

Lower Income Groups along the Water Course: A vulnerability Analysis on their Social Capital

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Abstract

The focus of the present study is on Dhideer Nagar in Saidapet located in the 142nd ward of Corporation of Chennai, Tamil Nadu, India. Dhideer Nagar is a slum located on the banks of Adyar river and by its location it is highly susceptible for flooding. The study emerged with the central question: How can the local government (Corporation of Chennai City) and the people build or strengthen Social Capital in Dhideer Nagar during flooding? To capture answer for the above questions a detailed investigation was done on the potentials of social capital as a means to tackle flooding problem among the lower income groups of Chennai using PRA (participatory rural appraisal) tools and under the light of relevant literatures. Owing to thumbs down response on social capital both from the people and the local government, two suitable cases where a variety of social capital was used to earn livelihood during flooding were selected such as BO from Fiji and Dhaka in Bangladesh to compare and contrast the existing situation in Chennai. Then under the light of them, to overcome the problems of the lower income group during turbulent conditions solutions were given with ample recommendations.

Problem Statement

The focus of the present study is on Dhideer Nagar in Saidapet located in the 142nd ward of Corporation of Chennai, Tamil Nadu, India. Dhideer Nagar is a slum located on the banks of Adyar river and by its location it is highly susceptible for flooding. The economic condition of the people is very low and the environment they live is extremely uncondusive. Majority of them are wage labourers who survive on their daily wages. In India, the slums are classified as objectionable and non-objectionable slums found to have existed since time immemorial but have caused great concern only of late due to rapid urbanization. According to the government of India the ‘Slums’ have been defined under Section 3 of the Slum Areas (Improvement and Clearance) Act, 1956 as areas where buildings are in any respect unfit for human habitation; are by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals (Chandramouli,2003). Though there are no tangible differences found in the living conditions of the people in the above said slums and both are equally liable to eviction, the objectionable slums are referred as illegal settlements or encroachments, prone to get affected easily by natural disasters particularly flood.

The incidences like flood and inundation off and on have resulted in devastating consequences including stress, loss of belongings; properties and lives (Abhas, K. 2007). Many times even before the slum dwellers could recover from the previous loss, they are subjected to the next ones. The relentless and repeated onslaught put them into a constant state of penury and as there is no imminent support, a complete recovery becomes a distance dream. To break the bonds of impoverishment a timely and reliable support is important. But when the support is not being given, the community has to find some feasible mechanism to resolve the problem whether from inside or outside of it. In other words expanding the web of social relationship inside and outside the group would best serve the needs of the members and that exactly is often referred as social capital. The higher the levels of their interaction, the greater would be their expansion of the horizon. Social capital consists of the features of social life-networks, norms and trust that enable participation to act together more effectively to pursue shared objectives (Pelling and High, 2005). In order to cope with floods, slum dwellers have to rely on a whole series of coping and – to some extent – adaptive measures. Adaptive measures are conducted before an event takes place in order to minimize its negative impacts. Coping measures can be defined as practices which people apply after the event has happened in order to combat the negative effects that accompany the event (Nelson et al. 2007; Smit and Wandel 2006). Coping measures here is referred as something which are the reactions to the immediate as well as to the long-term impacts of floods.

Objectives

1. To investigate the potentials of social capital as a means to tackle flooding problem among the lower income groups.

Research Questions

By keeping the above as moot points the present study emerged with the central question: How can the local government (Corporation of Chennai City) and the people build or strengthen Social Capital in Dhideer Nagar during flooding?

Method

The study was carried out in three areas such as Dhideer Nagar, Sathya Nagar and Attuma Nagar in Chennai city. The rationale for selecting all the three areas is due to its highest degree of vulnerability and its population size. Dhideer Nagar with 600 households and with a total of 2000 population, Sathya Nagar located along the drainage course with 200 dwelling units with a total population of 800 and Attuma Nagar which has a total population of 3000 with 800 households in (see fig .1). All the above said slums are located very close to the river and by their location they are the most vulnerable to flooding. Using simple random sampling method 10 percent of sample were abstracted to study their social capital.

Fig 1. Satellite Imagery of Study Area



Source: Google Earth Map 2013

Primary data was collected from the respondents such as slum dwellers and their social network range from International donor organisations, government organisations, Ngo's and to other organizations. The primary data was collected and analysed through semi-structured interview and PRA tool such as Transect walk, Focus group discussion, social resource mapping and institutional mapping (See. Table .1). From the study it was learnt that the potential of social capital among the slum dwellers is very thin. In India so long, no much serious studies undertaken or programmes implemented on the social capital of the slum dwellers. In view of this, the present study attempts to investigate the potentials of social capital by way of answering the research questions from two case studies discussed as under.

