkeys came and took away people's clothes.			
1948	Beginning of construction of Pucca buildings	Introduction of Pipe water supply to the puoca households.     Introduction of Electricity supply to some of the houses.			
1948	Introduction of outdoor water supply	I water tap was established for public use.			
1962-1965	Westernized School, Nobokumar School and Azimpur School were established.	People of this community send their children to these local schools.			
1968	Non electric lamps or lanterns were used to lit the roads	These lights were manually operated.			
1948-1971	Local people used to do shopping from After establishme Chok Moulovibazar Moulovibazar Mellovibazar frequently used community.				

**Figure 2:** Time Line showing the history of *Lalbag* Society

# 2.1 Historical Background of Lalbag Society

Since the birth of *Lalbag* residential area, it has gone through many physical changes and encountered planning related problems. Local people came up with the idea of setting up a CBO to deal with the problems after the liberation war of 1971.

A time line has been prepared to investigate about the action of this CBO which is shown by Figure 2. An elderly person of the local area was interviewed to get the historical background and useful information regarding the activities of CBO. According to him, after the liberation war of 1971, an organization named '*Torun Shangho*' (Youth Club)' was set up. Although it was a sports club, it used to deal with community problems also. In 1991, first election of '*Torun Shangho*' was held and it officially started to function as an established organization. Since then, the chairperson along with the members used to call in a meeting and took decisions regarding community problems whenever they encountered any. In 1992, this CBO installed two gates to increase the safety of the community because at that period

the incident of robbery had increased in that locality. There have been many low income people in the locality who were unable to afford piped water supply in their household. To provide free water supply to these people two cost free outdoor water taps were established in 1997 by the initiaves of this CBO. In 2011, 'Torun Shongho' initiated the collection of garbage from the locality in order to keep the environment clean and hygienic. In 2012, the name of 'Torun Shongho' was changed to 'Lalbag Society'. Since then this CBO has become the official organization to solve various planning related problems of this locality. On March 2012 it installed street light at some important sections of the area to add to the safety factor of the area.

## 2.2 Physical and social features of the area:

Physical characteristics of the study area were comprehended by performing 'Transect Walk'. Depending on the shape and size, two transect paths were chosen to traverse the study area to observe the topography, buildings characteristics, roads and utility facilities. Those Transact paths were at North-South direction (360 feet) and East-West direction (213 feet). Along these directions the sections and elevations are shown in Figure 3.

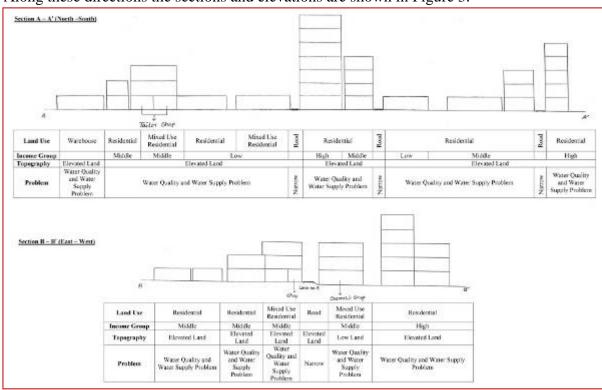
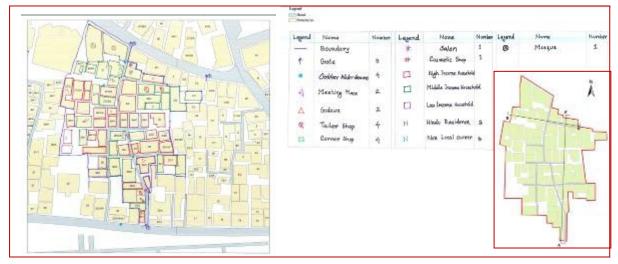


Figure 3: Section, elevation and other information along Transact paths

Social and physical resources of the study area were also examined as manifested by Figure 4. The study area can be characterized as a mixed use residential area. Most of the buildings' ground floor is used as grocery shops, corner shops, salons, tailor shops, cosmetic shops, and warehouses where the upper floors are used for residential purposes. Most of the buildings range from 3 to 6 stories. Each building was categorized under three broad classes



**Figure 4**: Social and resource map of the study area such as- high income households, low income households, middle income households. There is only one mosque in the entire study area. It serves also as a community place where people socialize with each other and also it is the meeting place of the *Lalbag* CBO. There are other two places where meeting of *Lalbag* Society is held. Another important resource of this area is the office of ward commissioner which is not inside the study area, but it is located just beside the area along the Ajimpur road adjacent to the Mosque.

