

Policy pointers

- Better city provision of public services can decrease poorer communities' reliance on threatened ecosystem services and improve environmental issues like river pollution. This creates a positive feedback loop of reduced poverty, climate change mitigation, and environmental sustainability.
- Because traditional urban planning is dominated by male perspectives, using a 'gender lens' or designing policies through the perspectives of women can illuminate marginalised citizens' perspectives more generally.
- City-level planning does not have effective gender-focused data collection and implementation methods. While climate change hazards affect everyone, municipal responses must be targeted and specific to differences in gendered experiences.
- Climate Change Vulnerability Assessments (CCVAs) are increasingly common methods among NGOs and other institutions for obtaining data on how climate change hazards affect men and women differently. These CCVAs are often carried out by local community groups, NGOs, and universities in partnership with local governments who can use the data to build more effective mitigation and adaptation responses.

Lessons from Improving a Gender-based Climate Change Vulnerability Assessment

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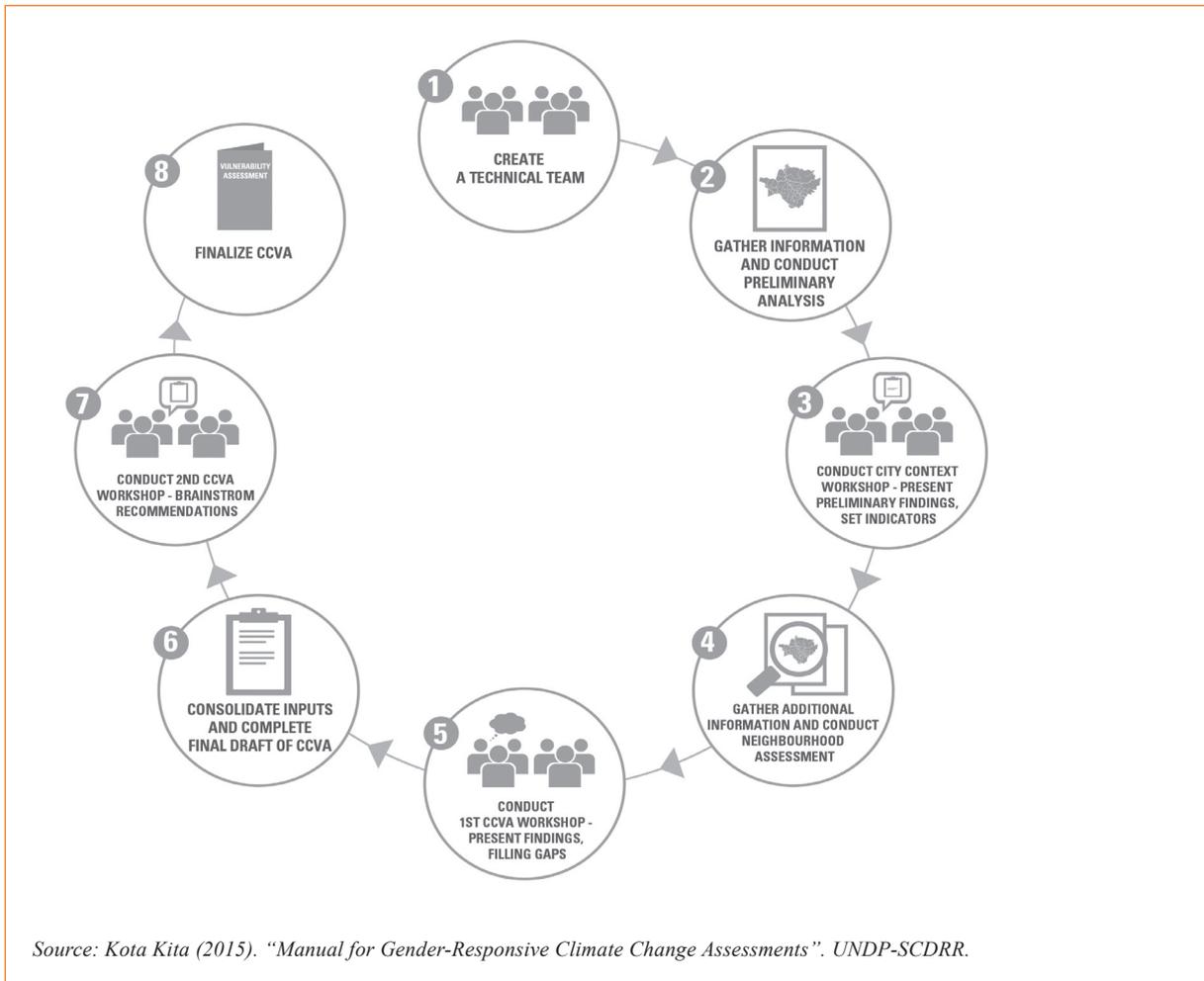
Indonesian cities are increasingly invested in efforts to build urban resilience, and finding means of resisting, absorbing and recovering from climate change hazards. Despite growing evidence that women, especially in underserved populations, suffer disproportionately from climate change hazards, there are inadequate data and methods for taking adequate account of women's perspectives in city-level resiliency initiatives. The Indonesian civil society organisation Kota Kita conducted a study to examine its methodology for undertaking Climate Change Vulnerability Assessments (CCVAs). It focused on how its CCVA process could better assess women's climate vulnerability for urban planning efforts, the importance of using a gender lens for resiliency planning, and observed several key gender-focused resiliency efforts in Indonesia. The study found that women's perspectives were lacking in city-level resilience planning because few women participate in CCVAs. It also found that any data obtained had limitations in terms of its credibility, availability and accessibility, and that institutional capacity for using it was also limited. Finally, it found that gender and resilience development trends could actually reinforce gender discrimination rather than alleviate it.