Table 1: Potentials of social capital in Chennai Slums

TOOLS USED	Method	Data Collected	Results
Semi structured Interview	Partly structured with more of open ended questions to facilitate information flow.	personal data, economic status of households, relationship and modes of means and modes of interaction, attitude, problems of flooding during heavy rains, disease relapse etc	Due to rapid urbanization, the social cohesion was feeble and weak as the inmates spent much of their time in pursuit of earning their livelihood.
Social Resource Mapping	Mapping of the Socially significant local resources and residences done by the people themselves.	Social networks, local resources such as household, infrastructure etc.	The absolutely scanty resources forced the slum dwellers to live with a perpetual social deprivation which put their reciprocal relationship within or outside the social network at bay.
Institutional Perception Mapping	The network of the people on priority basis with various institutions was done by the people themselves.	Institutions range from local to national and international levels that play major roles.	There is no clear evidence of connections studied with government or with other organisation except with a few philanthropic organisations and churches.
Focus Group Discussion	Grouping of Heterogeneous community into homogeneous groups.	Discuss collectively with community members to build knowledge and arrive at consensus.	FGD helped in the collection of first hand information and in triangulation of the above said information.

The case of Fiji

According to Othniel M.Y (2013), Floods are among the most significant and frequent hazard that affect communities in the Western Division of Fiji, often leaving in their wake displacement, death and putting thousands at risk of sliding into poverty. The study conducted between 2009 and 2012 floods, among residents in five selected villages in Ba district and presented the fact the social capital aids in post-recovery of flood was remarkable. The pattern of social capital deployed toward recovery was done with four distinct strategies. They are 1. search and rescue, 2. information, 3. mutual assistance and 4. commercial cooperation as rightly explained by Otheniel.

1. Search and Rescue:

At the onset of the flood the initially the villagers themselves helped evacuate people, and organised patrol teams to guard and look after belongings against theft and robbery. For example once the flood receded, the people and households worked together day in day out to repair community infrastructure such as canals, water gates and culverts. Most of the rehabilitation works which needed immediate attention were started by the villagers and later they were aided by external agencies. During flood the people reported to have refuge and found asylum with friends and other families, and they were then reported being rescued by volunteers. In many cases the victims were helped and checked

upon by their friends and neighbours and coordinated with benevolence the rescue operation.

2. Information:

One of the strengths of social networks is the facilitation of information flow. Information is an asset especially at the time of emergency. The networks they had served as important channels for information especially at the times relief assistance. The channels of information flow usually were friends, relatives, neighbours and their societies such as informal and formal institutions. Comparing any other information social networks were by far the most important conduit for the people. Other interesting aspects of the dissemination of information were possible through social media, mobile media and mass media to extend information, awareness and support.

3. Mutual Assistance:

Mutual assistance emerged as one of the most prevalent aspects of social capital. The assistance extended were both material and non-material such short term loan, free housing and shelter, child care, tools and equipment and exchange of labour constituted as major strategy the people deployed. Such reciprocity enhanced not only binding but also increased the cohesion of people. Mutual assistance initiated and guided collective action in very many ways. Primarily it served as a good source of material support and following to that it signaled the friends, neighbours and relatives to become committed to the recovery process by and large all through their times of adversary. Finally it served in restoration of the framework of social network which was at stake after the flood. The mutual assistance went on to the extent of rendering physically challenging tasks such as reconstruction and rehabilitation which helped many to move back soon to their houses. Without such clear assurance of assistance mechanism, it is very difficult for the households to rebuild their houses.

4. Commercial cooperation

As pointed out by Chamlee-Wright (2010) with reference to post-Hurricane Katrina, commercial cooperation put business activity at the centre of the disaster recovery. Commercial cooperation serves a function very similar in many ways to that exactly of mutual assistance through material support, confidence and so on. The business activities resumed soon after the water receded helped poor in many ways to access material assistance from them to rebuild and rehabilitate their houses. For example coffee shop, hardware shops etc.

