Resource Capability for Local Government in Mainstreaming Gender into Disaster Risk Reduction: Evidence from Bantul Indonesia

Tri Yumarni¹ and Dilanthi Amaratunga²

Abstract. This research aims to examine various local government capability for mainstreaming gender into disaster risk reduction in Bantul Indonesia. A mixed method study combining qualitative and quantitative methods was applied to explore key local government capability for effective mainstreaming gender into disaster risk reduction. The findings show various benefits of mainstreaming gender for enhancing disaster risk reduction. Women leadership, local government financial resources, availability of local institutional framework, women full participation, financial resources and effective collaboration with non-government organisations are key capabilities that lead to effective mainstreaming gender into sustainable reconstruction.

Keywords. Local government capability, gender mainstreaming, disaster risk reduction.

Introduction

Gender mainstreaming is one of central aspects that should be measured to create effective disaster risk reduction and community resilience (Delaney & Shrader, 2000; Ariyabandu & Wickramasinghe, 2003). Increasing decentralisation across developing countries during the last three decades has transformed local government into the central actor in local development (World Bank, 2008). They have now been given many responsibilities, provided with increased resources, and allowed greater autonomy to decide local policies and services at promoting sustainable development. Hence, local government capability in managing disaster risk reduction and building local disaster resilience including integrating gender mainstreaming strategy into local disaster risk reduction and resilience is vital (UNISDR, 2012). However, it is less understood how local government take into account various gender vulnerability and capacity to achieve their cities safer.

The objective of this study is to elaborate the capability requirement of local government in mainstreaming gender that can act as a useful guide for policy makers and policy implementers in integrating gender mainstreaming into local disaster risk reduction strategy and building resilience. In doing so, it explores key capabilities of mainstreaming gender within local level disaster risk reduction and resilience. It addresses various issues of mainstreaming gender within earthquake regions in Indonesia, in particular in Bantul district of Yogyakarta province.

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Methodology

A single case study was used to identify the benefits of gender mainstreaming and key local government capability. Primary data was collected through in-depth interviews with 18 informants from policy makers, NGOs, and local leaders who have experience working post-earthquake reconstruction at Bantul. We also used a questionnaire to measure key indicators of local government capability in mainstreaming gender into disaster risk reduction. In total, 100 respondents consist of local policy makers and community leaders who works during post disaster reconstruction at Bantul. The questionnaire was administered in June 2013 and completed January 2014.

Qualitative data were analysed using qualitative content analysis in particular to explore how local government response to earthquake disaster. It requires in-depth enquiry about respondent’s attitudes and opinions about these issues (Remenyi et al., 1998). Meanwhile, quantitative data were t-statistics in particular to identify key determinants of local resources capability for mainstreaming gender into disaster risk reduction and resilience (Child, 2006).

Findings

Integrating gender within post-disaster reconstruction management is important to achieve sustainable reconstruction. Enarson and Chakrabarti (2009) points out that when women are empowered, they have the capacity and the inner will to improve their situation and gain control over their own lives and families. Hence, they are not only vulnerable to disaster but they are also effective agent of adaptation and disaster mitigation (Delaney & Shrader, 2000). They have skills and knowledge for creating community resilience and enhancing sustainability of post disaster reconstruction.

Mainstreaming gender into post-earthquake reconstruction in Bantul shows that women grassroots have understanding, evidence, knowledge, networks and resources to enhance reconstruction outcomes. This study reveals the roles of women grassroots at Bantul in creating environmental, economic and social sustainability. With regard to environmental sustainability, they were not only participate in creating health environment such as providing and maintaining safe water and clean sanitation but also establish green environment surround their village. They also active in promoting and implementing organic farming and food production such as organic rice, fruits, and vegetables. These organic products have become trade mark product of Bantul following reconstruction. Women grassroots organize themselves to plant trees along village’s roads and garden. They established Tanaman obat keluarga groups which aim to plant indigenous herbs and medical plantation nearby their home. Waste management were another concern that women take important role to find solution by establishing creative waste recycle contribution (i.e. rubbish bank arcade, vertical garden from soda bootless, and handicrafts). They were also actively involved in kerja bakti and kampong improvement program to maintain healthy and green environment surround the village.

