Available online at www.sciencedirect.com

ScienceDirect

Procedia Engineering 212 (2018) 443–450

Procedia Engineering

www.elsevier.com/locate/procedia

7th International Conference on Building Resilience; Using scientific knowledge to inform policy and practice in disaster risk reduction, ICBR2017, 27 – 29 November 2017, Bangkok, Thailand

Building Community Resilience in the Re-settlement of Displaced Communities

Yamuna Kaluarachchi*

School of the Built Environment & Archiecture, London South Bank University, United Kingdom

Abstract

In natural disaster and man-made conflict scenarios, livelihoods, assets, community networks and relationships get destroyed and in many areas, lives and communities are devastated. Re-settling these communities and providing them the essential support to adapt to the new or changed environments has been a major challenge for governments. Taking into consideration case studies from two South Asian countries, Bangladesh and Sri Lanka, this paper explores the displacement and re-location cycle experienced and the impact disaster, conflict and reconciliation has on families, community and stakeholder relationships and networks as they re-build their lives in the re-settlement process. The case studies were selected from available literature to focus on different kinds of natural disasters and civil conflicts. The paper focuses on characteristics of resilient communities and how these characteristics have aided the recovery and re-settlement. It also identifies attributes that are inherent in communities that have undergone disaster and displacement and explores how these attributes have helped communities in re-building their lives. From the literature and the case study results and information, it is seen that topics of safety, security, and livelihoods summarises the core needs that are important for transitional settlement and shelter. Having ownership of assets, a shelter or dwelling unit or land is also important in the re-settlement process. These requirements vary according to the ethnicity, religion and culture and the challenges for the relief agencies are to provide alternative solutions that match these requirements in the short and long term.

© 2018 The Authors. Published by Elsevier Ltd.
Peer-review under responsibility of the scientific committee of the 7th International Conference on Building Resilience.

Keywords: Community Resilience, Re-settlement, Displaced Communities, Building Resilience, Natural Disasters, Civil Conflicts

* Corresponding author. Tel.: +44 (0) 20 7815 7264.
E-mail address: kaluaray@lsbu.ac.uk

1877-7058 © 2018 The Authors. Published by Elsevier Ltd.
Peer-review under responsibility of the scientific committee of the 7th International Conference on Building Resilience
10.1016/j.proeng.2018.01.057

1. Introduction

According to the Internal Displacement Monitoring Centre [10], between 2008 and 2013, almost 47 million people were displaced by disasters and natural hazards in South Asia. The enormity of displacement caused by disasters is determined by communities' vulnerability to shocks or stresses and the capacity they have to withstand the disaster. In these situations social, economic and political realities have a major influence on the capability to cope and have varying effects on individuals and communities. In disaster situations, homes and livelihoods are destroyed, social support networks disintegrated, heightened risks such as family separation, child protection challenges and gender-based violence are introduced. These risks increase the more often people are displaced and longer the displacement. Similarly, the more resilient the community, the less the risk and impact of displacement experienced. Oxford Dictionary broadly defines resilience as "the capacity to recover quickly from difficulties; toughness" (2017). In the context of Communities, 'resilience is a measure of the sustained ability of a community to utilise available resources to respond to, withstand, and recover from adverse situations' [28]. Social resilience is different to 'individual resilience' as it takes into account the economic, institutional and social dimensions of a community. It extends the ecological perspective of resilience to recognise the ability of people to organise themselves [21]. Resilient communities are better able to preserve their basic social structures and functions and to restore them when displacement does occur, so reducing the associated risks.

Recent perspectives on resilience can be summarised into three major views [8]- Resilience as stability (Buffer capacity), Resilience as recovery (Bouncing back), Resilience as transformation: (Creativity). A common aspect in all perspectives is the ability to withstand and respond positively to stress or change. Taking into consideration case studies from two South Asian countries, Bangladesh and Sri Lanka, this paper explores the displacement and re-location cycle experienced and the impact disaster, conflict and reconciliation has on families, community and stakeholder relationships and networks as they re-build their lives in the re-settlement process. The case studies were randomly selected from available literature to focus on different kinds of natural disasters and civil conflicts. The paper focuses on characteristics of resilient communities and how these characteristics have aided the recovery and re-settlement. It also identifies attributes that are inherent in communities that have undergone disaster and displacement and explores how these attributes have helped communities in re-building their lives.