The role government

It was also reported that even when the Fiji military, Red Cross and experts arrived to extend assistance and meet the needs, the local population still made up a large amount of search and rescue operations by themselves which implied the fact that a heavy reliance on social networks significantly emerged as first aid through social capital during extreme conditions. Thus it was made clear by the author that the social capital has brought about a feeling of togetherness and empathy as flood affected everyone and that resulted in a unifying effect in Fiji.

The case of Bangladesh

Tibor A et.al (2012) reported the incidence of flood and the strategies of social capital in five study areas of Dhaka, Bangladesh. Woolcock and Sweetser (2002) distinguish bonding, bridging, and linking ties of slum dwellers. Bonding ties refer to linkages within a group in which all partners occupy a similar hierarchical position (e.g. in terms of income, education, and occupation). Bonding ties are often characterized by emotional (friends, neighbours) or family relations (Bohle 2005). Bridging ties also describes linkages not only among people from a similar socio-economic background, but also between different social groups or local communities. Often times the needs and aims of the network partners are similar, and that is why they emphatically cooperate under certain circumstances and specific arrangements. Typical examples of bridging ties are relationships among colleagues at work or within cooperatives. In contrast to this, linking ties indicate social relations between people of different social hierarchies, such as employer and employee or landlord and tenant. The distinction of these three basic types of ties (structure of social capital) as discussed by Tibor is given below.

1. Assistance from Strong bondages

In Dhaka the study on social capital transpired the fact that the slum dwellers are able to deal with crises remarkably well due to their high social capital, one of the most important resources 'to get by' in times of crisis is social capital, which enables them to receive support whenever they are in need. Due to the high prevalence of trust, slum dwellers are able to borrow food, clothes, or money. During crisis many of the slum dwellers put emphasis on first replacing the reduced income by taking loans. Majority of them used their social capital to access loans, which were mostly provided through bonding and linking ties. Personal networks play a very important role during flood because they also provide non-financial support such as sharing luck, troubles and gossips with neighbours and friends and relatives.

2. Assistance from Linkages

Apart from the strong bondages the slum dwellers acquired from the linkages such as land owners, shop owners and employers. It is marked that every time after the flood events almost half of the damaged houses were rebuilt by the landlords. The most positive relations between slum dwellers and landlords were expressed.

3. Assistance from Bridging ties

At different levels the slum dwellers accumulate social capital under bridging ties. 1. Micro level 2. Meso-level and 3. Macro level.

a. Micro level networks:

At micro level networks the colleagues at work or people in other slum clusters, play a role. The report of Woodlock and Sweetser (2002), shows that poor people predominately rely on bonding ties, having less access to bridging or linking ties.

b. Meso- level networks:

The next most important tie emerged apart from micro-level is meso-level networks. A slum settlement is compact one consists of several compounds separated by streets, markets, or walls (here defined as 'slum clusters'). Though everyday interaction among different slum clusters is limited, it is more striking that the slum dwellers from one cluster can turn to other slum clusters and ask for assistance. Another form of a meso-level network is the interaction of NGOs or government party members within slums. The NGOs implement projects and the respective slums benefit not only through micro-credits and improved sanitation, but also through education programs.

c .macro-level networks(IC and the role of government)

At this level slum settlements are supported by the international communities by and large(IC) and by the Government of Bangladesh at smaller level. This is true even during the time of severe crisis in the form of relief distributions. It was also emphasized that despite a considerable number of projects have been implemented by Dhaka City Corporation and the Bangladesh government for the urban poor, the positive impact on slums is too small due to lacking political will and budget constraints (Banks et al, 2010).

4. Shared Norms:

The most significant cultural social capital the slum dwellers use during crisis is shared religious norms that play a decisive role. As long as people have faith in solidarity on the grounds of religion and national interest, they would receive help from the community whenever they were in trouble. Personal reciprocity was also evident which occurs mostly among the same socio-economic level, to get support in times of crisis particularly from somebody to whom they helped at an earlier occasion. Social support which is deeply rooted within Islamic traditions encourages the devoted Muslims to give donations (in the Quran called Sadaqah) for they consider it as one of the direct ways to get purification (*Zakat*), the next most important principle in Islamic religion is giving a defined percentage of one's wealth to poor people as charity (*Zakaat*) is also a widely respected duty. Solidarity, therefore, is a deeply rooted part of people's culture. It can be observed that slum dwellers who beg receive donations from adjacent better-off areas and that their hope for support by the wider community materializes during major flood events. Internalized norms, reciprocity, enforceable trust, and bounded solidarity are two important motivational factors for the slum dwellers to access social capital (Portes, 1998).