# 3. Methodology:

Every locality has some major and secondary problems which should be carefully identified and prioritized through participation of local people. To address the major problems of *Lalbag* society various participatory tools such as pair-wise ranking method, cause-effect diagram, venn-diagram, seasonal and spatial diagram were applied. To determine the possible solutions to the identified problems Focus Group Discussion (FGD) and Key Informant Interview (KII) were carried out. First of all, a group was formed including six to eight persons from the community. The purpose of every tool was explained to the people. They were also informed about the process of preparing the maps or any diagrams. Then they were asked to depict the major problems of the community and to find the respective solutions to those problems. Finally, to discover local people's perception about their dream society, a Dream Map was prepared based on their suggestions following the same method.

#### 4. Identified problems and their effects on the locality:

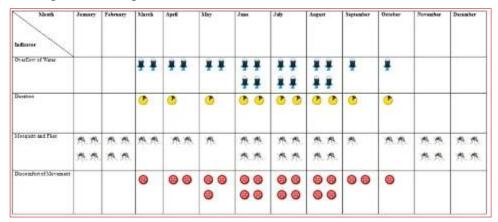
From the pair-wise ranking procedure, five problems were identified from which three top problems were further analyzed. Drainage and sewerage was the top priority, second problem was water supply and quality problem and the third one was narrow and poor condition of access roads (Table 1).

Table 1: Output from the pair-wise ranking of problems in Lalbag Society

Problem	Cultural Degeneration(C)	Water Quality and Water Supply (W)	Lack of Security (S)	Sewerage and Drainage (S <sub>w</sub> )	Narrow Road and Poor Road Condition (N)	Frequency	Rank
Cultural Degeneration(C)	X	W	С	$S_{ m w}$	N	1	4
Water Quality and Water Supply(W)	X	X	W	$S_{ m w}$	W	3	2
Lack of Security(S)	X	X	X	$S_{ m w}$	N	0	5
$\begin{array}{cc} Sewerage & and \\ Drainage(S_w) & \end{array}$	X	X	X	X	$S_{ m w}$	4	1
Narrow Road and Poor Road Condition (N)	X	X	X	X	X	2	3

## 4.1 Sewerage and drainage problem:

In order to have an understanding over the spatial and seasonal extent of the problems, spatial and seasonal diagram was drawn respectively. For each problem, different indicators were used to depict the true picture.



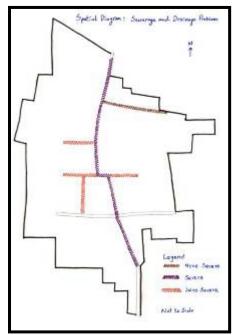


Figure 6: Spatial Diagram of sewerage and drainage problem of Lalbag Society

Figure 5 shows that, sewerage and drainage problem of *Lalbag* society varies in different months in case of different indicators like overflow of water, duration, mosquito and flies and discomfort of movement. Mainly drain water overflows during the rainy season and stays for a long time (Figure 6). Consequently overflowed water creates discomfort in movement and increase the disturbance of mosquitoes and flies

Cause-effect diagram (Figure 7) shows that the old sewer and drainage lines, constructed long years ago, have failed to address the growing needs of the locality. Besides, the sewerage lines which were originally earthen are now mostly broken. Consequently, the sweres of the houses have been connected to the open drain lines. In addition, local people throw the wastes in the open drain due to lack of concern. Overflow of these drains makes movement difficult inside the society and thereby causes odor and air pollution.

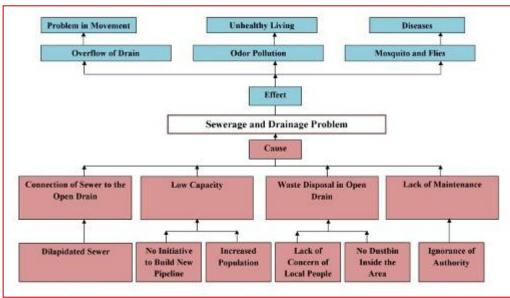


Figure 7: Cause effect relationship of sewerage and drainage problem

Besides, open drain and sewage is the breeding ground of mosquitoes and flies which give rise to diseases like Malaria, Dengue etc. Lastly, no initiative has been taken to upgrade the sewer or drainage lines due to lack of authority's concern.