An objective of the study is to examine the findings from different case studies in relation to settlement planning, the institutional context, provision and maintenance of shelter and infrastructure, relationships developed in community formation, support provided for communities in the re-location process and equity issues that have risen as communities settle in the new developments. Another objective is to explore the erosion of livelihoods, especially livelihoods that are relating to place and geographical location, family and traditional support systems and how the families are coping and creating new relationships with the re-homing and re-settlement process. The study recognises that the housing and infrastructure provision in the settlements are basic and minimal and focuses on the key factors that are essential for communities to reconcile and begin the recovery process. It will also attempt to identify key attributes that are inherent in resilient communities that make this process attainable. The findings inform all stakeholders, national and international, and make an important contribution to understanding the specific situations and needs of families, communities, and how policy makers and humanitarians can more effectively address these. Case studies are limited as the re-settlement processes are at varying stages and the unavailability of some data due to political sensitivities and the difficulty in gathering personal data from a vulnerable community groups that have gone through a traumatic period in their lives. A broad-ranging literature review provided the foundation for this paper and an understanding of the wider context and debate in relation to community resilience and social capital place the study in the current policy and strategy framework. Methodology is based on both secondary and primary data sources captured from different case studies carried out in the region and synthesising the information and findings to draw out lessons that can be learnt. These provide an insight and guide future initiatives to improve community resilience.

2. Community Resilience

Research on resilience is complex due its involvement across multiple disciplines and developed through different stages from ecological resilience (1960-70s), to an approach applied to human systems under social-

ecological resilience [8] to the most recent emphasis on the resilience of human systems and communities cited as 'social resilience' [7]. According to the UN [32] the mechanism to achieve resilience depend on four key aspects- hazard identification, adaptations (hazard mitigation), preparedness planning and recovery and rehabilitation. Community resilience has also been defined ''as the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change''[1]. It can be both preventative (avoiding poor outcomes by developing coping strategies), or it may facilitate recovery after a traumatic event or catastrophe and is often based on a 'bottom-up' approach. The International Federation of Red Cross [11] has identified the following criteria as characteristics of resilient communities:

- Understand the disaster risks and can assess and monitor them, and take steps to protect and minimise losses.
- Able to sustain basic community functions and structures despite disaster impacts.
- Can build back after a disaster and work to ensure that vulnerabilities continue to be reduced for the future.
- Understand that building safety and resilience is a long-term, continuous process requiring ongoing commitment and the ability to adapt to future issues.
- Appreciate that being safe and disaster resilient means that development goals are more likely to be met.

According to Wilson [37], community resilience and vulnerability can be conceptualized to illustrate how economic, social and environmental capital develop and interact. Figure 1 shows how the interaction and focus of these criteria create and shape different resilience levels.

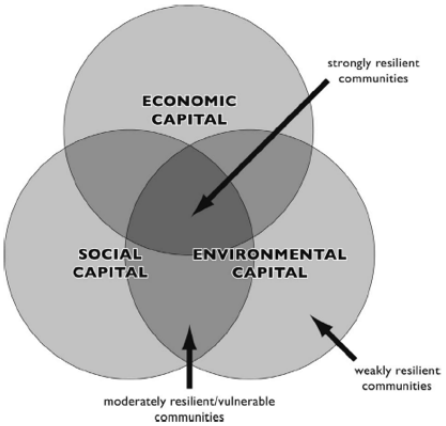

Figure 1 Community resilience, vulnerability and economic, social and environmental capital.
Source: Wilson 2012, 24 after Folke 2006

Resilience is strongest when all three criteria are well developed and reflect "multi-functional communities" that incorporate a multitude of assets. As a result of this interaction, the strongest community resilience can be found at the intersection between strong economic, social and environmental capital. Communities where only two capitals are well developed are moderately resilient while communities that have one or no well- developed capital have weak resilience thus high vulnerability [1]. Communities focused on developing economic capital at the expense of social and environmental capital will be vulnerable, despite a minority of the community benefitting financially. This implies that the relationship and balance among the three capitals are important than the components themselves, while the high degree of interdependence between the three capitals means that any disruption in one capital can cause a 'ripple effect' that affects others in reducing resilience [38].

