

Post disaster reconstruction as an opportunity for development: women's perspective

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Abstract

In the past few decades many nations have experienced quite a large number of natural disasters. Although they are developing new systems to avoid or reduce the devastation caused by disasters still many countries are struggling to recover. The literature on disaster management has begun to recognise the activities carried out during post disaster as an opportunity for nation and communities to develop. Post disaster reconstruction is a significant period in disaster management where it becomes a window of opportunity for communities and nations. Since women are one of most vulnerable groups in disasters and, as there is a need to recognise this human resource for their own development and for community's benefit, this research looks into the experiences of women in post disaster reconstruction. The study aims to present their experiences in post disaster reconstruction by considering their roles and challenges in this process in order to analyse the importance of post disaster reconstruction towards their development. This research has been based on theoretical and practical knowledge obtained through comprehensive literature review.

Keywords: Disaster management cycle, Empowerment, Post disaster reconstruction, Women

1. Introduction

The occurrence of natural and human-caused disasters has increased over the recent decades in many countries around the world. Disasters are generally large intractable problems that test the ability of communities and nations to effectively protect their population and infrastructure and, its capacity to recover rapidly [1]. During disaster management, post disaster reconstruction stage is confronted with many barriers in making the disaster an opportunity for development due to its ineffectiveness and inefficiency. Reconstruction is a rebuilding measure which involves not only constructing physical structures but also building the confidence, self-respect, self-esteem, self-dependency, mutual support and mutual trust and, the rebuilding of

communities. This long-term process focuses on human and material resource development, coordinated effort towards independence, sustainability and empowerment. The United Nations [2] defines disaster as a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental loss that exceeds the ability of the affected community or society to cope using its own resources. The disasters can be in the form of a battery of floods, droughts, cyclones, land slides, earthquakes, communal riots, armed conflicts, fires, volcanic eruptions, epidemics and industrial disasters.

This study focuses on naturally occurring disasters and their effects. However though these disasters are naturally occurring phenomenon, the intense impact of a disaster is exacerbated by human actions including incomplete development practices. Although there have been improvements in the emergency response to natural disasters, permanent reconstruction is often inefficiently managed, improperly coordinated and slow to get off the ground [3]. However post disaster reconstruction (PDR) is an important stage in disaster management where it becomes a window of opportunity for the community's development.

Present literature on disaster management emphasises the importance of gender sensitivity in PDR [4]. It argues that gender consideration will help for better targeting of resources to reach people in greatest need; for more accurate service provision to meet actual needs; to decrease vulnerability to future disasters and to prevent or mitigate negative impacts to second generation [4]. In addition earlier studies found that the gender composition of the population tends to change following a disaster where the percentage of female-headed households typically increases [1]. Furthermore it states that, during the post disaster phase the roles and responsibilities of women can change dramatically. In addition, the level of risk experienced by women to disaster is more than men and women are also more vulnerable in post disaster stages [5]. Therefore it is important to study women's experiences in PDR in order to improve their development.

Although the roles of women have changed noticeably in the past decades still they find it difficult to improve their status within the community. This research aims to present a review of literature related to women's experiences in PDR in order to analyse the effects of post disaster reconstruction towards their development. The study identifies their experiences with regard to their participation and confronts challenges related to women's development during PDR in the disaster cycle. In addition this study discusses whether PDR fosters or hinders women's development. This research has been based on theoretical and practical knowledge obtained through a comprehensive literature review.

2. Natural disaster management cycle

Natural disasters can occur as slow-onset natural disasters such as droughts or as rapid-onset disasters. The magnitude of disasters is documented by reference to the degree of vulnerability of the affected population [5]. A population's level of risk to disaster is determined by the type of hazard and the calculation of the level of vulnerability which is determined by social, physical and attitudinal variables [5]. Although in disasters it is difficult to differentiate between different stages, for management purposes there is a standard disaster cycle and each phase merits special considerations. The cycle includes disaster mitigation and prevention,

preparedness, emergency, rehabilitation and reconstruction [1]. Each phase in the cycle requires particular types of interventions and programming. According to Ariyabandu and Wickramasinghe [5], disaster management is a collective term encompassing all aspects of planning for and responding to disasters which includes both pre and post disaster activities. Further they state that the disaster management cycle includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property and infrastructure. Disaster management should not be seen in isolation but it should be considered at various phases of management in addressing the issue.

