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International Social Work 2007; 50; 357

DOI: 10.1177/0020872807076049

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Enhancement of community preparedness for natural disasters

The role of social work in building social capital for sustainable disaster relief and management

● Golam M. Mathbor

This article examines the scope and prospect for effective utilization of social capital such as social networks, social cohesion, social interaction and solidarity in mitigating the consequences of natural disasters that hit coastal regions. I give special emphasis to social capital at three levels: bonding within communities; bridging communities; and linking communities through ties with financial and public institutions. Light (2005) reports that actual movement towards preparedness at local level during disaster situations was a real weakness in areas of the American Gulf coast affected by Hurricanes Katrina and Rita. Government and public-sector coordination at senior levels, capacity building at the ground level of public services and strengthening social capital at grassroots level were identified as key strategic impulses in a conference on sustainable hazard reduction that took place in Colombo, Sri Lanka on 10–12 January 2006. The need for macroeconomic and fiscal policy to reflect recovery programs, think beyond pre-tsunami development levels, develop safety nets for poor and vulnerable people, and risk reduction and dependence on technology were salient points that the conference considered during policy dialogue sessions (Fernando, 2006). Communities need to be prepared for

Key words ● coastal Bangladesh ● community participation ● natural disasters ● Red Crescent ● social capital ● social work

natural and human-made disasters because these can strike anywhere, regardless of location, culture or history. Communities that are well trained culturally, socially and psychologically are better prepared and are more effective in responding to the aftermath of disasters. My previous work and research in this area indicate that community capacity building through effective utilization of social capital is crucial in disaster management projects (Mathbor, 1997, 1999, 2004; Mathbor et al., 1993).

In this article I examine the role of personal, social, economic and political empowerment through direct involvement and participation to improve and contribute to the sustainable development of communities. Many of my publications emphasize that experts by experience, that is, the local people, must be consulted by development practitioners and programs from the beginning of their involvement (Mathbor, 1997, 1999, 2004; Mathbor et al., 1993). The research focus of this article represents a continuation of my work that began in Bangladesh and has continued to prove applicable in ever widening spheres of engagement.

International partnerships provide a platform to learn from other countries that have faced similar hazards and developed mechanisms to cope with difficult situations over the years. My research draws from and contributes to models of community development and participation from around the world. In valuing a variety of models and disciplinary perspectives, I have found that with stronger local, regional and international partnerships, effective practice for intervening in disaster situations both in the long and short terms can be built.

In the wake of the disasters brought about in the United States by Hurricanes Katrina, Rita and Wilma, American social workers have much to learn from countries that have faced similar tragedies, including those in South Asia, particularly Bangladesh. Bangladeshis can expect a major disaster every two years. Consequently, Bangladesh has developed a successful mechanism that utilizes social capital to recover and rebuild after each disaster hits the country. Social workers in the USA can learn substantial lessons from the experiences of these colleagues. The literature on disaster management reveals that vulnerable populations tend to be the ones that suffer most. Social work as a profession values highly the services offered to these vulnerable populations, for example, the economically disadvantaged, mentally challenged, older people, children and those who are medically frail.

The Preamble to the National Association of Social Workers' Code of Ethics explicitly states that 'the primary mission of the social work profession is to enhance human well-being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed and living in poverty' (www.nasw.org). However, social work educators in the USA have not yet prioritized or developed sufficiently disaster management as an integral part of the social work curriculum and practice. The profession is highly grounded in the principles of social justice and human rights. Social workers' active involvement in disaster management is pivotal in creating plans that link and bridge vulnerable populations to required resources before, during and after a disaster. Social work professionals utilize social capital concepts such as solidarity, social cohesion, social interaction and social networks, to enhance the capacity of individuals, groups, communities and organizations to ensure social development.