Regarding economic sustainability, women role in reducing poverty following earthquake existed in Bantul. Generating income to fullfil family needs was the main aim of women groups. They create arisan or Rotating and Saving Credit Association (ROSCAs) to solve issues of limited cheap funding for running their small business. Moreover, some of women groups which managed the ROSCAs collaborated with district government to provide cheap loan and training for running their small business after disaster. Gender inclusiveness is strongly embedded in promoting local economic program to ensure sustainability. With regard social sustainability, we found women...
have vital roles in creating community safety and security, strengthening community social capital, enlarging access to community services, and improving village decision making. As a women activist explains the following: “women groups across villages have engaged to maintain community security for example they mobilize themselves to patrol and to monitor around communities in the morning when their husband going to works...” (Interview with a women activist). Moreover, women across the village were involved within Posyandu, a community based vehicle to improve child and mother survival and development. Through this group, women and children can get cheap and free access to health services provided by the government.

The effectiveness of gender mainstreaming in Bantul’s local government cannot be separated from a good cooperation with communities and NGOs during re-building communities. Table 1 shows results of resource local capability assessment conducted among policy makers, implementers and community leaders involved during reconstruction process.

**Table 1.** Resource local capability assessment of mainstreaming gender into DRR

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>t-statistics</th>
<th>rank</th>
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</thead>
<tbody>
<tr>
<td>Strong women leadership</td>
<td>4.8</td>
<td>58.9*</td>
<td>1</td>
</tr>
<tr>
<td>Strong support from NGOs for promoting gendered risk reduction</td>
<td>4.8</td>
<td>58.5*</td>
<td>2</td>
</tr>
<tr>
<td>High women groups’ participation</td>
<td>4.7</td>
<td>58.8*</td>
<td>3</td>
</tr>
<tr>
<td>Adequate financial resources supporting gender mainstreaming program</td>
<td>4.7</td>
<td>58.4*</td>
<td>4</td>
</tr>
<tr>
<td>Capacity of local gender institution</td>
<td>4.7</td>
<td>56.6*</td>
<td>5</td>
</tr>
<tr>
<td>Policy and program design linked disaster risk reduction and resilience</td>
<td>4.7</td>
<td>56.6*</td>
<td>6</td>
</tr>
<tr>
<td>Appropriate tools for gender mainstreaming</td>
<td>4.7</td>
<td>56.6*</td>
<td>7</td>
</tr>
<tr>
<td>Political will of government</td>
<td>4.7</td>
<td>57.6*</td>
<td>8</td>
</tr>
<tr>
<td>Gender sensitive budgeting</td>
<td>4.6</td>
<td>57.3*</td>
<td>9</td>
</tr>
<tr>
<td>Availability of gender vulnerability assessment</td>
<td>4.6</td>
<td>56.5*</td>
<td>10</td>
</tr>
</tbody>
</table>

*P < 0.01

The assessment of local capability in mainstreaming gender into disaster risk reduction shows that strong women leadership, support from NGOs, high women groups participation, adequate financial resources and capacity of local gender institution are among the most important factors for effective mainstreaming gender in Bantul district. Strong women leadership and high women groups participation represents the important of integrating gender capacities within disaster risk reduction. Hence, gender capacities represent women skills, knowledge and networks gained particularly through their experience.

During disasters women’s capacities are frequently recognized through their and their collective action which are important aspects for surviving from disasters. In Bantul for example, women grassroots organization have insight, information, experience, networks, and resources vital within disaster relief and reconstruction as it is increasing resilience and sustainability of reconstruction outcomes. Meanwhile, support from non-government organizations particularly
International donors are related to adequacy financial support for rebuilding communities. In the case of Bantul’s reconstruction, abundance support from International and national donor helps communities not only in providing financial resources but also in providing gender expertise. Existing gender expertise is useful to enhance the effectiveness of gender mainstreaming in reconstruction process. Capacity of local gender institution focuses on ability of district institutions especially women empowerment agency in promoting gender equality within each process of reconstruction. Effectiveness of local women empowerment agency is vital since they have responsibility to ensure gender inclusiveness after reconstruction finished and all international donors leave Bantul.

Discussion and Conclusion

Mainstreaming gender into disaster risk reduction needs not only standard planning practices but also the capability to manage it because the key characteristics of disaster that unequal to women (Fothergill, 1996). Gender mainstreaming is the process of assessing the consequences of disaster for women and men of any disaster reduction plan and action to reduce the detrimental effect of disasters. Gender mainstreaming is a strategy for making women's as well as men's concerns and experiences included within all phases of disaster reduction policies and programs (Enarson and Chakrabarti, 2009).

