Role of women in disaster risk governance

Kinkini Hemachandra\textsuperscript{a}\textsuperscript{*} Dilanthi Amaratunga\textsuperscript{a} Richard Haigh\textsuperscript{a}

\textsuperscript{a}-University of Huddersfield, UK

Abstract

Since the frequency and magnitude of occurrence of natural hazards increased unprecedented within this century, policy makers, researchers and practitioners have endorsed on innovative disaster risk reduction measures towards enhancing resilience. In achieving this, disaster risk governance promotes innovative and accountable approaches enhancing their effectiveness. Multi-stakeholder engagement is a fundamental element of disaster risk governance. Many international strategies and frameworks have identified women as one of the key stakeholders in any disaster management efforts due to many reasons. Women play a significant role in disaster response and recovery stages specifically at household level. However, their roles in organizational decision making, particularly in disaster risk governance, is limited due to uncovered reasons. This has created equity and equality issues among one of the most affected communities from hazards. Therefore, this novel study attempts to explore and emphasise the role of women in disaster risk governance, risk governance efforts and to uncover the barriers that limit their role in disaster risk governance. Hence, the study conducted a substantial level of literature review. Accordingly, it reveals that the role of women in disaster risk governance as vital for an effective disaster risk governance and resilience. Further, the study identified socio-cultural factors, individual characteristics, legal and institutional factors and socio-economical factors as the barriers that limit their role in disaster risk reduction and disaster risk governance efforts.

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

Keywords: disaster risk governance; women; disaster risk reduction

\textsuperscript{*} Corresponding author. Tel.: + 44 1484 900 590.
E-mail address: K.Hemachandra@hud.ac.uk
1. Introduction

Traditional disaster management approaches were based on different phases of the disaster cycle with different types of interventions; mitigation, preparedness, response and recovery strategies [1]. However, these emergency management efforts face many challenges. For example, lack of focus on all types of hazards, insufficiency in proactive measures, lack of coverage of all phases of emergency management and alike. [2]. As a result, number of disaster risk reduction (DRR) measures have been introduced with innovations in diverse areas of risk governance, risk knowledge, cost-benefit analysis and accountability [3].

Disaster risk governance (DRG) has received attention due to its ability of enhancing effectiveness of DRR and resilience efforts through participatory decision making [3, 4]. Risk governance connects horizontally with government ministries and departments, vertically with regional, departmental and local governments and set specific roles for related institutions. DRG is aligned with broader governance concept which deals with political interferences balancing different interests with political realities. Since, good governance ensures delivery of efficient and effective outcomes of economic, social and environmental decisions [5], it is necessity to strengthen risk governance with increasing disaster risks.

Since DRG ensures equal participation in decision making along with equity and equality, women must be represented in all types as well as all stages of DRR decision making [3, 6]. This was emphasized at the 3rd World Conference on DRR held in Sendai aimed at promoting gendered DRR since 2015. However, its implementation was not at a satisfactory level [7]. This has made it difficult to represent the needs of women affected by disasters in many different ways [8, 9]. Therefore, it is necessary to establish the link between roles of women in DRG. However, existing literature presents importance of risk governance keeping the role of women in isolation. Therefore, this study aims at making an interconnectivity of role of women in risk governance while highlighting its importance and identifying the barriers that limit their role towards risk governance. The next section presents the methodology used in the study followed by the analysis of the study in Section three. Section four presents the conclusions and the way forward of the study.

2. Methodology

This study is based on a literature review with the aim of identifying the role of women in DRG and the barriers that limit their role in DRG. The literature review has been conducted based on 21 peer reviewed journal papers, 5 books, 20 official reports produced by institutions, for example, United Nations, United Nations International Strategy Disaster Reduction and 10 official websites. This is an initial study of a PhD dissertation with the aim of proposing a framework to enhance the role of women in DRG and DRR efforts based on the barriers identified through literature review and interviews. Following table demonstrate the breakdown of the journal articles used in identifying the barriers that limit the role of women in DRG and DRR related decision making.

<table>
<thead>
<tr>
<th>Journal name</th>
<th>Number of papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Asian African Studies</td>
<td>1</td>
</tr>
<tr>
<td>African Affairs</td>
<td>1</td>
</tr>
<tr>
<td>Journal of Global Economics</td>
<td>1</td>
</tr>
<tr>
<td>European Journal of Business and Social Science</td>
<td>1</td>
</tr>
<tr>
<td>Sociology and Anthropology</td>
<td>1</td>
</tr>
<tr>
<td>Journal of Public Administration and Governance</td>
<td>1</td>
</tr>
<tr>
<td>International Research Journals</td>
<td>1</td>
</tr>
<tr>
<td>Population and Development Review</td>
<td>1</td>
</tr>
</tbody>
</table>
3. Analysis

This section presents the analysis of the study based on the literature review under three sub-sections: introducing the concept of DRG, importance of DRG emphasizing the role of women in DRG and identifying the barriers that limit their role in DRG.