Vidal and Gittell (1998) have remarked that the creation of programs like the Local Initiatives Support Corporation (LISC) will be advantageous for both communities and their supporters. They further note that at the community level LISC included increased comprehension of community development; participation in community development; organization of community development; and ultimately, control of community development. This program also sought increased financial, technical and political support for community development from both private and public sectors. Vidal and Gittell (1998) call these the support community. The enhancement of social development in community organizing and development facilitated by social workers and the community concerned allows for a stronger, more cohesive response to disasters. For example, during the earthquake devastation in Bam, Iran, the support of the International Federation of Red Cross and Red Crescent Societies made the Iranian National Society's teams of community volunteers who live locally unique among all humanitarian organizations for being able to react immediately and stay long after other the other agencies had come and gone (Mukhier, 2006).

Social capital

This article focuses on the effective utilization of human and social capital in mitigating the consequences of natural disasters. Snowden (2005) argues that community social capital reduces community

distress. But the reverse is also true: community distress suppresses social capital. Snowden (2005) also states that in general, events in the community and in the larger society can affect levels of engagement, trust and reciprocity by supporting or undermining pro-social norms and related social practices. Because conditions can improve or deteriorate over time, these can facilitate or frustrate normative belief and practices. Moreover, social capital is not static. The effective utilization of social capital is crucial in the building of community and institutional capacities in disaster management projects. Social capital consists of such concepts as social networks, social contacts, social cohesion, social interaction and solidarity.

Loeffler et al. (2004) define social capital for social work as a process of building trusting relationships, mutual understanding and shared actions that bring together individuals, communities and institutions. They also claim that the processes involved facilitate further cooperative action. These generate opportunities and/or resources that are realized through networks, shared norms and social agency. Putnam (2000) notes that if people lack money then they can give time strictly out of self-interest that can be harnessed through social capital in communities that need help. Putnam's theory of social capital presumes that the more people connect

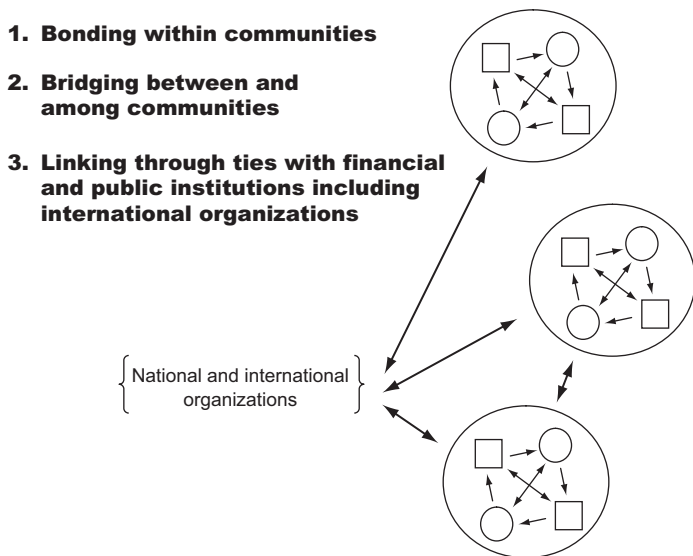


Figure 1 Three steps to building social capital

with each other, the more they will trust each other and the better off they will be individually and collectively, because social capital has a strong collective aspect. The social and economic system as a whole functions better because there are ties among the actors that make it up (Vidal and Gittel, 1998: 15). I have also developed a model that emphasizes three steps to building social capital based on the World Bank's classification of social capital from the poverty reduction and community capacity building perspective (World Bank, 2006) (see Figures 1, 2, 3, 4). These highlight bonds, bridges and links and were evident in the post-Katrina commentary in the USA. A crucial weakness in this was the lack of well-coordinated preparedness, including the human service professions, at the grass-roots level. Therefore, there is a need for some persuasive work in formulating policy directives that will emphasize community collaboration, solidarity, coordination and utilization of social networks as a vehicle for effective service delivery before, during and after a disaster.