The Hyogo Framework recognised the importance of awareness and preparedness in enabling communities to respond and recover from disaster, which has underpinned most Disaster Risk Reduction (DRR) initiatives over the last decade [11]. The concept of community resilience has gained stronger as DRR has progressively moved away from a 'predict and prevent' paradigm to building the capacity of communities who face a wide range of shocks and stresses. Three aspects enhance community resilience and improve the interaction and balance among the social, economic and environmental capital.

(a) Assets owned by communities including agricultural and livestock that enhances livelihoods, and other income streams that increase security and independence of households
(b) Policies, laws and Legal and institutional frameworks for disaster management and climate change adaptation and their implementation that shape the risks communities face and their capacity to adapt.
(c) Communities' knowledge, resources and actions that might strengthen their resilience to adapt. Many communities have traditional DRR knowledge and have benefited from training and capacity-building programmes run by NGOs and government authorities.

The notion of 'community resilience' is rapidly gaining ground as both a targeted process of societal development and as a research topic in its own right. Community safety and resilience has also been absorbed in long term development and millennium goals where re-building adhere to 'build better' to achieve [34] sustainable built environments. Monday [23] recognises the importance of resilience in creating 'a community that can endure into the future'. This is related to the ability of a community to take control and make decisions that concern them with capacity 'to adapt to and influence the course of environmental, social and economic change' [13]. Case Study Contexts- Bangladesh & Sri Lanka

Despite the wide-ranging issues facing South Asian communities, several recurring themes have emerged that form the basis of resilience building frameworks. The two chosen locations, Bangladesh & Sri Lanka, have many similarities in terms of agricultural livelihoods, family and social networks, inter-generational relationships and displaced communities due to natural disasters and civil conflict. Community relationships form a major support network in such instances and there are numerous examples where community involvement has brought about positive outcomes in post-disaster situations ([9].

2.1 Bangladeshi Context

Bangladesh has been identified as one of the most vulnerable countries [16] due to its exposure to frequent and extreme climatic events such as cyclones and associated storm surge [14]. Nearly half of Bangladesh's population lives on the coast, where they face substantial cyclone and flood risks. Frequent cyclones (Gorky in April 29, 1991; Sidr in November 15, 2007; Aila in May 25, 2009; Mohasen in May16, 2013; Komen in July 31, 2015) gave an early indication of increasing natural calamities as well as support the latest observation of the Intergovernmental Panel on Climate Change (IPCC) that frequency of climate change induced extreme events like cyclone will increase in the future. Globally 606,000 lives have been lost and 4.1 billion people have been injured, left homeless or in need of emergency assistance as a result of Climate change induced disasters [4]. There are on-going conflicts at the boarder with Myanmar. According to the UN Refugee Agency (UNHCR), there are 200,000 -500,000 Myanmar refugees in Bangladesh, as a result of internal and cross boarder displacement [36].

According to a global report on "Disaster Risk Reduction: A challenge for development", Bangladesh ranked as the most disaster prone country in terms of the impacts of tropical cyclones. Cyclones related death rate was the highest in Bangladesh amongst other cyclone prone countries as 32.1 people per 100,000 have died over 100 years [35]. The magnitude of physical hazards, poor land-use decisions and unenforced public policy are the main causes of disaster related death and casualty (Paton and Johnston, 2006). Bangladesh has demonstrated its ability to withstand disasters and climate risks by combining infrastructure development and community based coping practices. It is revealed that disasters are the first and foremost local phenomenon where local communities are on the frontlines of both the immediate impact of a disaster and the initial emergency response. In the face of hazard, learning from the previous disastrous events helps to create disaster resilient community through different disaster risk reduction mechanisms. More importantly, disaster risk reduction activities begin at home throughout the local communities. It was realized that combined efforts of GO, NGO and concerned community could save lives and livelihoods of the vulnerable people.