3.1. Disaster Risk Governance (DRG)

There are many aspects to be considered when developing an effective DRR strategy, such as; security/ good governance, economic/ social development, food & water security, environmental sustainability/ climate change adaptation/ and disaster risk management initiatives. This is furthermore complicated when designing DRR strategies for poor and developing countries since many of their systems and institutions are influenced by weak regulatory frameworks, weak capacities, lack of information, funding limitations and alike. [White et al 2004 cited in 1]. In fact, many of the above mentioned issues are related to risk governance [10].

During the last decade, the concept of DRG has gained attention [11] with the notion of informed decision making as an essential element for risk societies. DRG is defined as “the way in which public authorities, civil servants, media, private sector, and civil society at community, national and regional levels cooperate in order to manage and reduce disaster and climate related risks” [12]. It is also defined as an emergent version of integrated risk management that is tailored or directed to enhance coping capacity under high complexity and uncertainty conditions of post-industrial society [13]. Further, it is described as how various actors respond to risks complement with uncertainty, complexity and ambiguity [4, 14].

According to International Risk Governance Framework, risk governance consists of five components: risk pre-assessment which deals with early warning and framing the risks by different stakeholders; risk appraisal which provides knowledge through scientific risk assessment with systematic concern assessment for decision making; characterisation and evaluation which deals with evaluating the risk as acceptable, tolerable or intolerable; risk management as the actions and remedies for reducing, transferring or retaining the risk; and risk communication which explains the way how stakeholders understand risk and participate in the risk governance process [14, 15].

DRG is based on good governance principles of which participation, accountability, transparency, equity and effectiveness. More than 120 countries have introduced legislations and policies to enhance DRG [11]. Further, multi-stakeholder participation is also a key consideration of DRG [4, 16, 17]. Specifically, this is vital in informed decision making to minimize negative results of trade-offs under high risks and uncertainties [4, 13, 14].

DRG accommodates representation of communities and vulnerable groups in government decision-making process [11]. However, when governments, industry, civil society and experts, engage in collective decision making, it could result in trade-offs [4]. These trade-offs are perceived by different groups who have been affected by complexed situations as a result of being neglected or ignored in decision making. Among these stakeholders, women are considered as necessary stakeholders of managing disasters [6]. However, the documented evidences do not present the role of women in DRG by showing the inter-link between DRG and the role of women. Therefore, the next section presents the existing literature on importance of DRG and the role of women in DRG highlighting the missing link between these two.

3.2. Importance of DRG

The importance of risk governance has increased along with increasing trend of disasters [4]. Many international frameworks have introduced evolving strategies to reduce the risk of disasters. For example: Hyogo Framework for
Action (HFA) introduced the first international framework for DRR during 2005-2015 with the aim of building the resilience of nations and communities. The framework has identified some key gaps and challenges of the Yokohama Strategy when dealing with disaster risks. Among these challenges, governance became the first challenges to be addressed in terms of organizational, legal and policy considerations. Further, DRG is important to increase capacities at the national and community level when dealing with DRR. It further acknowledges the importance of gender sensitive disaster risk management policies, plans and decision making process at all levels [18]. According to this framework, transboundary cooperation, mutual learning and exchange of good practices and information and monitoring and assessment of disaster risks at regional and global level facilitate DRG [18]. However, this framework did not able to identify the link between the role of women in achieving DRG.

Keeping another step ahead in 2015, the HFA was replaced by the Sendai Framework for Disaster Risk Reduction (SFDRR), for the period of 2015-2030. Strengthening DRG is one of its priorities. It underlined the necessity of enhancing good governance through international cooperation for an efficient and effective management of disaster risk at national, regional and global level [10]. The framework has recognized the leading, regulatory and coordination role among women in the design and implementation of policies, plans and standards. However, the framework did not present the measures in which the role of women can be incorporated to ensure risk governance to overcome the barriers that prevent their participation.