The three stages involved in creating and developing social capital

Bonding within communities The utilization of social capital starts with bonding within the community. Social integration, social cohesion, solidarity, networking, two-way communication, sustained interaction between and among the members, effective coordination of community activities, collaboration on and support of members' activities, the fostering of leadership qualities and giving a hand to other community members are all useful attributes for this bonding. These attributes can be cultivated through recreational activities, religious and spiritual gatherings, political and institutional affiliations, economic and business activities, the physical infrastructure and buildings, and psychological and social supports.

Bridging between and among communities The next level in social capital formation is that of reaching out to other communities in the society. At this point, groups and interested citizens can form a coalition to identify the needs and joint collaboration efforts required to meet them.

Linking communities through ties with financial and public institutions Researchers have revealed that historic, longstanding relationships that are developed among different elements of communities, the government and other organizations, including

Social capital attributes

- Integration
- Cohesion
- Solidarity
- Networking
- Communication
- Interaction
- Coordination
- Collaboration
- Social supports
- Leadership
- Volunteerism

Activities

- Recreational
- Spiritual
- Religious
- Political
- Economic
- Cultural
- Institutional
- Physical infrastructural
- Psychological and social work support

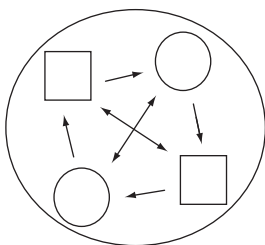


Figure 2 Bonding within communities

financial institutions and voluntary agencies, have generally assisted in mitigating the consequences of natural disasters. Their effectiveness in working together has proved crucial in mobilizing a community's resources, expertise, professionals and volunteers, before

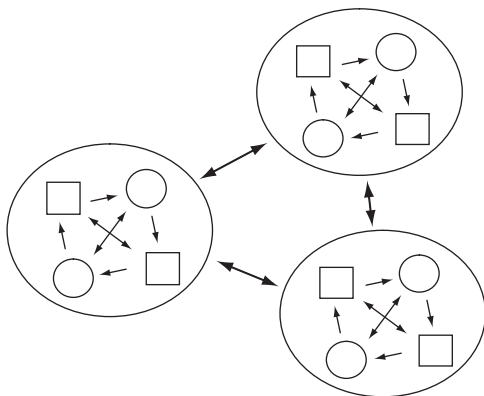


Figure 3 Bridging between and among communities

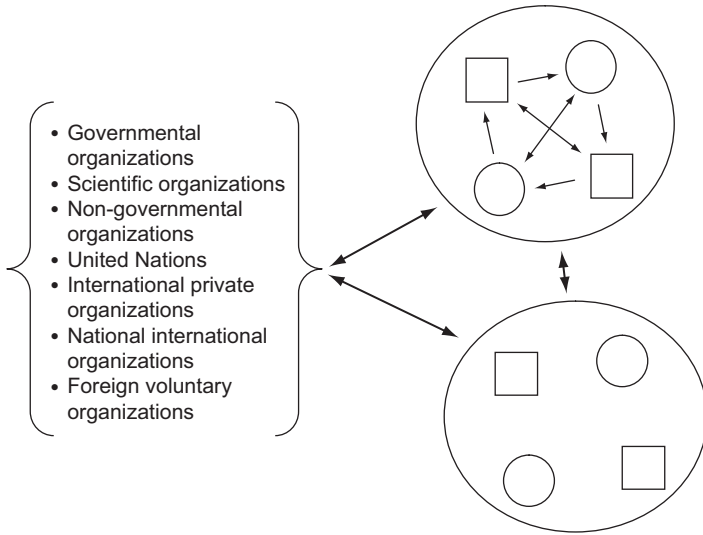


Figure 4 Linking through ties with financial institutions, including international organizations

disaster strikes and in the recovery work that takes place during and afterwards.

Natural disasters: the case of Bangladesh

Cyclones, storms and tidal surges often hit Bangladesh’s coastal areas. The results of their impact have ranged from heavy losses of human lives and cattle, to property damage causing enormous expense to both individuals and governments. Table 1 below shows that 64 major cyclonic storms buffeted Bangladesh during the period 1797–1997. These killed 863,016 people and caused severe damages worth billions of dollars to properties.