2.2 Sri Lankan Context

The Tamil and Muslim communities of Eastern and the North District of Sri Lanka have faced the trauma of the Asian Tsunami in 2004 as well as decades of civil war. The Indian Ocean Tsunami (IOT) is the most catastrophic natural disaster in Sri Lanka's recorded history and caused approximately 40,000 deaths, 120,000 buildings fully or

partially damaged and affecting more than 200,000 families leading to the displacement of 516,000 persons. For over 27 years, the Sri Lankan civil war caused significant hardships for the population, environment and the economy of the country, with an estimated 90,000 people killed during its course [33]. The final stages of the war created 300,000 internally displaced persons who were transferred to refugee camps [2]. The resettlement process was said to be completed and camps were officially closed in September 2012 [15]. In this natural disaster and man-made conflict scenario, existing livelihoods, assets, community networks and relationships have been destroyed and in many areas, devastated lives and communities. Re-settling these communities and providing them the essential support to adapt to the new or changed environments has been a major challenge for the government.

In Sri Lanka, extended family structures and inter-generational relationships are unique and central to communities. According to community workers, the breakdown of this arrangement has resulted in providing significant signs of trauma or isolation and other effects detrimental to their wellbeing. Communities who lived along the coast devastated by the IOT (2004) depended on activities such as fishing and tourism. Livelihoods were severely lost or affected for the families re-homed in new settlements located several miles away from the coast. While some have given up earlier economic activities and found new sources of livelihood, others continue to engage in the same activities from the new location. In the new housing developments some inequities have risen due to size of the dwelling, the quality of construction and different modes of operation and varying standards adopted by sponsoring agencies. These and other stakeholder influences have given rise to significant inequities both within settlements creating tension that affect community relationships and cohesion even in the short term.

2.3 Case study findings

Case Study	Displacement/ relocation	Major findings	Lessons to be learnt
Gaibandha, Bnagladesh, Since 1973	2500 households affected due to erosion of river bank	Raising homes for flood defense during the rainy season tube-wells for safe drinking water and sanitary facilities. Educating families to improve personal health. Loss of agricultural land, livelihoods and asset values near the riverbank affecting communities. Measures proposed to minimise the losses: Sustainable embankment construction and its maintenance, Training on disaster preparedness involving local institutions/ local government, Massive afforestation with the experience of local knowledge and its maintenance, Action against deforestation, Form an alliance among SAARC countries in order to ensure water distribution within the subcontinent [31].	For the short and long term, prevention and mitigation techniques identified and implemented to minimise damage and provide security and stability. Knowledge, training and skill development programmes as a long-term solution. Co-operation and collaborative programmes in-order to identify long-term solutions.
Kutubdia Island, Bangladesh, 1991.	40,000 people displaced due to tidal floods	Preventive physical structures were built to protect houses but the high tides and tidal surges now top the barrier. Livelihoods such as fishing, farming affected and the community displaced.	Long term strategies and policies need to be put in place for prevention and mitigation. Communities need support and alternative income generating avenues for the period that they are displaced.
Cyclone Aila, Coastal Bangladesh, 2009	2.3 million people affected [20]	Communities employed various coping and adaptive strategies with varied levels of exposure and abilities to keep themselves safe in the face of cyclones along with disaster preparedness and response, structural and non-structural measures to mitigate impacts [3]	Awareness and capacity building of the local people to increase their adaptive capability. Urgent collective community action needed with local leadership knowledge.
Char Kabilpur, On going	620 households affected by frequent flooding	Purchase of community boat by resource pooling, the development of community networks, working together to address local problems by local communities.	Local knowledge, local skills and resource pooling to find common solutions to on-going solutions.
Mahaweli Hydroelectric multipurpose project, Sri Lanka, 1977	3400 families re-settled including 900 from areas	Settlers did not express satisfaction about the shelter for more than two decades. Inexperience of the settlers within the tea plantation created a big difference in	The importance of sustaining livelihoods, preferably in the same trade. Ownership of suitable

