

Mainstreaming gender in climate change adaptation in Cirebon, Indonesia

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Policy pointers

- Gender is an important analytical lens which highlights the different ways in which women and men manage risks and access opportunities, and the implications of this differential access for reducing vulnerability to climate change.
- Gender mainstreaming in climate change adaptation is complex, and it must be considered alongside education, economic conditions, cultural norms, and the role of government, to be effectively implemented.
- Indonesian national and local government institutions have started to consider gender mainstreaming in formulating and in implementing climate change adaptation policy and programs – but a key institution with legal authority in decision-making should oversee the process to avoid duplication.

Climate change has a huge impact on many aspects of Indonesia's economy, society and environment. The Cirebon area in West Java province is particularly affected by sea level rise, coastal flooding and long-term drought, making its population vulnerable to climate change impacts. Vulnerability to climate change depends on an individual's adaptive capacity – and gender inequality can affect this capacity. This briefing assesses the gender dimensions of climate change vulnerability in Cirebon coastal area and explores how gender sensitivity can be mainstreamed into local climate adaptation policies. Other factors which affect adaptive capacity, such as education, livelihoods, culture and the role of government, should also be taken into account when mainstreaming gender effectively into urban climate resilience plans and initiatives.

Climate change impacts in Cirebon

The Cirebon region in West Java province in Indonesia is already feeling the effects of climate change. These include a rise in sea level, flooding in the coastal area, and drought during the long dry season. According to the National Agency for Disaster Management (BNPB), about 13 per cent of the total area in Cirebon city is at heightened risk from flooding during high tides and high rainfall periods. In addition, the impacts of climate change threaten agricultural production, with drought causing extensive crop failure, in particular in Cirebon district. Food security in Cirebon city is threatened as this district is the main supplier of food to the city. The study focuses on two areas in Cirebon which

are particularly impacted by climate change – Kesepuhan and Pegagan Lor villages.

Drivers of vulnerability – the gender dimensions

Adaptive capacity depends on a number of factors, including income and the capacity to obtain information relating to climate change. Indicators of this capacity are literacy and educational levels, which are high in Kesepuhan and Pegagan Lor, where over 80 per cent of the total population is literate. Regarding livelihoods, men are more likely than women to have jobs, although many women work in the informal sector as traders and housemaids. The lower economic earning power of women compared to men suggests that their capacity to adapt to climate change

is lower. Whether a household is female-headed or not is also a crucial factor that determines the level of adaptive capacity. Female-headed households may experience lower adaptive capacity, due to the added burden of dealing with domestic matters whilst also earning a livelihood, which also means that in certain cases they have a lower household income.

This study found that both male and female populations in Kessepuhan and Pegagan Lor prefer to remain in their homes during times of climate-related disasters such as flood or drought, as their livelihoods are tied to their hometowns. Their ability to continue their livelihood activities cannot be separated from their health, which is a factor driving vulnerability. In Cirebon, climate change affects human health indirectly. In particular, diarrhoea is a common disease during floods as it is spread through water contaminated by bacteria from human and animal waste. According to the survey data, diarrhoea generally occurs in densely populated areas. The lack of public sanitation infrastructure and the low level of awareness of health issues can increase ill health and cause communicable diseases to spread during disaster events.

To raise awareness, the impacts of climate change need to be discussed collectively at community-level meetings. In Kessepuhan and Pegagan Lor villages, women are active participants at community meetings, even though higher numbers of men participate. Women's participation determines their actions in dealing with climate change impacts. The Self-Awareness Forum (*Indonesian: Forum Kesadaran Diri*) and the Women's Agricultural Group