Mortality from disasters is generally greatest in areas having the poorest socio-economic conditions (Guha-Sapir, 1991). This was the case for the last major cyclone in 1991 (Table 1 shows major cyclones through 1997). The devastating cyclone and tidal wave that struck the southeastern coast of Bangladesh on 29 April 1991 killed nearly 138,000 people, left more than 10 million homeless and destroyed property worth \$2bn (Mathbor et al., 1993). Related deaths were largely attributable to a lack of decent housing capable of providing shelter during the cyclone. Research showed that

Table 1 Cyclone-related deaths in Bangladesh

Year	People killed
1822	40,000
1876	110,000
1897	32,000
1961	11,000
1963	11,000
1965	20,000
1970	500,000
1991	138,882
1995	21
1996	2
1997	111
Total	863,016

Source: BDRCS, 1997.

casualties were directly related to types of housing and shelter-seeking activities; no deaths occurred among individuals living in *pucca* houses (made of brick and concrete) and the ones who sought shelter in these buildings (Mathbor et al., 1993).

People had heard cyclone warning signals from three to six hours before the storm surge, but they did not take refuge in shelters (Mathbor et al., 1993). A similar situation occurred during the devastation caused by Hurricane Katrina when people were not evacuated in time due to a lack of coordinated plans between and among relief organizations. People who live in the coastal areas are poorly educated about disaster coping mechanisms and are at risk of being uninformed, as was evident from the recent disasters in the USA and Bangladesh. Buckland and Rahman (1999), studying the Red River flood in Canada, found that communities characterized by higher levels of physical, human and social capital were better prepared and more effective in responding to natural disaster. Similarly, no deaths occurred among the indigenous people of the Andaman Islands during the tsunami devastation because they understood early warning systems.

It is evident from previous research undertaken in this area by Hossain et al. (1992), Mathbor (1999), Mathbor et al. (1993) and UNICEF (1991) that poorer people in such regions are more vulnerable than richer during natural disasters. Hurricane Katrina exposed

similar dynamics. These situations call for community capacity building that encompass considerations that cover housing conditions and income generation while raising awareness and educating coastal people about the consequences of cyclones.

The idea of a Cyclone Preparedness Program (CPP) started in 1965 when the National Red Cross Society, now the Bangladesh Red Crescent Society (BDRCS), requested that the International Federation of the Red Cross/Crescent (IFRC), formerly the League of Red Cross and Red Crescent Societies, to support the establishment of an early warning system for the population living in the coastal belt of Bangladesh. In 1966 the IFRC and the Swedish Red Cross began the implementation of a pilot scheme for cyclone preparedness which consisted of both impersonal media outlets like TV and radio and personal warning equipment.

The social capital of CPP volunteers

The CPP experience shows that proper guidance, transparency and access to information is needed at all stages of a project, including the proposal, planning, implementation and evaluation stages of development initiatives and recognition of people's worth in coastal community development endeavors. Volunteers' sincerity and firm commitment to the fundamental principles of humanity, impartiality, neutrality, independence, voluntary service, unity and universality are inherent in the Red Cross movement. These were cultivated through a sustained training program and enhanced not only the effectiveness of CPP, but also saved many lives in recent disasters that hit the coast of Bangladesh. Many of the recent tsunami victims in south and southeast Asia could have been saved if there had been some kind of preparedness programs in the areas affected.

Local people come forward to join CPP on a voluntary basis. CPP volunteers are well trained cadres in disaster management activities. Their training consists of an ongoing training program that runs throughout the year, to generate leadership qualities, management skills, and a commitment to serve humanity and solidarity among and between volunteers and the community concerned. Volunteers are quite familiar with a local community and its resources, including the location of safe shelters, relief and rehabilitation programs, and evacuation plans to be followed in the event of a disaster. Ongoing interaction among and between CPP members and the people the projects are aimed to help avoids mistrust and misunderstanding in the development process. CPP volunteers are grateful for the social recognition of their relentless efforts in helping distressed

people in devastated communities and consider this as their net gain from society. CPP operates through a wonderful chain of command using a communication networking system which is very quick to respond to the immediate needs of coastal communities. This communication system comprises both direct personal contact and impersonal communication through the recognized media. CPP sees its volunteers as magnetic catalysts who convey the program's messages to the mass of people. To this end, CPP conducts a round-the-year training program for volunteers and utilizes local folk media in disseminating program messages to large numbers of people. Its volunteers engage in public awareness activities, stage dramas, and show films and video shows and so on.

