

# Gender mainstreaming in disaster risk reduction – a step towards the visibility of women in DRR

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## ABSTRACT

Women and men perceive risks differently and therefore gender is an important part of disaster risk reduction requiring further consideration. Experiences of large disasters have shown that the role of women is significantly different from the one of men in the phases of prevention and disaster response. To further enhance resilience it is important to proactively include women in socio-political decision-making processes and to ensure the inclusion of women and youth-specific issues in disaster risk management plans. Therefore, the platform on Natural Hazards of the Alpine Convention - PLANALP - has included this topic in the current mandate 2015-2016. The focus is to raise awareness of gender issues in disaster risk reduction and to foster women's engagement by enhancing the visibility of female experts in this area of work.

## KEYWORDS

disaster risk reduction; gender mainstreaming; policy; PLANALP

## INTRODUCTION

Natural hazard risk is perceived differently by women and men and, consequently, differences of gender are a significant part of disaster risk reduction. This is also underlined by the recently adopted Sendai Framework for Disaster Risk Reduction 2015-2030 (UN 2015). With respect to natural hazards, often women are more vulnerable compared to men because of socially constructed roles and prerequisites; biological or biophysical factors; and existing patterns of discrimination, such as domestic violence against women, that become more evident in extreme situations, thus emphasizing the importance of this topic. This subsequently also affects children and elderly who are frequently dependent on women, especially in developing countries where women often are responsible for the subsistence of the family members.

Experiences from large disasters have shown that the role of women is significantly different from men in the phases of prevention and disaster response. In the case of the 2004 tsunami, it was discovered that more women and children than men died in the worst affected areas (OXFAM 2005). Reasons are, for example, that in the disaster-affected areas men were more capable of swimming or climbing trees than women (OXFAM 2005). Furthermore, a study

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carried out in Serbia following the flood of 2014 (Baćanović 2015) indicated that elderly women and women living alone were more inclined to have suffered damages from the calamity.

To further enhance resilience it is important to proactively include women in socio-political decision processes and to ensure the inclusion of women- and youth-specific topics in disaster risk management plans. Therefore, the empowerment of women at local levels is crucial for influencing local protection and response. However, it is important to highlight not only the need to strengthen the training on gender issues for political representatives and institutions that deal with disaster risk reduction and reconstruction, but also the need for increased representation of women in decision-making processes in these institutions (Damyanovic et al. 2014, UNISDR 2010). Based on this, the platform on Natural Hazards of the Alpine Convention – PLANALP – included this topic in the current mandate 2015-2016. The focus of the mandate is to enhance the visibility and foster the engagement of women in decision-making processes and to raise awareness on gender issues in the field of disaster risk reduction.

### **DIMENSIONS OF DISASTER PERCEPTION**

One of the guiding principles of the recently adopted Sendai Framework for Disaster Risk Reduction 2015-2030 (UN 2015) is an all-of-society engagement and partnership which includes a gender perspective in all policies and practices. Social interactions between men and women result in socially constructed roles, responsibilities and identities that are reflected in a combination of physical and behavioural characteristics – gendered identities (Madhavi 2010). These gendered identities comprise: perception, attitudes, and status separating boys from girls and men from women. Perceptions are the subsequent views resulting from these gender identities, and the attitudes differ as these are guided by their respective perception (Madhavi 2010). Another reflection on social interactions of men and women is the resulting positions in family, community, or society (Madhavi 2010). These relations come into effect in all spheres of life including disasters, which is highlighted in various studies conducted in different regions of the world. To detail with these differences, the approach of Neumayer and Plümper (2007), distinguishing three causes for gender differences in mortality resulting from natural disasters, is applied in the following paragraphs.

The first dimension can be summarized as a physiological or biological dimension (Neumayer & Plümper 2007) that incorporates limitations, such as the ability to run away from a wave or withstand a storm. The 2004 tsunami that affected Southeast Asia, South Asia, and East Africa is a good example. In this event more women and children died than men. One reason for that was missing the physical strength necessary to hold on or float, which subsequently also applies to men that were not strong enough.

In terms of recovery, including rebuilding infrastructure and health risks, there is also evidence of physiological differences between men and women. A big issue in the recovery phase is that women often do not have the strength to help clear debris, but engage in cleaning after the heavy-duty jobs were done (Baćanović 2015). Therefore, they are sometimes not as proactive as men when it comes to returning to their homes. In addition, single women or families without a male family member are not able to carry out post-disaster recovery work (Baćanović 2015). Subsequently, these women and families have to pay somebody to assist them with their return and rebuilding of their homes. Another issue where differences between men and women is evident: men and women have different propensities to die from various diseases. This in combination with discriminated access to resources after disasters, like food and hygiene products, can have tremendous impact on women. For example, women in less-developed countries are often more likely to suffer from malnutrition (IUCN 2009), which constitutes to their vulnerability to diseases. However, the implications for gender-specific disaster mortality are ambiguous (Neumayer & Plümper 2007).