Increasing decentralization across developing countries during the last three decades has transformed local government into the central actor in local development (World Bank, 2008). Hence, local government capability in mainstreaming gender determines the effectiveness of disaster risk reduction and resilience. Local government capability includes the ability to use and access needed resources beyond actual resource availability. It is often rooted in resources which are endogenous to the community and which rely on traditional knowledge, indigenous skills and solidarity networks. The ways in which capabilities are mobilized in times of crisis reflect coping strategies. Coping strategies refer to the way in which individuals and organizations use current resources to attain various beneficial ends (UNISDR, 2002).

Lesson learn from Bantul’s case it is identified some essential local capability for mainstreaming gender into the process of disaster risk reduction and resilience. Some of them confirm Moser and Moser (2005) findings. This essential gender mainstreaming capability includes: (1) strong leadership and political will of government for mainstreaming gender equality; (2) ability of gender institution to ensure gender representation; (3) availability of gender analysis using gender disaggregate data; (4) adequate gender expertise who understand gender policy design in the contexts of disaster management; and (5) existing policy and program design which is linked to all aspect of disaster risk reduction and resilience.

Moreover, increasing gender vulnerability and neglecting gender capacity are two main gender inequality issues within disaster reconstruction, which challenges to achieve sustainability of reconstruction. Lesson from Bantul local government shows that gender mainstreaming strategies within sustainable reconstruction should not only incorporate strategies for protecting women vulnerability but also strategies for promoting women capacity. Both strategies are needed to create gender equality and women empowerment, which both are fundamental for sustainable reconstruction (see also Setiyaning & Nugroho, 2017; Sitorus (2017).

Table 2 show a summary of research findings that identify types of gender vulnerability and capability requirements within each stage of disaster risk reduction. Following Coppola (2008), disaster risk reduction can be divided five stages: mitigating, preparing, responding and recovering. Within mitigation stage, lack of women access and voice in hazar mitigation is among
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the most prominent type of gender vulnerability found. Hence, local government needs to establish a gendered warning system and gendered risk and disaster assessment to address such vulnerabilities.

**Table 2.** Gendered related capability requirement within disaster risk reduction and resilience

<table>
<thead>
<tr>
<th>Stage</th>
<th>Types of gender vulnerability</th>
<th>Process</th>
<th>Capability requirement</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigating</td>
<td>Lack of women access and voices in hazard mitigation</td>
<td>Identify and analyse risk associated gender</td>
<td>Evaluation, monitoring, and dissemination</td>
<td>A gendered sensitive warning system and gendered risk and disaster assessment</td>
</tr>
<tr>
<td>Preparing</td>
<td>Lack of women access and voices in disaster risk education and dissemination</td>
<td>Educate and disseminate gender sensitive disaster risk</td>
<td>Planning, exercise, training, and logistics management expertise</td>
<td>Gendered sensitive education program on disaster risk reduction</td>
</tr>
<tr>
<td></td>
<td>Lack of women access to gendered disaster training and exercise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responding</td>
<td>Lack of women access to emergency and relief services</td>
<td>Emergency and relief services meet gender needs and concerns</td>
<td>Need assessment coordination, information exchange and logistic expertise</td>
<td>Gendered sensitive emergency and relief system</td>
</tr>
<tr>
<td>Recovering</td>
<td>Shortage of women voices and leadership within recovery and reconstruction process</td>
<td>Restore women well-being and improve their disaster coping strategies and resilience</td>
<td>Disaster recovery and reconstruction assistance skill</td>
<td>Gendered sensitive recovery and reconstruction</td>
</tr>
</tbody>
</table>

In preparedness stage, women often have lack access to disaster risk education and dissemination. Hence, all related capabilities must tackle planning, exercising, training and having logistic management expertise with sensitive to the gender needs and concerns. In response stage, women limited access to emergency and relief service often challenges for effective disaster response. The capabilities are required to address the importance of gendered sensitive need assessment, networking and communication, and logistics management. The purpose of this stage is to achieve a gendered sensitive emergency and relief system. In recovery stage, one of major gender issues is that a shortage of women leadership and voices in recovery and reconstruction. The capabilities needed to restore women well-being and improve their coping strategies and resilience for possibilities of future disaster.

Therefore, it is important for local governments to recognize and aware each types of gender vulnerability and capability that required for formulating disaster risk reduction and resilience.
policy and plan. Gender disaster vulnerabilities arise from barriers to resilience and a root cause of increased risk for community resilience. Gendered vulnerabilities reduce the capacity of families and communities to anticipate, survive, resist and recover from disasters. In the long term, gender vulnerabilities may result in unsustainable reconstruction and community development. Effective gender mainstreaming strategies should tackle both issues of vulnerability and capacity in the same time.

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