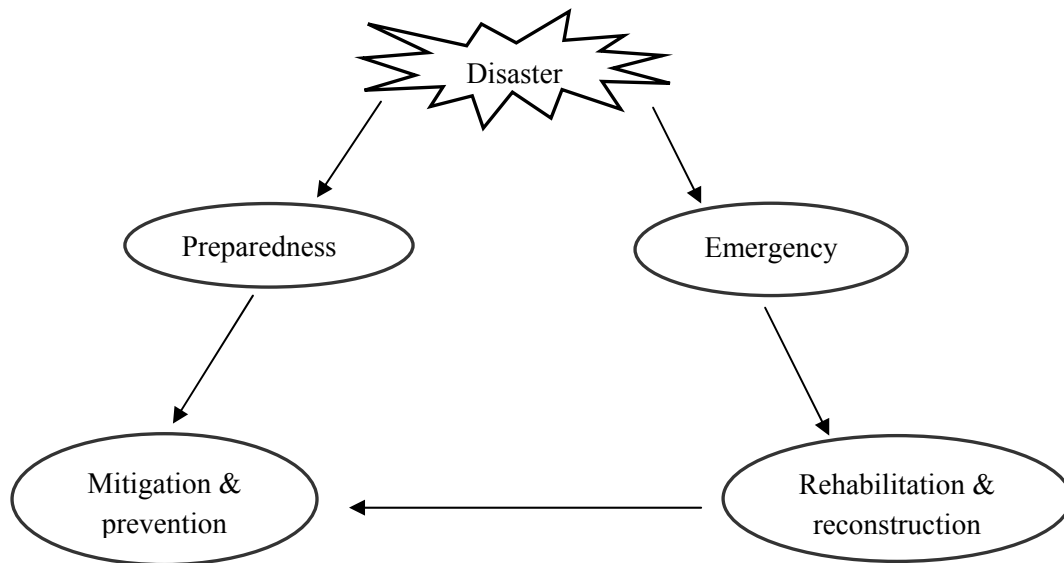


Figure 1: Natural disaster cycle (Source: [1])

2.1 Disaster mitigation and prevention

In the natural disaster cycle, the pre-disaster phase includes mitigation and prevention and, preparedness. During mitigation stage activities are related to elimination or reduction of the probability of the occurrence or reduction of the effects from unavoidable disasters. The mitigation process includes building codes; vulnerability analysis; zoning and land use management; building safety codes; preventive health care and public education. The success of mitigation measures depends on the integration of appropriate measures in national and regional development planning. Its effectiveness will also depend on the availability of information on hazards, emergency risks and the counter measures to be taken.

2.2 Disaster preparedness

During the disaster preparedness phase, measures are undertaken to control the impact of the event through ensuring a structured response and establishing mechanisms for effecting a quick and orderly reaction to it [6]. These are not aimed at preventing the occurrence of a disaster. Further this stage includes the development of awareness among people on the general aspects

of disaster and how they need to behave in future by educating them about the disaster signs, methods of successful evacuation and first aid measures. In addition formation and training of local committees, building of communication systems, meteorological observation systems, facilitation of basic utility systems such as water supply system and sanitation are some of the activities undertaken during this phase.

2.3 Emergency phase

The emergency response aims to provide immediate assistance to maintain life, improve health and support the morale of the affected population. The emergency phase involves immediate post recovery which can last for days, weeks or months depending on the nature of the disaster and local conditions [3]. During the emergency phase, relief agencies or groups focus on preventing additional loss of life through actions such as search and rescue, emergency food and water, temporary shelter, and temporary transport. The focus of this phase is on meeting the basic needs of people until more permanent and sustainable solutions can be provided. Humanitarian organisations are often strongly present during this phase in the disaster management cycle.