Disasters affect differently for diverse communities [19] specifically, more women have been affected than men [20-23]. For example: the death toll of women is four times higher than men from the Indian Ocean Tsunami in 2004 [24]; flood and cyclone in Gorky in 1991 in Bangladesh, the ratio of women deaths to men was 14:1; Nepal earthquake in 2015 reported 55% of women and girls deaths when compared to men and boys [25]. This shows that existing public decision making for DRR have not been able to address the effects of disasters particularly on women due to uncovered reasons. Despite this fact, women’s participation is important in all levels of decision-making for socio-economic development [26].

As mentioned earlier, DRG aims at reducing negative effects of public decision making under complex and uncertain situations[4], DRG can be incorporated to minimize negative effects of disasters on women. Participatory decision making ensures engagement of all four actors of the society: governments, industry, civil society and experts. Women could be representatives of all types of actors mentioned earlier at different levels. For example: women administrators, political figure heads, policy makers, experts in the forms of academics, researchers, practitioners and scientists and civil society agents [19].

Hence, the General Assembly of Beijing Platform for Action in 2005 explained the role of women at all levels of environmental decision making [27] as important stakeholder [9] in achieving DRG [6]. Without their participation and taking their perspective into decision making at all levels of government, the status of equality, development and peace could not be delivered [26]. Their unique skills, qualities and expertise benefit in quality governance [28] through accuracy and transparency in decision making process [29]. Role of women can also be identified when assessing and analysing disaster risks. The absence of women in disaster planning creates many issues during response and recovery stages. Because women are considered as agents of change within their communities and even in wider spectrum [30]. According to Saito [8], limited role for women in planning at local authorities for disaster prevention in Japan, created many issues for women who were affected by earthquakes.

Despite the fact that the role of women in decision making is crucial, their presence is not evident in most disaster management policies and programmes [8, 31, 32]. Hence, their needs and interests are excluded in disaster management programmes [33]. Women in governance represent women in legislature and cabinet, ministerial and sub-ministerial positions, administrative services, and professional and technical jobs. Similarly, there are inter-regional as well as cross-national variations among countries. Especially women in administrative level, ministerial and sub-ministerial levels are very low in Asian region [34]. The above explained demonstrate the literature gap in identifying the ways to improve role of women in DRG. Hence, the next section presents the determining factors of the role of women in DRG and DRR.
3.3. Factors determining the role of women in DRG

Patriarchal culture: Many researchers have identified patriarchal culture as a major barrier that prevent or limit the role of women as decision makers or leaders. Some societies accept that wives and daughters as subordinate to husbands and sons [35]. Traditional systems consider the role of women as mothers and housewives and prevent their opportunities in engage in political decision making. Some societies also believe that women are considered as inferior to men, second class citizens, weaker sex, child barres and care givers [36]. In a study by Mungiriya [37] identified patriarchal systems, female circumcision, beliefs, retrogressive cultures and community attitude as parts of socio-cultural factors which limit the freedom of women in decision making. According to Kassa [38], patriarchal systems prefer sexually segregated roles. This could be changed by changing the social culture by opening the doors to women in all level of institutions [35].

Religious believes: Religious believes influence the role of women in public engagement and decision making. For example, Protestantism promotes and accepts women as religious leaders compared with Catholicism and Orthodox Christianity which limit their involvement [38]. World’s dominant religions argue for women inferiority and prevent them in political or public engagement [38-40]. This is confirmed by Jejeebhoy and Sathar, stating religious believes restrict the autonomy of Muslim women compared to Hindu women in India [41]. Religions too support the patriarchal society which prevents women’s role as decision makers in Ethiopia [38].

Structure of the family: Studies found that size of the family and its composition similarly affect the decision making power of women in households specifically in developing countries [42, 43]. According to Baliyan, women do not have a freedom to engage in household decision making when many senior male members are available in the family in Bangladesh. He recommends education as the way of overcoming this issue and empowering women [44].

Household work load: Traditional societies expect the role of women to engage only in family work related to child baring, caring and kitchen works [43]. As a result, they have limited time to engage with other works for example, community work, voluntary work and alike. [22, 38, 40]. Women are overburden with household related work specially after a disaster, due to the fact that many males have gone outside for work. This has significantly increased the work load for women in Bangladesh[22]. Another example in Ethiopia, men spend their free time in socializing while women take care of household work which prevent or limit their political and decision making roles [38].

Level of education: Level of education is an individual characteristic [38, 43, 44]. According to Hora, lack of adequate level of education among women in Ethiopia was one of the major factor that prevent women participating in leadership and decision making role [40]. According to the report published on Gender in Nigeria, it is similar to the status of Nigeria. Education is important since it helps to develop interpersonal skills and knowledge, public speaking and organizing and coordinating activities among women [45].