	prone to earth slips [22, 29]	income between non-settlers and settlers shortly after relocation. Some of the displaced came from paddy cultivation but had to take up jobs in relation to tea plantations. This difference prevented them from acting as a community and the displaced population expressed dissatisfaction in common engagements [30].	dwellings as an asset. Community engagement activities to improve interaction among the non-displaced and the displaced.
Batticaloa, Eastern Province, Sri Lanka, 2004	1,500 families displaced due to Tsunami	Combining livelihoods, safety, and security the transitional settlement and shelter construction included apprenticeships for tsunami-affected youth trained in carpentry and electrician skills, giving them an introduction to possible livelihoods, a say in the transitional process, tasks to occupy their time, and an appreciation for safety issues regarding construction and electricity. Transitional shelters made out of local materials.	Adhering to long- term development plans in providing livelihoods, safety and security can build social, economic and environmental capacity.
Siribopura resettlement-housing programme, Sri Lanka, 2005	454 Tsunami affected households relocated in Hambantota	The settlers had to give up their land rights and lost their jobs, especially farming related jobs and self-employed occupations. Income of the settlers after resettlement did not show considerable improvement owing to resettlement as well as market failure generated by the absence of formal land rights. The change in living environment leading to conflict between the life style of the displaced and the changed environment in which they have been relocated [25].	The importance of sustaining livelihoods, preferably in the same trade. Ownership of suitable dwellings as an asset and where self-employment and home crafts and trade can be carried out. Community engagement activities to improve interaction among the non-displaced and the displaced.
Batticaloa, Eastern Province Sri Lanka, 2007	213 displaced families due to Civil Conflict	The displaced families lost their livelihoods, especially coastal trades such as fishing, lime stone excavating, tourism etc. Lost land rights and ownerships of land which has up-rooted many communities and disrupted their community support networks.	The importance of sustaining livelihoods, preferably in the same trade. Settling of land ownership and a variety of measures to re-evaluate the previous land ownerships
Building of coal power plant in Trincomalee, Sri Lanka, 2016	Requiring 2795 acres of land and the displacement of residents	Involuntary relocations planned in 2017. Community distressed about losing their livelihoods, assets and land ownership. Interaction among the displaced and the non-displaced.	The importance of sustaining livelihoods, preferably in the same trade. Ownership of suitable dwellings as an asset. Community engagement activities to improve interaction among the non-displaced and the displaced

3. Discussion-

It is seen that topics of safety security, and livelihoods summarises the core needs that are important for transitional settlement and shelter. They are usually socially and environmentally contextual and must relate to that particular community and culture. As a result ‘it is not necessarily feasible to design settlements and shelters as an off-the-shelf package’ [17]. Different cultures and communities have different expectations regarding their dwellings, layout, appearance and infrastructure. Adaptability and flexibility should be a basic component of any provision, so that occupants can adjust their own shelter to meet their own needs. It is not just about providing a post-disaster shelter, but one that facilitate livelihoods, communities and the wider environment. Kennedy et al. [17] sighted those specific needs as:

1. Physical and psychological health including protection from the elements and a feeling of home and community.
2. Privacy and dignity for families and for the community.
3. Physical and psychological security.
4. Livelihood support.

The findings and lessons learned from the case studies support these findings.

In a natural disaster prone country like Bangladesh, social safety network programs implemented by the government are helping community to cope with the impacts of cyclones, floods and tidal floods as well as protecting the lives

and livelihood of vulnerable people. Structural (embankments, barrages, etc.), non-structural measures and social safety network programs for disaster preparedness are playing important role in creating resilient community. Non-structural and self-help activities provide opportunities for the local communities to evaluate their own situation or share their own experience, facilitates community empowerment, which help to create resilient society. Local communities become part of the risk assessment, planning, decision-making, implementation and monitoring with the end goal of achieving capacities and transfer of resource to the community. Community assistance is vital in time of disastrous event and lessons from the previous disaster interventions might help to build resilient communities that can withstand disasters. Literature review and case study information assist in identifying a number of attributes inherent in resilient communities. These can be highlighted as below-

