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Mainstreaming Gender Sensitive Disaster Risk Management

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Abstract

The studies on sustainability of disaster management and community disaster resilience indicate the necessity of participation of all parts of public. Lessons from disasters show that existing social vulnerabilities based on gender roles are increasing during disasters, and reducing disaster resilience and capacities. Gender-sensitive approaches should be integrated into the disaster risk management (gender mainstreaming), given equally place to women in planning. Gender-sensitive disaster mitigation strategies are more successful to reduce vulnerabilities and increase disaster resilience. During the disaster mitigation and preparedness handling the post-disaster issues in gender framework, recognizing gender needs and participation, will encourage gender equality and empower women. Developing gender-sensitive programs are right strategies for improving disaster capacity and resilience. During gender mainstreaming in planning processes there is an urgent need for the train the trainers who works in the field.

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1. Disaster impacts, vulnerabilities and women

Disasters have the highest impact on those, the weak and already marginalized or disproportionately affected groups. For example, poorer people are likely to live in unplanned, low quality settlements, and these groups are the slowest to recover. There is also a well-known correlation between being poor and being female (Quarantelli 2005; Enarson 2008). Observations indicate that the conditions for women after disasters get worse. In terms of the different impacts of disasters, men and women more likely recognized the emotional impact of the disaster (Quarantelli 2005; Phillips and Morrow 2008; UNDP 2010). For instance, the mortality of women are far more than men's because women don't have access to information, services and sources, but rather stay at home (Bradshaw 2004; Pincha 2008; World Bank 2012). The death ratio of women are significantly larger than men in many different disasters from the 1991 Bangladesh cyclone through the 1993 Maharasthra, 1995 Kobe and 1999 Izmit earthquakes and to the 2004 Indian Ocean and 2011 Japan tsunamis (Wisner *et al*. 2012; Weber and Peek 2012; Nakahara 2013).

One of the most important factor in disaster risk reduction is the concept of vulnerability. Pre-existing vulnerabilities are enhanced during disasters. Communities are face disaster risks due to social vulnerabilities as well as physical conditions. Vulnerabilities in disasters are influenced by socio-economic and cultural characteristics of the community, and they often have a gender dimension. As a development issue, social factors such as lack of access to knowledge, source of income, and limited access to services often increase women's vulnerability. The assigned roles and responsibilities within communities effect both men and women in different ways during disasters. The domestic role of women as caregivers can also diminish their capacities to disasters, for example, by limiting their mobility and making them stay home. Gender-based challenges increase vulnerabilities and this leads to huge risks and result in devastating disasters (Enarson 2008; Bradshaw 2004; Wisner *et al*. 2012; World Bank 2012).

2. Why Gender-sensitive Disaster Risk Management (GDRM)

Disaster is a social result. Women, being a part of community, should participate in all phases of disaster management cycle in order to understand, cope and practice the disaster risk reduction activities (Enarson 2008; Pincha 2008). This participation affects the sustainable resilience, and enables quick response and recovery (Xu and Okada 2012; Okay *et al*. 2014, 2015).

The representation of women even in developed societies, in planning and decision-making, is still very little. The importance of mainstreaming gender perspectives in all phases of disaster risk management has already entered the agenda of all countries (Hyogo Framework 2005-2015; Sendai 2015-2030). Gender-sensitive approaches to disaster risk reduction strategies and policies will constitute sustainable community resilience to disasters (Gaillard *et al*. 2015). Therefore, the gender mainstreaming in disaster management requires a gender-sensitive disaster planning procedures as well as gender training of disaster management employees and volunteers.

Gender mainstreaming is a right strategy and tool to incorporate the needs, concerns and capacities of women and men, in disaster planning and response phases. Effectively, to design mitigation and preparedness measures for risk management, and manage the disaster recovery and reconstruction, it is crucial to acknowledge gender differences (Enarson 2008; Pincha 2008). In the longer term, gender-sensitive disaster risk reduction is more effective and sustainable as it benefits from women's participation, networks, capacities and resources. This way, women take active part instead of being passive and vulnerable in their community planning and disaster resilience. It is recommended to use gender analysis and assessment to obtain local gender-specific risk, capacity and vulnerability data and information (Pincha

2008). The participation and representation of women throughout the process of design, plan and implementation of disaster management cycle (mitigation, preparation, response and recovery) is the only way to ensure that gender concerns are incorporated.

Local gender-sensitive data is widely used to contribute to disaster preparedness and to improve disaster response, need assessment and reconstruction planning. Gender analysis must be integrated to development and disaster risk reduction programs, preparedness as well as recovery and reconstruction planning (World Bank 2012; UNDP 2012). Disaster risk reduction and reconstruction provides a "**window of opportunity**" and offers a "**building back better**" for social transformation and breaking down of gender inequalities (UNDP 2012), reducing vulnerabilities and increasing capacities as well as disaster resilience. Thus, this provides a chance to reinforce policies and strategies that protect women's social and economic gains and contribute to their greater equality within their household, community and in the overall society.