2.4 Rehabilitation and reconstruction phase

The recovery activities, which include both short and long term, continue until all systems return to normal or improved status. The rehabilitation phase includes medium term interventions such as construction of transitional housing, provision of basic food to the affected population, provision of social services, road clearing, income generation, water system rehabilitation [1]. As the emergency is brought under control the affected community is capable of undertaking a growing number of activities aimed at restoring their lives and the infrastructure that supports them. There is no distinct point at which immediate relief changes in to rehabilitation and then into long-term reconstruction development.

The reconstruction period includes the long-term and often substantial investment in rebuilding the physical and social infrastructure of affected regions. PDR is a process that is the interaction of complex social, technological and economic factors and actions [7]. There will be many opportunities during the reconstruction period to enhance prevention and increase preparedness, thus reducing vulnerability. However though many organisations are involved in relief and rehabilitation most often they focus on the emergency and reconstruction remains neglected [8]. Therefore it is necessary for organisations which are concerned about disasters to utilise the opportunities and develop the community's capabilities.

3. Women's experiences in post disaster reconstruction

3.1 Women's participation

Generally the role of women in the post disaster stages are categorised under three main areas: reproductive roles; community roles and productive roles [5]. Reproductive roles include roles

within household and the family: inclusive of bearing, nurturing and rearing children; cooking; cleaning the house and yard; marketing; caring for sick and elderly, etc. These roles may be expanded to include agricultural work in the home stock within household, long-term work of rebuilding family and community spirit, etc. which do not give economic values. Women's community roles include: maintaining kinship relations; religious activities; social interactions and ceremonies; communal sharing and caring activities; communal survival activities, etc [5]. These are generally done voluntarily and do not provide economic returns. Although these are usually related to reproductive function, there are instances where it includes work related to relief and reconstruction including the physical reconstruction of their homes [9]. Finally, productive roles give economic remuneration for manual labour, professional labour and subsistence activities. Although generally women's roles are classified under above three categories, Fordham [10] states that there is no simple distinction between private and public labour of women which usefully frames neither women's disaster responses nor can women's work be neatly confined to discrete categories.

The degree of vulnerability among women and their participation during post disaster differ considerably. Disabled, elderly, pregnant and lactating women and widows often require assistance on a longer term or sustained basis, whereas other women can be supported up to the point where they achieve food and economic self-sufficiency. These distinctions are important in determining the types and levels of support to be provided to them. Therefore more local knowledge and wisdom needs to be incorporated into post-disaster recovery and development planning, particularly as they relate to women. According to the International Labour Organisation [13], it is now widely accepted that women are not only responsible for attending to the basic needs of their children and families, but also account significantly for productive and income-generating activities. In addition, in a disaster situation women have demonstrated their capacity as income-earners, producers and managers of food production, providers of fuel and water, participants in cultural, religious and political activities.

The reconstruction phase is a significant period in disaster management as the results of the process are directly open to evaluation and criticism. The literature on disaster management [11] suggests that women's work around the household, on the job and in their neighbourhood contributes significantly to the social construction of daily life under extreme and routine conditions [12]. However the recognition of the importance of their work and their development is still remains a question.

During the reconstruction phase and especially in temporary shelters, women take on a triple duty of reproductive work, community organisation and productive work in the informal economy, while men tend to return to their traditional role of waged work outside home. The tremendous impact of the disaster on children and elderly are largely shouldered by women. Generally in post disaster situations the officials in charge for reconstruction activities finds it difficult to obtain timely and accurate information. This is partly because of decision making which does not follow its usual procedure due to the urgency and the pressures and flow of information to lower ranks does not work in its routine way. In certain cases the implementation does not happen effectively. Thus, the contribution of women to this will be of great help.