- People-place connections that enhance the relationship to a locality.
  Relates to human-environment interdependencies and connections [6] and include social-ecological systems, that assist in the re-settlement process. From research, two main themes emerge: 'connection to place' and 'sustainable livelihood development'.
- Community networks that improve social capital.
  Include the social processes and activities that support people and groups in a place [26]. Local community leaders and volunteer workers are essential to facilitate effective community networks.
- Infrastructure is essential to support community needs and actions and include diverse services and facilities such as medical, dental and other human services; community centers and youth recreation facilities; appropriate transport options; and local arts, music and food markets [27].
- Knowledge, skills and learning in order to face re-settlement and future displacement.
  Individual and group capacity to respond to local needs and issues and include knowledge partnerships, technology and innovation, and skills development and consolidation.
- Diverse and innovative economy that can maximise local skills and labour.
  The importance of a regional and local economy, which comprises a selection of industries and services, and supports new initiatives. It acknowledges the changing demands that can generate new employment opportunities.
- Engaged governance
  Promotion of collaborative approaches to regional decision-making [18] and the involvement of all stakeholders. Participation from relevant stakeholders is considered essential for effective problem solving.

4. Conclusions

Literature and case study findings clearly illustrate that safety; security and livelihoods are the core requirements that must be met in creating resilient communities. Having ownership of assets, in most case a physical shelter or dwelling unit or piece of land is also key in the re-settlement process. These requirements vary according to the ethnicity, religion and culture and the challenges for the relief agencies are to provide alternative solutions that match these requirements in the short and long term.

Securing existing asset base has a direct impact on communities' ability to withstand disasters and displacement. In South Asia water resources and agricultural productivity are directly linked and case study information illustrated that livelihoods must be protected to create security and independence. Providing this security of existing assets requires long-term thinking, planning and investment. Resource management and sharing mechanisms that are relevant to the context, suits that particular community must be developed. In the case study examples the socio-cultural values were insufficiently linked with the economic and real estate aspects, which is the basis for the sustainable resettlement. The importance of gaining a physical shelter must be emphasized as it impacts on overall poverty levels at macro level contexts in re-building livelihoods as has been illustrated in Sri Lankan case studies. The type, layout, space allocations and status of the shelter contribute to facilitate family structure and relations, income generation activities and contribute to the healing process of the displaced