Role of social work in disaster relief and management

Adger et al. (2005) notes that social and ecological vulnerability to disasters and the outcomes of any particular extreme event are influenced by the build-up or erosion of resilience both before and after disasters occur. They further claim that resilient social-ecological systems incorporate diverse mechanisms for living with, and learning from, change and unexpected shocks. Social work is a discipline that originated from grassroots movements that continuously dealt with unexpected shocks and utilized people's strengths. Mukhier (2006) reports that the psychosocial support, previously considered soft and not tangible in terms of assistance to those affected by the devastating earthquake that struck Bam, Iran and killed 29, 878 and injured 22,628, is now a key component of any effective emergency response. As A.T. Ariyaratne, the founder-president of Sarvodaya (the largest non-governmental organization in Sri Lanka), remarked:

Most of our full-time workers and thousands of volunteers from unaffected areas worked around the clock taking a lot of risks and undergoing hardship. However, none of them demanded additional salaries or extra payment for overtime work. Neither did they seek any cheap publicity or recognition. They only shared the sufferings of those who lost their loved ones and possessions to the Tsunami and tried to make the lives of the survivors at least a little bit easier. They helped satisfy the survivors' immediate, basic physical, psychological, and social needs and were rewarded with the dispassionate joy of loving and serving true Sarvodaya (sacrifice). spirit' (Sarvodaya, 2006: 5)

Social workers are well connected to the people they serve, know about their unique locations, are familiar with community resources and leadership potentials and are equipped with the necessary

knowledge base for addressing issues at micro, mezzo and macro levels. The US National Association of Social Workers (NASW) convened a meeting in March 2006 on disasters and disparities as they relate to social work and examined issues in the wake of the unprecedented disasters of the last few years. 'It is very important for social workers to focus on the issues of disparities when addressing disasters', said the NASW Executive Director, Elizabeth Clark (Stoesen, 2006: 5). While other professionals have valuable skills for responding to disasters, the social work perspective takes into account the many factors that affect access or lack of access to services and resources. The CPP case study findings and other works that I have cited make it clear that social workers can play important roles by providing assistance in the following ways.

- Various communication tools to engage in public awareness campaigns about disasters.
- Coordinating disaster management and development activities.
- Community capacity building at the social, economic and environmental levels.
- Enhancing community preparedness for disasters and in building social capital.
- Educating people on how to mitigate the consequences of disasters during relief (the short-term), recovery (the mid-term) and reduction (the long-term) prevention strategy periods.
- Strengthening the capacities of existing civil society institutions.
- Playing a monumental role in providing psychological support, e.g. counseling, for disaster survivors.
- Assessing the impact of disasters.
- Participating in the community's active involvement in disaster management activities.
- Relief operation activities.
- Resource mobilization using social and human capital.
- Tracking people down for family reunions after disasters.
- Communication, particularly utilizing interpersonal communication for disseminating warning signals.
- Recruiting local volunteers who are familiar with the local logistics, resources and coordination plan.

Conclusion

Social workers need to be prepared in anticipation of disaster rather than wait until disaster strikes. The social work curriculum needs to

incorporate disaster management so that a new generation of social workers will be trained for and prepared to intervene effectively in disaster situations. Ongoing training must also be developed for practicing social workers, particularly in countries where natural disasters occur with predictable regularity. Since Bangladesh expects a major cyclone every couple of years, its social workers have developed an effective coping mechanism for addressing such eventualities that the USA and other countries at risk can substantially learn from.

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