Recent literature on PDR emphasises the dominance of men in development processes. Further, women remain marginal to the process and the study recognises the importance of offering diversified packages to women in post disaster stages as not all women are from educated backgrounds.

3.2 Women's challenges

According to the International Labour Organisation report [13], there are four general impacts that disasters have on the work of women. Firstly, women's economic insecurity increases. Since their productive assets are destroyed they often become sole earners, their household entitlements may decline, their small-businesses are hard-hit and they lose their work. In developing countries, after natural disasters, women lacking in land titles or farming small plots may be forced off their land [13]. Moreover, since land and employment arrangements are often negotiated through men, women may lose access to both without a man to represent them. Most importantly the gender stereotypes limit women's work opportunities especially in the post disaster reconstruction stage. In addition, due to economic downturns after natural disasters women lose their jobs more quickly and in greater numbers than men [13].

Women's workload increases significantly following a disaster and their working conditions in the household and paid workplace deteriorate e.g. through lack of child care and increased work and family conflicts [13]. The increase workload stems from damaged infrastructure, housing and workplaces; the need to compensate for declining family income and social services and the responsibility to care for orphaned children, the elderly and the disabled. This in turn limits women's mobility and time for income generating work. Furthermore this leads to women recovering more slowly than men from major economic losses, as they are less mobile than male workers, are likely to return to paid work later and often fail to receive equitable financial recovery assistance from the government or external donors [13]. In certain communities since women often take on more waged or other forms of income generating work and engage in a number of new forms of disaster work, they have also expanded their responsibilities.

While women are severely affected by natural disasters this often provides women with a unique opportunity to challenge and change their gendered status in society. □ Women have proven themselves indispensable when it comes to responding to disasters [4]. Following Hurricane Mitch in 1998, women in Guatemala and Honduras were seen building houses, digging wells and ditches, hauling water and building shelters [4]. Although often against men's wishes, women have been willing and able to take an active role in tasks that were traditionally considered as male tasks. This can have an effect of changing society's perceptions of women's capabilities. Women are most effective at mobilising the community to respond to disasters. They form groups and networks of social actors who work to meet the most pressing needs of the community.

According to a study on past disaster experiences, a pre-existing pervasive culture of acceptance or denial concerning violence against women including no existing criminal legislation on domestic violence, presents compounded problems for organisations attempting to support

women in the wake of the tsunami. The denial or trivialising of violence against women by authorities only adds to the problem [14]. In certain developing countries the prominent finding of male dominance and its negative implications is what underscores the importance of the longer-term vision for structural change to address gender inequality [14].

4. Discussion

The reconstruction is a rebuilding measure that involves building the confidence, self-respect, self-esteem, self-dependency, mutual support and trust and the rebuilding of communities. In order to have a successful completion of disaster reconstruction it is important to include the participation of social actors of the community. During PDR, in addition to men, women are also engines of recovery who possess qualities vital for disaster response and who can help to keep the fabric of society in tact. Since crises present an opportunity to break-down gender barriers and as coping prompts men and women to step out of their traditional places, unequal pre-disaster gender roles can be changed. During recovery periods women have been able to carry out community mobilisation for recovery programmes in developing countries with critical support and planning [16]. In many instances, after gaining economic independence through income generating projects, women have been largely instrumental in promoting youth projects. Thus, their mobilisation capacity can be increased through their economic independence.

Reconstruction is a long-term process and it focuses more on human and material resource development, coordinated effort towards independence and sustainability. In order to achieve the above objectives the concept of empowerment can be used as a tool. In reconstruction the most vulnerable and marginalised sections like women, children, the poorest section of society, etc. are the primary stakeholders who need to be considered as partners in the empowering process [8]. In disaster circumstances, empowerment would enable women to increase their human and economic developmental goals. Through women's participation in planning, design, implementation, monitoring and evaluation, the processes of recovery and reconstruction can go beyond the provision of basic needs. Their participation may engender a level of community cohesiveness and security, with greater potential for realising development goals. However it is advisable to organise and implement community measures that do not violate the stability of the family structure. Working in traditionally male fields like construction; launching small businesses; contributing to discussions on reconstruction; and pursuing education, even while displaced, can empower them. In addition, if men are absent, gender roles are obviously open to change. These circumstances can increase women's economic independence, their ability to provide for their families, their decision making skills and social prominence. However such positive changes need support.