Conclusion

The foregoing discussions on the two case studies throw a profuse light on the potential of the social capital of the slum dwellers by way of answering the research questions on how people and government strengthen social capital to cope with the extreme conditions like flooding. The above study throws light on the variety of social capital used by the poor particularly within and outside the group. It is also strikingly noticeable that it occurred at different socio-economic level. The social capital always helped as an alternative to other resources as they were poor. It is remarkable to observe that even at

the point of the time of bankruptcy people still had hope and held fast to their reciprocal relationships to build further their ties. It could be understood from the above study that social capital is also a situational and contextual. It depends much on culture as in the case of Bangladesh, Zakaat has been an avenue for the poor to have links with rich and the rich to fulfill their religious obligations. There is flip side also observed in the accumulation of social capital which is to do with adaptive social capital. Adaptive social capital either never happened or happened very rarely. So it is now the need of the hour to sensitize the people to build adaptive than coping with social capital as it would reduce the burdens such as fatalities and other loss.

Recommendations:

In Dhideer Nagar, the slum dwellers face problems on the one hand of congestion, unhygienic environment, the threat of eviction, improper sanitation, unsafe water and drainage facilities due to fast urbanization. On the other hand, due to natural calamities and turbulent conditions their life is completely under threat. At this juncture a very handy and cost effective mechanism to address the problem evolved is accumulation of social capital. In the light of the above studies, the following recommendations were made to Dhideer Nagar.

1. Rescue which is a crucial necessity of extreme conditions is viciously undermined by the Corporation of Chennai (CCC). Though the CCC has employed rescue teams, they are functioning for name sake for minimum salary. It is now imperative for the government to take up this issue in war footing and build the capacity of the rescuers through adequate training and equip them with proper resources. The identification of right persons and critical location for stationing the rescuers must be done in a participatory way, incorporating the opinion of the public.
2. The government should come forward readily to facilitate not only the information flow which is a corner stone of social capital, through proper linkages to social media, mobile media, mass media and various institutional, but also enable perpetual and uninterrupted functioning of social capital.
3. The government has to create an enabling environment to the slum dwellers through devising proper strategies like participatory approach and poverty reduction schemes to accumulate efficient social capital with enhanced cohesion, solidarity and reciprocity.
4. The voices of the women, sick and elderly also has to be heard by the government particularly during the turbulent conditions.
5. The NGOs should help create a climate of empathy among the public and sensitise them to come out of the ambit of stereotypes such as caste based stratification and social stigma which would minimize the economic burden of the government by and large.

Solutions:

The present study by way of unraveling the underlying implications of poverty directly ushered the need of an overarching participatory approach which is merited to revolve around the nucleus of social capital. It is undisputable that participatory approach

by itself is an all-encompassing one, if applied, without undermining its importance. The next most important concept studied and analysed was poverty reduction approach. Poverty reduction must take off from the gambit of blue print approach which includes upper, middle and lower class poor. Rather it has to be tailored in a more canny way to reach out first the people in absolute poverty whose life is at risk. Resettlements and rehabilitations have to be done with proper plans which should comply with the requirements of the people to build their assets particularly through enhancing their potentials of social capital.

In the light of the review made, a brief sketch of the varieties of social capital is presented to enable Chennai slums to explore the potentials of social capital during flooding. The pattern of social capital deployed toward recovery initiated by the people themselves was identified as one of the best practices with four distinct strategies in Fiji such as 1. search and rescue, 2. information, 3. mutual assistance and 4. commercial cooperation.

It is phenomenal that in Bangladesh for some slum dwellers adaptive social capital was possible though it is very rare to mobilise social capital of its kind in such poverty stricken environment. It was observed that the structural measures like raised plinths, door thresholds or bamboo constructions are common, but only effective while the water level does not exceed average levels (Chatterjee M, 2010 for India). Individual preventive measures like personal savings, preserving food, storing medicine, or organizing building materials in advance are common phenomena as well. Though they are hardly sufficient during severe flood events, they ease the lives of people during normal floods.

Finally the social cohesion, reciprocity, enforced trust and solidarity are the building blocks facilitated by NGO's became intrinsically interwoven with the people who are connected with bonding, bridging and linking in accumulating social capital in Dhaka. The culture based solidarity called Zakaat also helped accumulate social capital that was a remarkable practice observed in the accumulation of social capital.

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