Self interest: Attitude of women themselves limit the role of women engagement in politics and public decision making [40]. Specifically, women in developing countries express a negative interest to play a role in politics and decision making assuming that politics is dirty and involve violence [40, 46]. For example, many women in Ethiopia have shown lack of confidence and make less interest to participate in decision making. Hence their commitment and confidence has significantly reduced for facing any barriers or violence against them [40].

Policies and legislations: There was a target of 30% women representation in leadership positions endorsed by the United Nations Economic and Social Council in 1990 and reaffirmed in the Beijing Platform for Action in 1995. However, the reality is far more behind from its expected level [40, 43, 47, 48]. Most women are unaware about policies and legislations in relation to women empowerment. Sweetman [49] identifies laws and organizations as substantive element in his framework developed to examine the issues of gender in development organizations. Favorable policies have ensured more women participation in Rwanda with the pro-women policies by the President.
Kagame and relevant ministries. There, they were able to increase the number of women representatives to 25% in 2003 [35].

Organizational Culture: Organizations reflect and replicate the values of people who set them and these values amend roles and behaviors that limit women’s access to resources and decision making [Anderson, 1993 cited in 49]. Further, the patriarchal nature of government organization limit the role of the women in DRR decision making [50]. A study conducted in Sri Lanka revealed that organizations do not treat equally both men and women when appointing suitable candidates [51]. In addition, unfavorable working conditions, security issues and patriarchal structures in the organizations too affect their participation[40].

Political environment: Women in political positions are important not because of its strategic importance, but for the benefits and its impact [45]. However, due to minimum representation of women in numbers, reduce their decision making power at national level. For example, unhealthy political environment has prevented women in political positions and decision making in Nigeria [39]. It is also confirmed by the study conducted in Nigeria highlighting the opportunity of women to be elected as Local Government Councilors in Nigeria is about 4% [45].

Household income: Poor socio-economic status affects lower level of engagement of women in decision making at house hold level [38, 43]. The level of household income is a determinant of socio-economic condition [44]. Generally, women depend on economic support on male counterpart in households where it limits their decision making power [43]. Instead, women with wealthy background have the power to influence on decision making in particular farm management decisions in Nigeria [45].

4. Findings

Based on the literature survey, ten factors have been identified as the limiting factors of role of women in DRG and DRR decision making. Those are classified into four categories: Socio-cultural factors, socio-economic factors, individual characteristics and legal and institutional factors. Patriarchal culture, religious believes, house hold size and household workload are categorized under socio-cultural factors. House hold income is categorized under socio-economic category. The level of education and self interest are put grouped as individual characteristics where as political environment, policies and legislations and organizational cultures are categorized as legal and institutional factors. Following diagram represents the summary of factors that affect role of women in disaster decision making.

Fig.1. Factors affecting the role of women in DRG and DRR decision making
5. Conclusions and way forward

It is accepted that women are not only a valuable role model but also be powerful agents of change at national and global level [52, 53]. Even though women participate in economic activities, their role in decision making is still at a lower level [44]. The major argument for increasing the role of women in public administration and decision making is due to its ability of enhancing the government responsiveness and effectiveness. This in-turn helps in achieving inclusive development and democratic governance that helps in improving trust and confidence in government institutions and increasing sustainability and responsiveness of public policies. Furthermore, women leadership ensures inclusiveness of their interests and properly address their issues [47].

Similarly, the role of women in DRR policy/ strategy making is not at a satisfactory level. Many international frameworks attempted to introduce women in decision making to achieve equity, equality and ensuring good governance at all levels of decision making [6, 18]. Traditionally, women are considered as victims of disasters [22, 54, 55], but new developments have been taken place by identifying capacities and skills of women towards DRR efforts[6, 54]. Present role of women in DRR efforts are uneven across different nations, regions and continents [56].

In order to enhance the role of women in governance specially in DRR context, the first step would be to identify the barriers that prevent their role in decision making, governance and any DRR efforts. Based on the literature review, following barriers are identified socio-cultural factors, socio-economic factors, individual characteristics and legal and institutional factors. This could help to propose suitable and relevant recommendations as the second phase of the study.

References


32. V. L. Masson, S. Lim, M. Budimir, and J. S. Podboj, "Disasters and violence against women and girls: Can disasters shake social norms and power relations?," Overseas Development Institute, London, United Kingdom2016.