According to report by UN-HABITAT [15], when women are empowered they have the capacity and the inner will to improve their situation and gain control over their own lives. Further it states that, this can lead to an equal share in economic and political decision-making, and control of economic resources. The report by Department of Economic and Social Affairs [16] states that, in addition to poverty, environmental degradation and differing needs of men

and women, the marginalised role of women within many organisations and their absence from decision-making structures contribute to their vulnerability in post disaster situations. Kumar-Range (1999 cited [16]) points out that though women tend to be active in communities and households they are marginalised by agencies and organisations responding to the disasters.

In a study by Bradshaw [17], in post Hurricane Mitch, participation rates of women in community based projects and programmes have increased from under a quarter to over half the women interviewed in the four communities considered for the study. The lowest levels of participation are recorded amongst young female partners or wives in male-headed households and the highest levels are amongst female heads of household. This is perhaps not surprising since women heads are assumed to take on dual responsibilities of male heads and female partners when they head their own households. This was supported by the fact that female heads appear to have been actively targeted in reconstruction. While over half of the number of women interviewed think women are participating in reconstruction only a quarter state that it is women who benefit the most from reconstruction and the majority see benefit as being for family. This shows that mere targeting of women as better deliverers of services and resources may indirectly reinforce traditional gender roles and relations rather than transform them [17].

Although an understanding of the factors that affect vulnerability is crucial, the focus on women's empowerment draws attention to the importance of understanding both women's and men's capacities and potentials as well. This understanding is only possible through the consistent use of participatory methods and a focus on understanding and strengthening women's forms of organisation. Women should be involved in disaster reconstruction processes as having an active role in planning, needs assessment in the construction.

Generally, disaster creates a socially acceptable and legitimate reason for women to get into the public arena. In a way it creates a kind of recognition for women's mobilisation to advocate for their needs and also their initiatives. This coincides with the present concern about the willingness to recognise and responsibility to act. Thus, women's priorities like the provision of community services, collective businesses and access to credit, housing cooperatives, safe housing, etc., become concrete issues of engendering local governance. However, this is always at stake, and the critical issue for women here is building a critical mass to continue to advocate for them. Most importantly women need to become aware of their potential and this opportunity during their experiences.

Training for women must respond to the full range of their aspirations and potential. Interventions also must include those working informally or in the home. Women often know local conditions better than anyone. Therefore they bring crucial knowledge to the planning and implementation of reconstruction projects and decision-making structures [6]. Their participation in turn helps to develop an economic, social, and legal environment propitious for women's success. Long-term recovery strategies should capitalise on positive changes and avoid reverting to pre-disaster patterns. With PDR activities both women and men can find new opportunities for decent work to aid the recovery of their families and communities.

5. Conclusions and the way forward

Disaster response needs a partnership between all the actors in society including the marginalised groups and individuals at all levels, most importantly at community level, where women normally operate. When disasters strike, associations for women and youths can be mobilised and play key roles in relief and recovery. During the PDR phase some activities can be resuscitated. It is wise to search for the hidden resilience displayed by communities affected by disasters and then to build upon it. This would entail a conscious strengthening of local knowledge and wisdom, applying appropriate solutions to crises. One goal should be to increase economic possibilities that promote political, social and economic empowerment of communities wherever possible, without introducing externally generated institutions.