3. Better risk communication and women groups

Accurate risk perception by community is necessary in terms of improving the capacity of the preparedness and response. The differences in gender characteristics and risk perceptions lead to women having limited access to public information, public awareness and training, which enhances vulnerabilities. Due to insufficient information about the risks, women's participation is limited, and therefore, they lack preparedness in disaster risk management. It is recommended to engage with local women's groups to communicate and disseminate the knowledge of planning and preparation activities (Xu and Okada 2012).

Turkey has a large number of local and voluntary women's organizations working for women's empowerment. For example, after the 1999 Izmit earthquake KADAV and VAKASUM, after the 2011 Van earthquake were established and they provide various services for women, but there is still lack of information on disaster risk reduction (Okay *et al*. 2015). Design of the practical training of these organizations are generally known to be in the form of one-way information flow. Therefore the training of trainers and disseminating information requires the establishment of gender-integrated participation, collaboration, communication and coordination between different sections of community.

In disaster response teams, in aid distribution during the post-disaster, the processes of temporary sheltering or disaster planning, women are unable to take place, which reduces the capacity of community to disaster preparedness and resilience. However, the presence of local women's groups, helps local community to quickly overcome, fastens the response and recovery stage (Yönder *et al*. 2005). Therefore, by the development of gender-sensitive strategies and procedures, the disaster preparation and planning process should include women's participation. Those working in the field of the disaster should undergo gender-integrated response training.

4. Making Women Visible in Disaster Risk Management: Tuzla Case Study

In this study gender-sensitive approaches were investigated within the scope of the disaster risk management development project for Tuzla district of Istanbul. To increase disaster preparation capacity and resilience and as well as risk perception, the field and table exercises were conducted with local women's group who took equal part in planning and development of risk reduction strategies in mitigation planning. This collective watching and participatory mapping enhanced the engagement of women volueenters and munacipality experts in these risk reduction activities. Series of exercies were considered as a process and it was important to continue the initiative for effective risk reduction at the community level.

5. Differences and focusing on capacities

The level of access to and control of resources as well as decisions by different gender groups can determine and improve the community's resilience to disasters and also the ability to recover. Gender differences between men and women are more prominent at times of crisis, such as post-disaster periods. Whereas, gender differences can help development effectively and manage mitigation measures and preparedness for risk reduction. Based on gender roles, social networks, knowledge and skills, health, wealth, and residential properties of all members of the community affect community's risk and vulnerabilities and their capacities to react to disasters (Graham 2001; Ariyabandu and Wickramasinghe 2003; UNDP 2010; Pincha 2008; Fordham 2008). Women, as a group, often have different needs, priorities in disasters, and experience different levels of resilience. Women commonly work with women's groups to organize (Xu and Okada 2012) and maintaines involvement throughout a prolonged time period.

Another important factor to consider and design disaster risk reduction tools is the differences of risk perception between men and women. Across all societies, women are consistently more willing to participate in disaster preparedness activities and are quicker to observe disaster warnings and evacuation alerts. During this study the participants stated that they are very much interested in training, and feel much better and resilient with preparation exercises (Fig. 1). They are also better suited to participate in disaster preparedness planning, working in response teams and organizing sheltering activities (Figures 2; Okay *et al*. 2015). Women's local community knowledge, strong social networks, key roles in families and their active work roles makes them resourceful social actors in crisis, yet they are rarely recognized as 'front-line' responders (Enarson 2008; Pincha 2008).

Based on the case study:

Gender-sensitive approaches should be integrated into the disaster risk management processes, given equal place to women in planning and decision making, and engage women's organizations in risk communication and dissemination.

In response teams and local volunteers, women's participation should be promoted and supported to cooperate with local organizations. Women relief workers are important to female survivors. **Incident Command System (ICS)** should be used as a tool to control, command, and coordinate equal gender groups during crisis response process as well as gender mainstreaming to ensure gender-integrated response.

Statistics indicate that more people are rescued and saved by local volunteers. First-aid, search and rescue **CERT** trainings (Simpson 2001) should be given at every level, from schools to businesses, by the support of local authorities and women's volunteer groups and their activities should be promoted. **Early Warning** and knowledge dissemination should be addressed to all groups including women, and the training of local community should be ensured.

All shareholders in disaster management should be trained for gender-sensitive disaster management. Based on the study results Gender-sensitive Disaster Management for the Disaster and Emergency Management Graduate Program course was developed by a group of faculty members who expert in sociology, economy and disaster management (Okay *et al*. 2014).

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