The second aspect comprises behaviours and social prerequisites, meaning that the role one has in society can have an impact on vulnerability (OXFAM 2005, Neumayer & Plümper 2007). These preconditions range from clothing that might hinder protecting oneself or from escaping, to the obligation or duty of providing protection or care for children or the elderly. An example is given in the case of the 2004 tsunami where women stayed behind with children or elderly, and consequently were not able to save themselves (OXFAM 2005). This hints at another important aspect with respect to social constraints: time and location of a disastrous event. Again, examples are provided by the 2004 tsunami where women in India were waiting at the sea shore for the fish to be processed when the tsunami struck, whereas in Sri Lanka the tsunami hit in the hour the local women usually take their bath (OXFAM 2005). Additionally, in Indonesia the men tended to work away from their homes in bigger cities resulting in proportionally more deaths among women (OXFAM 2005).

Another aspect that is related to social structures are long term impacts on the economic situation. A study that was carried out after the Great Hanshin Earthquake in 1995 details the impacts that disasters can have on women. It was shown that companies let go of part time workers first, most of whom were women (Masai et al. 2010), who often take care of the children and, therefore, were not able to work full time. Another long term effect of disasters can be a changed situation after the disaster, when men have to, for example, fend for themselves or take over unfamiliar tasks as they have to take care of their remaining family (OXFAM 2005).

The third dimension focusses on the recovery phase where Neumayer and Plümper (2007) underline that existing gender patterns, depending on the respective societal context, become

exacerbated through increased competition of individuals resulting from the breakdown of social order and limited access to resources.

A transfer of existing gender patterns was also highlighted by Baćanović (2015), indicating that in the displacement centres after the flood in Serbia, men took over leadership and organizational roles and stepped out into the public sphere, whereas women were more isolated and passive, often looked after the children and did not always get the psychological support needed. Another example from St. Lorenzen in Austria, in 2012 indicated a continuation of traditional gender roles after a debris flow event. Women took over the supply and provision roles such as cooking, whereas men were more active in reconstruction works (Damyanovic et al. 2014). Nevertheless, in this case the degree to which individuals were affected was not based solely on their gender, but more on the individual situation and the subsequent social network within the municipality (Damyanovic et al. 2014).

Differences between men and women are also evident in the context of early warning and evacuation, depending on their specific social context. A study from the Save flood (Baćanović 2015) showed a difference in response and actions after warnings. In this case, women preferred official warnings, whereas men were prepared to obtain informal information. Another example, from Japan, showed that women often were talking to and then evacuating with people around them, whereas men more often evacuated alone (Gender Equality Bureau 2014). The example of Hurricane Katrina showed that women were often the decision-makers when it came to preparedness and evacuation: deciding if, when, where, and how long a family would evacuate (Peek L. & Fothergill 2010). The reason was that approximately 40 percent of the households before the storm were headed by females, due to the absence of husbands, and therefore they were also responsible for evacuation (Willinger 2008, Barber & Deitz 2015). However, the fact that a large proportion of these female-headed households lived in poverty exacerbated this situation because of difficult preconditions like limited access to transportation and other necessities for evacuation, or insecure employment (IWPR 2006, Barber & Deitz 2015).

Another aspect is the increased health and security risk for women after an event. Violence against women is commonly observed. This is especially referred to after big events, e.g. after the tsunami in Sri Lanka where threats of rape and sexual assault increased (OXFAM 2005). However, domestic violence can also increase due to such extreme situations. For example, in New Zealand following the Whakatane Flood 2004, a doubling to tripling in domestic violence was observed by several agencies (Houghton 2010). Another example is the Great East Japan earthquake of 2011, where the evacuation operation of the centres was mainly carried out by men without considering the women's point of view, thus causing women inconveniences and discomforts (Gender Equality Bureau 2014). Examples would be special health needs or security issues due to poorly lit areas.

## GENDER MAINSTREAMING IN DISASTER RISK REDUCTION

The above examples clearly indicate several gender differences in the context of natural disasters and this is especially evident in the response phase. The different roles and perception of men and women in situations such as preparation, early warnings, or decisions on evacuation, underline the importance of meeting the different needs in all phases of a disaster. Gender mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities – policy development, research, advocacy/dialogue, legislation, resource allocation, planning, implementation and monitoring of programs and projects (UN Women). The focus therefore is on the differences in perception of men and women in all phases of the disaster risk cycle and how to address these differences. The all-of-society engagement should also account for age, disability, and cultural perspective in all policies and practices (UN 2015) related to disaster risk reduction at all levels. This further increases the preparedness and coping capacity among all groups of society.