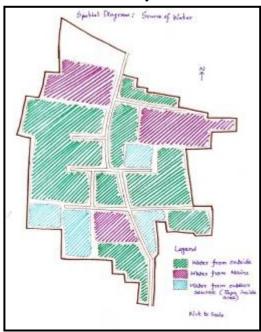


Figure 8: Spatial Diagram of source of water of Lalbag Society

#### 4.2 Problems with Water Quality and Water Supply:

The second severe problem of the society is scarcity of pure drinking and usable water together with intermittent water supply. Praticipants informed that the major pipelines around the area that supplies water from the Saidabad Water Treatment Plant (SWTP) are in a dilapiated condition. They have got many leakages through which various suspended solids, dirt and germs enter into the pipelines and pollute the water. This polluted and water has very bad taste and odor. The outdoor water sources have the same problem as well. In rainy season flood water gets mixed with the supply water and make the situation worse. At this time people bring water from outside as the taste of water becomes unbearable. Figure 8 shows the distribution of households according to the source of water supply. In addition, various water borne diseases like diarrhoea, dysentery etc and dengue breaks out due to lack of pure

drinking water in the locality. This condition is less severe in pre and post rainy season (Figure 9(a)). To deal with this problem, people who can afford, have started using water purifier or filter in the house. Those who cannot afford to buy filter, drink boiled water which increases their gas bill (Figure 10).

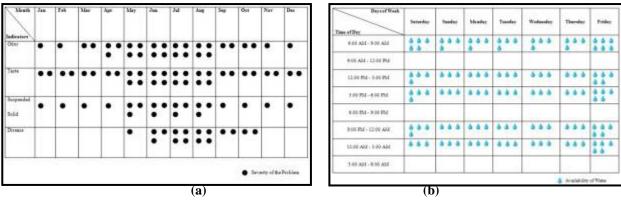


Figure 9: Seasonal Diagram (a) Water Quality Problem; (b) Water Supply Problem

As the water supply is intermittent it also hampers the daily activity. the weekly diagram (Figure 9(b)) of water supply problem, have to of necessityThe weekly diagram of water supply problem of *Lalbag* community has been manifested by Figure 7(d). According to local people water is not available at three times of the whole day such as from 9:00 AM in the morning to 12:00 PM at noon, from 6:00 PM in the evening to 9:00 PM at night and from 3:00 AM to 6:00 AM. Therefore, local people store water to use it at the time when water is not available. Water is used at almost the same rate all over the week except on Friday and Saturday. As Friday and Saturday are holidays in Bangladesh and hence the working people usually stay home all day long which results in comparatively more usage of water.

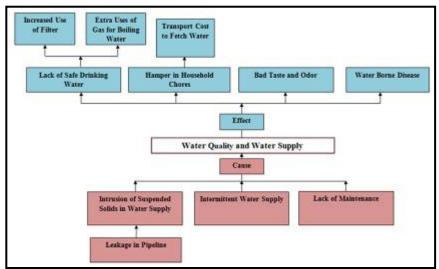


Figure 10: Cause effect relationship of Water Quality and Water Supply problem

## 4.3 Narrow and poor condition of access road:

Narrow and Poor Condition of the access road is the third major problem of *Lalbag* Society. Except only one road, which is 8' wide, other roads inside *Lalbag* society are 5' to 5.5' wide. The main reason behind this scenario is local people's ignorance of building construction regulation (Figure 11). Due to absence of any kind of monitoring authority, local people build their houses by utilizing every single inch of the plot and by not following the setback rules at all. Consequently, the roads became narrow. No vehicle, except motorcycle and bicycle, can pass through the roads. Lack of open spaces and trees inside the area, left people with no choices but to live a suffocating life, the congested buildings, narrow roads

and absence of open space make this locality extremely vulnerable to some hazards like earthquakes, fire incidents etc.

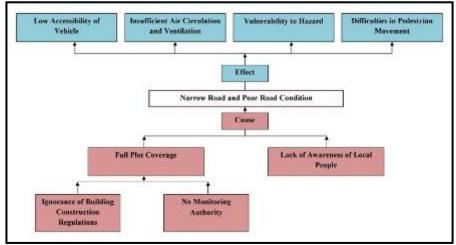


Figure 11: Cause effect relationship of Narrow and poor condition of access road

During rainy season, overflow of the drainages along with this narrowness characteristics of the access roads, makes it near to impossible for pedestrians to walk on the roads. The roads that are in more severe condition are the ones where the garbage stays for longer and deeper in height (Figure 12). In the less severe section of the access road the water stays during heavy rain and goes away within half an hour. The waste generation is relatively low from January to the end of April (Figure 13). Moderate amount of waste is disposed on the road in winter season. Reason behind this variation is the ignorance of authority regarding waste disposal works.