Background

Kota Kita developed its participatory CCVA methodology to assess climate change vulnerability with the UNDP, which also funded Kota Kita's previous three CCVA processes. This methodology uses the IPCC's formula to define vulnerability, which is:

$$\text{Vulnerability} = \frac{\text{Exposure} \times \text{Sensitivity}}{\text{Adaptive Capacity}}$$

This methodology focuses on quantifiable indicators to calculate vulnerability. While other CCVA methods have been practiced in Indonesia – for example, the Rockefeller Foundation's Asian Cities Climate Change Resilience Network's (ACCCRN) method – Kota Kita's accommodates limits to time and resources. Instead of a lengthy one-year assessment period and working through local institutions, this methodology is shorter and



uses available public data and citizen participation. The full CCVA process is explained below.

The importance of gender-based climate change adaptation

Southeast Asia is the second-most vulnerable region to climate change after South Asia (IPCC, 2007). This is due to the direct effects of climate hazards such as sea-level rise and the indirect effects of poverty, disease, food insecurity and, perhaps most fundamentally, increased gender inequality. As a nation comprising more than 17,000 islands, Indonesia is particularly at risk to climate change effects. Most of Indonesia's population, industries, infrastructure and agricultural lands are concentrated along low-lying coastal areas, and 60 per cent of Indonesians live in coastal cities (UNDP, 1997).

The growing focus on women in the global climate change discussion originated from the idea that patriarchal powers control the world's resources, which oppresses both the environment and marginalised populations. But using a gender lens to build urban-resilience is not simply about prioritising women's needs over men's; by understanding climate change impacts through marginalised women's perspectives, practitioners more accurately confront latent societal challenges that threaten progress towards a truly resilient city.

Considering gender dimensions in vulnerability assessments

Our research sought to examine 'the extent to which gender dimensions have been or should be considered in the process of assessing vulnerability, developing city resilience strategies, and implementing resilience-building initiatives at the city level'. We used Kota Kita's CCVA process as a focal point, and conducted primary and secondary research between September 2015 and January 2016 to better understand how to improve the CCVA's gender approach. Our specific questions focused on: 1) how to improve the gender focus of Kota Kita's CCVA, 2) how Kota Kita's CCVA fits into international and national development contexts, and 3) what challenges need to be overcome when collecting and implementing data to create more effective gender-mainstreamed climate change policies at the city level.

Finding 1: Women's participation in CCVA processes is low

We found that the participation of women in CCVAs is low. This can mean that women's views and knowledge are not sufficiently expressed through the process and therefore fail to be reflected in policy goals. While interviewees and workshop participants unanimously agreed that gender

Issues affecting women's participation in Kota Kita's CCVA process: responses from workshop participants

<p>"In many communities, women are more likely to participate and provide different responses when they are separated from men, since usually men are the ones who represent their families and speak up in the public arena. We have to know what kinds of obstacles there are for women to participate in planning processes, which relate to gender norms and practices, and how to overcome them."</p> <p>Dati Fatimah, gender expert in Yogyakarta</p>	<p>"Women can't come to workshops if meeting locations are too far from the home. Also, the time of the meetings must be at a time when women can meet, usually between afternoon and night (3pm to 7pm)."</p> <p>Woman representative of BPBD, Yogyakarta workshop</p>
<p>"The lack of gender-disaggregated data keeps facilitators from understanding context-specific issues, so their questions are not as focused and discussion remains surface level."</p> <p>Female Kupang workshop participant.</p>	<p>"Support from elite positions in the community is key. In Kulon Progo, women are active in community development, but because there is no support from elite positions in the community, these women's aspirations are not met."</p> <p>Female community member, Yogyakarta workshop</p>
<p>"Researching the local economy, and background research on elite positions within community organisations can help facilitators prepare questions that encourage less vocal women to participate."</p> <p>Woman gender expert, Kupang workshop</p>	<p>"There usually a few women who are very engaged in gender issues and who are more active in forums. They usually become more and more dominant and may discourage other women from participating."</p> <p>Woman from NGO, Yogyakarta workshop</p>
<p>"My humanitarian co-worker at an NGO still had a masculine ideology. Even though he worked on projects with gender focus, what he was delivering was not sensitive to the women's needs. It was easier to work with communities than to work with him."</p> <p>Interview with female Surabaya-based NGO founder</p>	<p>"It is important to understand how living conditions affect workshop turnout and participation, especially during disasters. Commuting safety and personal trauma affect both. For example, after the Padang Pariaman 2009 earthquake, NGOs designed shelters which did not prioritise privacy, which exposed women in bathrooms and in sleeping conditions, which increased the number of sexual attacks in the village."</p> <p>Interview with female Surabaya-based NGO founder</p>

Source: Author's primary and secondary research with Kota Kita's workshop participants and network in 2015-2016

inequality affected rural and less developed regions in Eastern Indonesia more than in cities in Central Java, our primary research shows how gender inequities can be culturally embedded and hidden from view.