In order to increase the resilience of women, it is important to ensure that women are specifically addressed in disaster risk management plans and that they are also included in socio-political decision-making processes. The United Nations Development Programme (UNDP) also aims to ensure women's participation in all dialogues and in solution-generation for disaster risk reduction (UNISDR & GDN 2009). This subsequently requires empowerment of women, which also means ensuring opportunities for women in science and technology; building capacity in women's groups and community based organizations; and including gender mainstreaming in communication, training, and education, etc. (UNISDR & GDN 2009). This is also underlined by Damyanovic et al. (2014) and UNISDR (2010) who emphasize that in addition to strengthening the training on gender issues for political representatives and institutions in disaster risk management, it is also key to set up trainings for representatives from institutions dealing with disaster relief or reconstruction.

The examples in the previous sections show that in the context of a disaster the differences between men and women are highly evident in developing countries, especially when referring to impact, death rates, etc., but are also evident in developed countries. Gender mainstreaming therefore might enhance success rates of disaster risk reduction and, considering knowledge transfer via best practice examples, influence community resilience in developing countries. Especially in disaster risk reduction, among other issues, alpine countries have strong expertise and, therefore, have a significant influence on methods and policies adopted in other mountainous areas of the world. The examples above show that vulnerability and resilience are highly dependent on the social structure, however, it also underlines the need for taking responsibility and acting as a role model to enhance gender mainstreaming in the disaster risk context.

Raising the awareness of experts and stakeholders, acting as multipliers in society, and tailoring information concepts for women, youth and men are examples towards main-

streaming gender in disaster risk reduction. The inclusion of women in different levels of the disaster risk reduction processes – from expert to stakeholder levels in participatory processes – increases perspectives, and subsequently accounts for different groups of society. In the long term this aims at an overall increase of resilience for all levels of society. Women have a different perspective on disaster risk reduction and therefore it is important to add this to the discourse, both at a decision-making and societal level. As a transnational body, PLANALP takes on this responsibility and has started by raising awareness for gender mainstreaming by featuring female experts in the field of disaster risk reduction.

### **INCREASING THE VISIBILITY OF WOMEN IN DISASTER RISK REDUCTION**

PLANALP integrated the aspect of gender in the context of natural hazard and disaster risk management in its mandate for 2015-2016 with the item: “The role of women in natural hazard management focusing on the Alpine region”. The objective is to raise awareness and increase the visibility of women in the field of disaster risk reduction and to show their vocational diversity. To implement this, PLANALP took the opportunity to contribute to an exhibition in the frauenmuseum Hittisau, Austria: “Ich, am Gipfel. Eine Frauenalpingeschichte”. This exhibition on women and alpinism was therefore complemented with “talking-heads”, showcasing the potential careers for young women in the field, thereby fostering mixed teams in disaster risk reduction in the long run.

To highlight the different options and career paths, as well as challenges and opportunities of female experts in disaster risk reduction, structured interviews were conducted and filmed. These interviews were displayed as “talking-heads” – showing the head and upper body of the person interviewed – on a screen in the exhibition. The questions in these structured interviews ranged from personal motivation for the job, daily business to observable differences between men and women in disaster situations. The women interviewed had a broad range of obligations in the field of natural hazard management: cross-cutting functions such as spatial planning, or the management of prevention and protection of hydro-meteorological hazards like floods or avalanches. A geologist and engineer in the field of torrent and avalanche control represented some of the women who contributed to this “talking-head” project. To integrate this element in an exhibition on women and alpinism was beneficial for two reasons: 1) the exhibition raised awareness for gender in similar contexts and 2) it reached out to different levels of society including experts, but also the general public and youth.

### **CONCLUSION**

In conclusion, gender mainstreaming is an important part of disaster risk reduction for increased resilience at all levels of society to natural hazards. This entails higher awareness, better understanding and further implementation and replication of tailored disaster risk reduction concepts that are gender-inclusive. The exhibition of PLANALP in the frauenmuseum was one step towards higher awareness among the general public but also among experts

which act as multipliers within society. Increased awareness among experts further contributes to tailored concepts for natural hazard risk management mainstreaming the gender element. To design these concepts, as indicated above, open questions like in-depth knowledge on the interrelationship of gender and social factors and related consequences in disaster situations have to be investigated. Further, regional differences have to be explored as shown by the examples of Serbia and Japan, where the reaction to formal versus informal warning was very different. Overall, evaluation of existing disaster risk reduction plans, documenting best practices and further research on the questions posed above are concrete steps towards a successful accomplishment of gender mainstreaming in all phases of the disaster risk cycle.

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