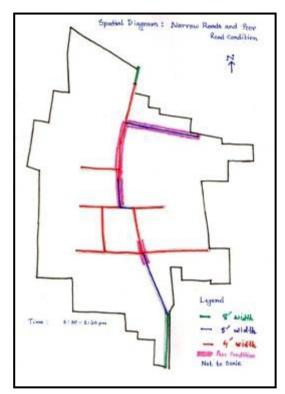


Figure 12: Spatial Diagram of narrow and poor condition of access road of Lalbag Society

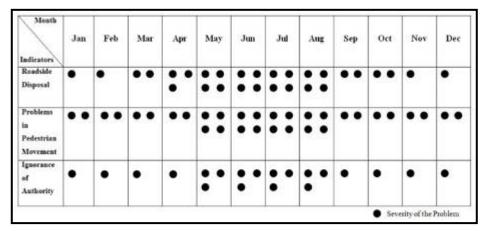


Figure 13: Seasonal Diagram of narrow and poor condition of access road problem

# **5. Suggested Solutions to Address Problems:**

People of *Lalbag* society's perception about the local area's problems and suggestions are important as they are the one who are facing these problems every day. Before hitting upon the solutions directly, SWOT analysis was developed to assist the *Lalbag* community in building awareness about their internal strengths and external opportunities that may help in finding out the soution to the major problems. Presence of the CBO is a potential strength to the community as the CBO can take initiatives to solve the problems by themselves. Even it is likely that they will get assistance from the Word office because Secretary of word commissioner lives inside the community. Moreover his office is also placed near the community.

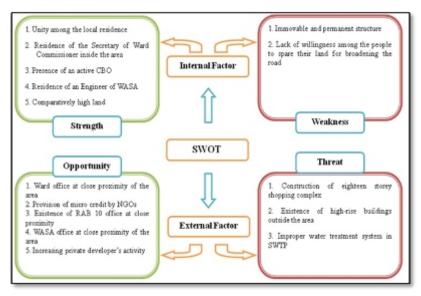


Figure 14: SWOT Analysis of Lalbag Society

SWOT analysis was also applied to make them cognizant about the potential weakness and threat toward solving these problems. Built structures are great weakness to the community that is hindering the possibilities to widen the narrow roads. Construction of high-rise buildings around the area will increase the pressure of traffic and can make the situation worse. Being aware of their potential strength, weakness, opportunities and threats it became effortless for the local people to find out the solutions to the problems. After conducting a Focus Group Discussion (FGD) with local people of the *Lalbag* society and some key informant interviews, a Dream map (Figure 15(a)) was prepared to perceive how they want to see their locality.

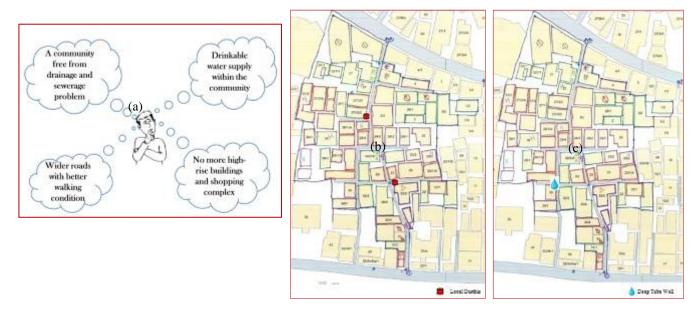


Figure 15: (a) Dream Map of Lalbag Society; (b) Possible Location of Local Dustbin; (c) Possible location of Deep Tube well

The first solution came up for the sewerage and drainage problem is to cover the open drains. Regular cleaning of the drains is also necessary to reduce the overflow of sewage. Dustbins can be placed at suggested locations (Figure 15(b)) so that people can use it and manage not to throw wastes in the open drains. Existing drain and sewer lines can be widened and deepened to increase the capacity. The CBO can undertake initiatives to implement these solutions with the help of the ward commissioner.

To address the problem of water crisis local people suggests that the field adjacent to the locality can be used to install a water extraction pump which will increase the water supply. The CBO can raise fund from the local people to buy the pump. Alternatively, they have suggested constructing large underground water reservoirs that can be established under the plots in which new buildings are going to be erected. This would not be so difficult because private developers' activity increasing here. Also, a deep tube well can be established at a suggested location by the local people as a source of free water supply for the locality (Figure 15(c)). Again the old water pipes can be replaced by new and improved quality pipes. Although it is not possible to change the old pipe line of houses that are in function but at the time of construction of new buildings it can be done easily.