Finding 2: Current data has limitations concerning availability, accessibility and applicability

Problems with empirical data fall into three categories: availability, accessibility and applicability.

Availability

Official urban statistical data is often incomplete and fails to capture more fast-moving dynamics, such as migration patterns. As a result, if there is a difference between the number of women and men who travel to cities and work in informal sectors of the labor market, this will not be reflected in the official data. In addition, available data only represents the government's view of a certain issue, because data is usually collected by one official source. For example, health statistics, which rely on official reports from health centers, could indicate inaccurate rates of infection because of ineffective data collection efforts. Similarly, urban data collection relies upon official jurisdictional boundaries, but these definitions may skew understanding of phenomena that extend beyond boundaries, or that are not captured by official

data collection areas. For example, some settlements are in areas such as mangroves or on urban peripheries that are not officially within city boundaries. This is important because climate change impacts such as sea-level rise and flooding are not limited to specific jurisdictions, though planning measurements are.

Accessibility

Data analysis for CCVAs can be challenging because of difficulties accessing government data. This is even more pronounced with gender-disaggregated data. While the Indonesian government has made efforts to make a significant amount of general and gender-disaggregated data available through *Badan Pusat Statistik* (the National Bureau of Statistics) it is not shared widely or used effectively among departments. But several departments, such as the Department of Health (*Kementerian Kesehatan*), have been developing more qualified general health data and initiating gender-disaggregated data in the health sector which can be used for CCVAs.

Applicability

Applicability of available gender data is another issue because available data is not framed, managed and used comprehensively for climate change planning purposes. This is a particular problem for local-level data, and in more remote Indonesian cities, such as Kupang, where the local weather forecasting agency *Badan Meteorologi, Klimatologi, dan Geofisika* (BMKG) charges a fee to

access data. In bigger cities, such as Semarang, BMKG has an established sharing mechanism to allow institutions and organisations to access its data. But even if data is made freely available, many NGOs, consultants and organisations supporting CCVA processes may not have enough technical expertise to use it effectively. Interestingly, Kupang workshop participants said that Kota Kita's current CCVA manual provided too much national-level data on climate change trends. Instead they wanted ten to 30-year forecasts to see how climate change would impact Kupang. They expressed concerns that the three neighborhoods labeled most vulnerable to sea-level rise now may not be the same as those most vulnerable in 20 years. Efforts to improve access to local-level climate change forecasts is crucial for education and planning purposes.

Finding 3: Government capacity for using CCVA data is limited

The lack of gender-disaggregated and qualitative data means that institutions do not have the capacity to effectively use and interpret CCVA data to influence planning. A member of BPBD Semarang, the city disaster mitigation agency, said that gender has been an 'after thought' in government resiliency efforts. Part of the challenge is that gender perspectives get lost in the municipal budgeting process. Though the Ministry of Home Affairs (*Kementerian Dalam Negeri*) mandates that 30 per cent of participants must be women in Indonesia's participatory budgeting process, *Musrenbang*, there are still challenges in facilitating good participation for these women. Further research is needed to assess the

impact of women's perspectives on municipal budgeting, specifically for resiliency projects.

Another challenge is sharing available gender-specific data among adaptation planning stakeholders. For example, one year after the CCVA document results had been disseminated to Kota Kita's local government partners in Makassar and Kupang, government officials had not yet created any plans or policies using the data (Taylor and Lassa, 2015). This suggests that gendered-perspectives for adaptation planning may also suffer from a lack of exposure due to the government's reluctance to share reports more widely. This happens despite efforts to integrate gendered perspectives into planning, both from national gender-mainstreaming policies and from international institutions such as AIFDR, 100 Resilient Cities and Mercy Corps. Many of these organisations have begun creating their own gendered frameworks for assessing climate change vulnerability, but they have not yet been effectively linked to local planning.

Implications of gender and resilience development trends

One potential consequence of the more recent trends in gender-focused resiliency efforts may be that discriminatory gender norms are actually reinforced. Our research far from validates this point, but our limited observations raise questions about the role of resiliency plans in using gender lenses to critically assess systematic social inequities in the status quo. These inequities mostly concern the potential sacrifices women make as primary caretakers of the family and home, which climate change adaptation programs must acknowledge in creating home-based strategies.

Aim of Series:

The findings presented here are drawn from research published in the Asian Cities Climate Resilience working paper series. The series has arisen out of the Asian Cities Climate Change Resilience Network (ACCCRN), an initiative funded by the Rockefeller Foundation – more information can be found at www.acccrn.org

Collaborators: Kota Kita, Indonesia <http://www.kotakita.org/>

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