One of the main sustainable means for disaster victims to overcome their marginal condition is through an adjustment process of empowerment, allowing them to fulfil their basic human development needs. When designing protection and assistance programmes for women during and following emergencies it is essential for planners to broaden the concept of women's status from the narrow conceptualisation as daughter or mother or wife. The capacity of women to mobilise people and manage change should not be underestimated. Instead of feeling that their voices cannot be safely heard, opportunities for women to engage in management and decision making related to all levels of disaster response and reconstruction should be offered. This can enable disasters to provide physical, social, political and environmental development opportunities that can be used during the PDR. This would lead to not only reconstruct the affected areas, but also to improve the socio-economic and physical conditions of the impacted population in the long run. This study has been undertaken as part of a research study which focuses on the empowerment of women in post disaster reconstruction.

References

- [1] Delaney, P.L. and Shrader, E. (2000) Gender and Post-Disaster Reconstruction: The case of Hurricane Mitch in Honduras and Nicaragua. Report prepared for the World Bank. (Available on line: www.anglia.ac.uk/geography/gdn [accessed on 25/10/2007].
- [2] United Nations International Strategy for Disaster Reduction (2003) Turning the tide on disasters towards sustainable development 2003 World Disaster Reduction Campaign. Geneva.
- [3] Jones, T.L. (2006) Mind the Gap! Post-disaster reconstruction and the transition from humanitarian relief. London: RICS.
- [4] Bradshaw, S. (2002). Exploring the gender dimensions of reconstruction process post Hurricane Mitch. *Journal of International Development*, Vol 14, pp. 871–879.
- [5] Ariyabandu, M.M. and Wickramasinghe, M. (2003). Gender dimensions in disaster management. Colombo: ITDG South Asia Publication

- [6] International Labour Organisation. (2006) The Gender Dimension, (available online <http://www.ilo.org/public/english/employment/crisis/about/dimension.htm> [accessed on 23/09/2007])
- [7] Baradhan, B (2006) Analysis of the Post-Disaster Reconstruction Process following Turkish Earthquakes, 1999. In: IF Research Group (Ed.), International Conference on post-disaster reconstruction Meeting stakeholder interests, 17-19 May 2006, Florence. University de Montreal.
- [8] Jayaraj, A (2006) Post disaster reconstruction experiences in Andhra Pradesh, in India. In: IF Research Group (Ed.), International Conference on post-disaster reconstruction Meeting stakeholder interests, 17-19 May 2006, Florence. University de Montreal.
- [9] Enarson, E. and Scanlon, J. (1999). Gender patterns in flood evacuation: a case studying Canada's Red River Valley. *Applied Behavioural Science Review* Vol. 7, No 2, pp. 103–124.
- [10] Fordham, M. (1998). Making women visible in disasters: problematising the private domain. *International Journal of Mass Emergencies Disasters*. Vol. 22, No 2, pp. 126–143.
- [11] Fothergill, A., 1996. Gender, risk and disaster. *International Journal of Mass Emergencies and Disasters*. Vol. 14, pp. 33–56.
- [12] Enarson, E. and Morrow, B. (1998). Why gender, why women? In *The Gendered Terrain of Disasters*.
- [13] International Labour Organisation. (2000) Crisis response and reconstruction (available online <http://www.ilo.org/public/english/employment/crisis/download/afghanwomen.pdf> [accessed on 23/09/2007])
- [14] Pheng, L.S., Raphael, B. and Kit, W.K. (2006). Tsunamis, some pre-emptive disaster planning and management issues for consideration by the construction industry. *Structural survey*. Vol 24, No 5, pp. 378-396.
- [15] UN-HABITAT Regional Office for Asia and the Pacific, 2007. *Towards Women Friendly Cities*. Fukuoka: UN-HABITAT Regional Office for Asia and the Pacific.
- [16] Department of Economic and Social Affairs, 1999. *Women's empowerment in the context of human security*. Bangkok: Department of Economic and Social Affairs.
- [17] Bradshaw, S. (2001). *Reconstructing Roles and Relations: Women's participation in reconstruction in post-Mitch Nicaragua*. *Gender and Development*, Vol. 9, No 3), pp. 79–87.