Importance of maintaining building bye-laws during construction of houses is still unfamiliar to most of the residence of *Lalbag* community. The CBO can take the initiative to conduct meetings to guide local people about the benefit of maintaining bye-laws and regulations. Moreover the penalty of not maintaining these regulations can also motivate local people to become more concerned. To enhance the road condition damaged roads can be repaired by the CBO's own initiatives. Few of the roads that get submerged during rainy season can be raised higher. Ward commissioner can take initiatives regarding this proposal and increase the level of lower roads.

#### 6. Conclusion:

Like other localities of Dhaka, *Lalbag* society is also overburdened with many problems. However, the problems can be solved by self-initiation of the community without entirely depending on the local level government. In this regard, the role of a CBO is cardinal to ensure active participation of the local people in addressing and remedying their own problems. This study tried to identify the local problems and solutions along with the local resources, strengths, weaknesses, opportunities, threats, through active participation of the

people of *Lalbag* Society. These problems were found to be condoned for a long time as the concerned authorities cannot always pay heed to the small local community. However after applying PRA tool it was found that the problems can be solved with the active functioning of CBO. Local people were prepared to find ways to install an extraction pump or to excavate an underground water reservoir which they considered to be a potential solution to the water quality and water supply problem. Regular cleaning of the open drains and widening of the existing drain and sewer lines, may improve poor drainage and sewerage condition. Increasing the level of road and enforcement of building bye-laws and regulations can improve the poor and narrow roads in the future. In order to implement the solutions CBO can play a vital role if adequate resource mobilization is assured. Besides, participation of local people will ensure more practical and desirable solutions along with higher level of accountability. Research results therefore indicate that, with sufficient mobilization of CBO, not only the study area but also other communities of Dhaka city can improve their condition. In this way, overall improvement of the city will be ensured with more active participation of community and less involvement of government authority.

#### **Glossary:**

**Jamdani:** Jamdani is a valuable hand loom woven fabric made of cotton mostly used for sarees, scarves and handkerchiefs.

Thana: Sub-district

#### **References:**

Ahmed, B., Muhammad Rakibul Hasan Raj, M.R.H. and Maniruzzaman, K.M. (2009) "Morphological Change of Dhaka City Over a Period of 55 Years: A Case Study of Two Wards", *Journal of Bangladesh Institute of Planners* Vol. 2, December 2009, pp. 30-38, ISSN 2075-9363

Banglapedia, (n.d.). *Lalbag Area*, Retrieved from URL: http://www.banglapedia.org/httpdocs/HT/L \_0028.HTM, accessed on 25 May, 2012

Economic Commission of Latin America (1973) "Popular Participation in Development", *Community Development Journal*, **Vol 8**, No. 2, Oxford

Enam, A. and Choudhury, C.F. (n.d.) "Methodological Issues in Developing Mode Choice Models for Dhaka City", Retrieved from URL: http://teacher.buet.ac.bd/cfc/publications/Methodolgical\_TRB11.pdf

Haque, A.M., Hossain, M.R., Farhan, M.H.M. and Neema, M.N. (2013), *An Innovative Approach to Assess the Quality of Major Parks in Environmentally Degraded Mega-City Dhaka*, proc. ICCSA 2013, Part III, LNCS 7973, 394–407.

Hossain, S. (2008) "Rapid Urban Growth and Poverty in Dhaka City". *Bangladesh eJournal of Sociology*, **Vol. 5**, No.1, 2008.

Jamdani Weavers' Community.(2008). Scope of Improvement of Living Condition and Occupational Status of a Jamdani Weavers' Community.Department of Urban and Regional Planning, Bangladesh University of Engineering and Technology.

Kumar, S. (2002), *Methods for Community Participation: A Complete Guide for Practitioners*, Vistaar Publication, New Delhi, 2002

McCracken, J.R. and Narayan, D. (1998) "Participation and Social Assessment: Tools and Techniques", Library of Congress Cataloging in Publication Data, Washington D.C. 1998, Retrieved from URL:

http://www.greenwonderland.co.uk/upload/document/participation tools and approachsworld bank.pdf

Mridha, R.U. (2008), "Old Dhaka business hubs in misery", The Daily Star, August 5, 2008, Retrieved from Website of a Bangladeshi Newspaper: http://archive.thedailystar.net/newDesign/news-details.php?nid=48926

NCBON (2004), What is a Community Based Organization (CBO)?, Retrieved from Website of Community Based Public Health Caucus: http://www.sph.umich.edu/ncbon/whatis.html Accessed on 10 October, 2013

Smities, J. and Wenster, G. (1998) *Community Involvement in health: from passive recipients to active participants*, Aldershot, Ashgate 1998.