References

[1] Adger, W. N. (2000) "Social and ecological resilience: are they related?" Progress in Human Geography, 24: 347-64.
[2] Amnesty International (2009) Unlock the Camps in Sri Lanka: Safety and Dignity for the Displaced Now.
[3] Ashraf M. A., Shaha S. B. (2016) Achieving Community Resilience: Case Study of Cyclone Aila Affected Coastal Bangladesh, International Journal of Social Work and Human Services Practice Horizon Research Publishing Vol.4. No.2
[4] Centre for Research on the Epidemiology of Disasters (CRED) Annual Disaster Statistical Review 2015 The numbers and trends, Institute of Health and Society (IRSS) Université catholique de Louvain – Brussels, Belgium
[5] Chandra, A., Acosta, J., Howard, S., Uscher-Pines, L., Williams, M., Yeung, D., Garnett, J., Meredith, L., Cuthill, M., Fien, J. (2005) "Capacity Building: Facilitating Citizen Participation in LocalGovernance" Australian Journal of Public Administration 64 (4)
[6] Dale, A., C. Ling, and L. Newman. 2008. "Does Place Matter? Sustainable Community Development in Three Canadian Communities." Ethics, Place and Environment 11.
[7] Davidson, D.J., 2010. The applicability of the concept of resilience to social systems: some sources of optimism and nagging doubts. Society and natural resources, 23.
[8] Folke C (2006) Resilience: the emergence of a perspective for social-ecological systems analyses. Global Environmental Change, 16.
[9] IASC Working Group. Geneva: Inter-Agency Standing Committee; 2008. Operational Guidance on Responsibilities of Sector Cluster Leads and OCHA in Information Management V3.
[10] Internal Displacement Monitoring Centre (IDMC), May 2015, Global Overview 2015: People internally displaced by conflict and violence.
[11] International Federation of Red Cross and Red Crescent Societies (2012) The road to resilience Bridging relief and development for a more sustainable future, IFRC discussion paper on resilience, Geneva
[12] Intergovernmental Panel on Climate Change, Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation Special Report, 2012, Cambridge University Press, ISBN 978-1-107-02506-6 Hardback ISBN 978-1-107-60780-4 Paperback
[13] IOTWS (2007) Manual on evaluating coastal community resilience to hazards
[14] IPCC.(2012) Managing the risk of extreme events and disasters to advance climate change adaptation. A special report of working group 1 and 11 of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.
[15] Human Rights Watch (2009) Sri Lanka: Government Breaks Promises That Displaced Can Go Home.
[16] Huq, S. 2001: Climate change and Bangladesh. Science 294, 1617.
[17] Kennedy, J., Ashmore, J., Babister, E. and Kelman, I. (2008) The Meaning of 'Build Back Better': Evidence from Post-tsunami Aceh and Sri Lanka, Journal of Contingencies and Crisis Management, 16(1).
[18] Knight, B., H. Chigudu, and R. Tandon. 2002. Reviving Democracy: Citizens at the Heart of Governance. London: Earthscan.
[19] Leon, E, Kelman, I., Kennedy J. & Ashmore, J. (2009) Capacity building lessons from a decade of transitional settlement and shelter, International Journal of Strategic Property Management, 13:3
[20] Mallick, B., Rahman, K.R. and Vogt, J. (2011) Coastal livelihood and physical infrastructure in Bangladesh after cyclone Aila. Mitigation Adaptation Strategies Global Change, 16
[21] Maguire, B. & Cartwright, S. (2008) Assessing a community's capacity to manage change: A resilience approach to social assessment, Bureau of Rural Sciences, Australian Government
[22] Manatunge, J., Herath, L., Takesada, N., & Miyata, S. (2009). Livelihood Rebuilding of Dam-Affected Communities: Case Studies from Sri Lanka and Indonesia. International Journal of Water Resources Development, 25(3)
[23] Monday, J (2002) Building Back Better: Creating a Sustainable Community After Disaster
[24] Paton, D. And D. Johnston (2006) Disaster resilience an integral approach. Springfield, Illinois: Charles C Thomas Publishers Ltd.
[25] Perera, T. G. U. P., Weerasoori, I., & Karunarathne, H. M. L. P. (2012). An Evaluation of Success and Failures in Hambantota, Siribopura Resettlement Housing Program: Lessons Learned. Sri Lankan Journal of Real Estate(6).
[26] Putnam, R. (1996) "The Strange Disappearance of Civic America." Policy, Autumn: 3–15.
[27] Prichard, P., S. Purdon, and J. Chaplyn. 2010. Moving Forward Together: A Guide to Support the Integration of Service Delivery for Children and Families. Victoria, Australia: Centre for Community Child Health.
[28] RAND (2016), Community Resilience Is Key in the Aftermath of Flint's Lead Water Crisis, Abir M., Cunningham R. , Zimmerman M.,
[29] Sridarran, P., Keraminiyage, K., Amaratunga, D., (2016) Building community resilience within involuntary displacements by enhancing collaboration between host and displaced communities: A literature synthesis. Environmental Opportunities and Challenges Proceedings of the CIB World Building Congress 2016, Volume II
[30] Takesada, N., Nakayama, M., & Fujikura, R. (2009). Lessons from Resettlement Caused by Large Dam Projects: Case Studies from Japan, Indonesia and Sri Lanka. International Journal of Water Resources Development, 25(3).
[31] Uddin, A.F.M A. & Basak, J. K. (2012) Effects of Riverbank Erosion on Livelihood, Unnayan Onneshan - The Innovators, Centre for research and action on development.
[32] United Nations. (2004). Guiding principles on internal displacements: United Nations.
[33] United Nations (2009) The Internal Review Panel report on Sri Lanka.
[34] United Nations. (2015). Sustainable Millemiun Goals, United Nations.
[35] UNDP (2004). A global report: Disaster Risk Reduction: A challenge for development. [Available from www.undp.org.bcpr]
[36] UNHCR, The State of the World's Refugees: A Humanitarian Agenda, http://www.unhcr.org/3eb789f42.
[37] Wilson, G.A., 2012. Community resilience and environmental transitions. London: Routledge.
[38] Wilson, G. A. (2013) Community resilience: path dependency, lock-in effects and transitional ruptures, Journal of Env. Plann. & Management, 57:1.