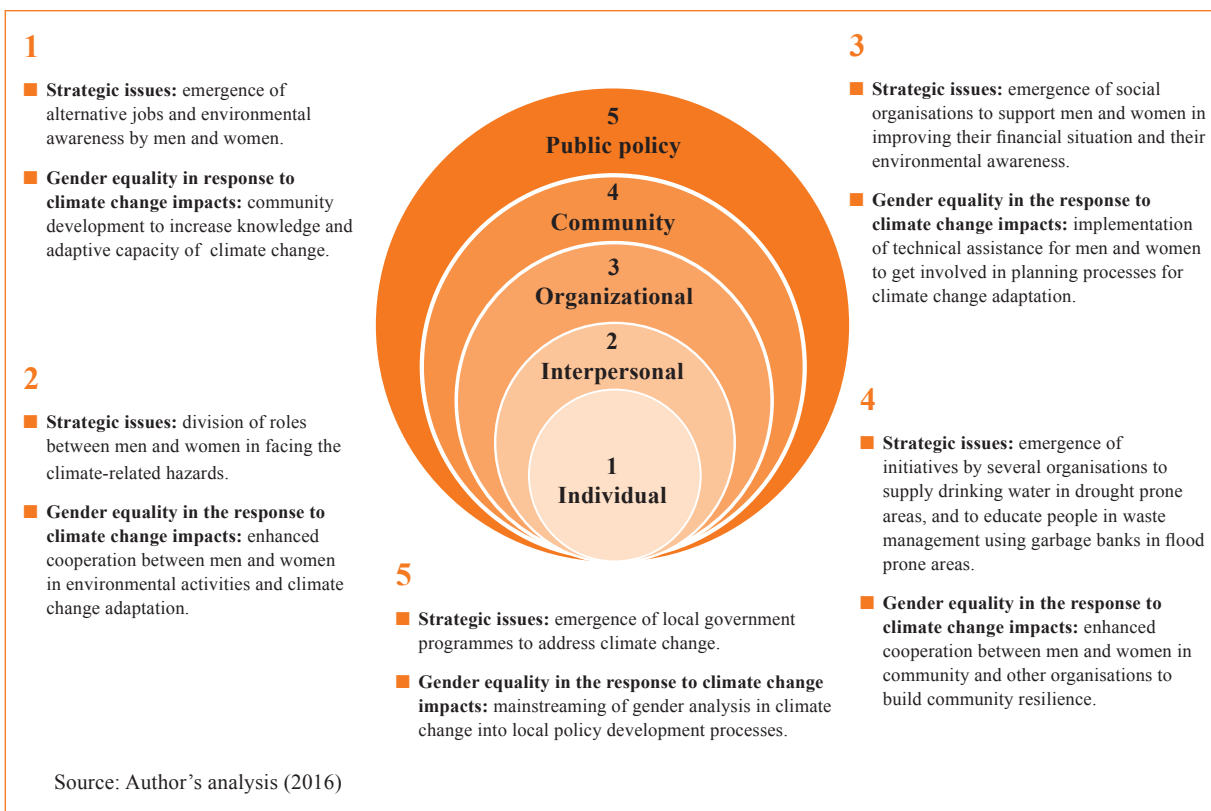
(*Indonesian: Kelompok Wanita Tani*) are two important forums which facilitate women's participation, providing a space to share ideas on innovations and solutions to overcome health, environmental and economic problems caused by climate change.

Strategic approaches to gender equality in climate change adaptation

A socio-ecological model was used during the study to identify challenges and entry points to respond to climate change at the community level. The model had five components; (i) individual; (ii) interpersonal; (iii) organisational; (iv) community; and (v) public policy (see Figure 1).

There is a clear division in gender roles when dealing with floods and droughts in Cirebon. Men tend to contribute as leaders or coordinators of activities and planning processes. On the other hand, women may not take on positions of authority, yet they contribute solutions whilst continuing to take on the responsibility of caring for children and the elderly. Women tend to spend more time at home, so their levels of daily social interaction are higher than those of men, and this is an asset that can be seized on to strengthen collective approaches to adaptation. Women also have a strong understanding of local environmental conditions, and they can act as key informants when discussing and addressing problems at village level. Therefore, more equal participation of men and women in decision-making processes should be encouraged.

Figure 1. Strategic issues and recommendations for gender equality in response to climate change impacts



According to the survey data, about 49 per cent of men and 32 per cent of women actively participate in community discussions in Kesepuhan, and 42 per cent and 25 per cent respectively in Pegagan Lor. These community forums offer a major potential avenue to develop working groups to raise awareness of climate change in each community, and these should be established on the assumption that men and women have the same capacity. It is suggested that members of these working groups join together and collaborate to address climate change and environmental issues, so that community members can get a better understanding of climate change and its impacts and how to respond to it, and thereby increase community resilience.

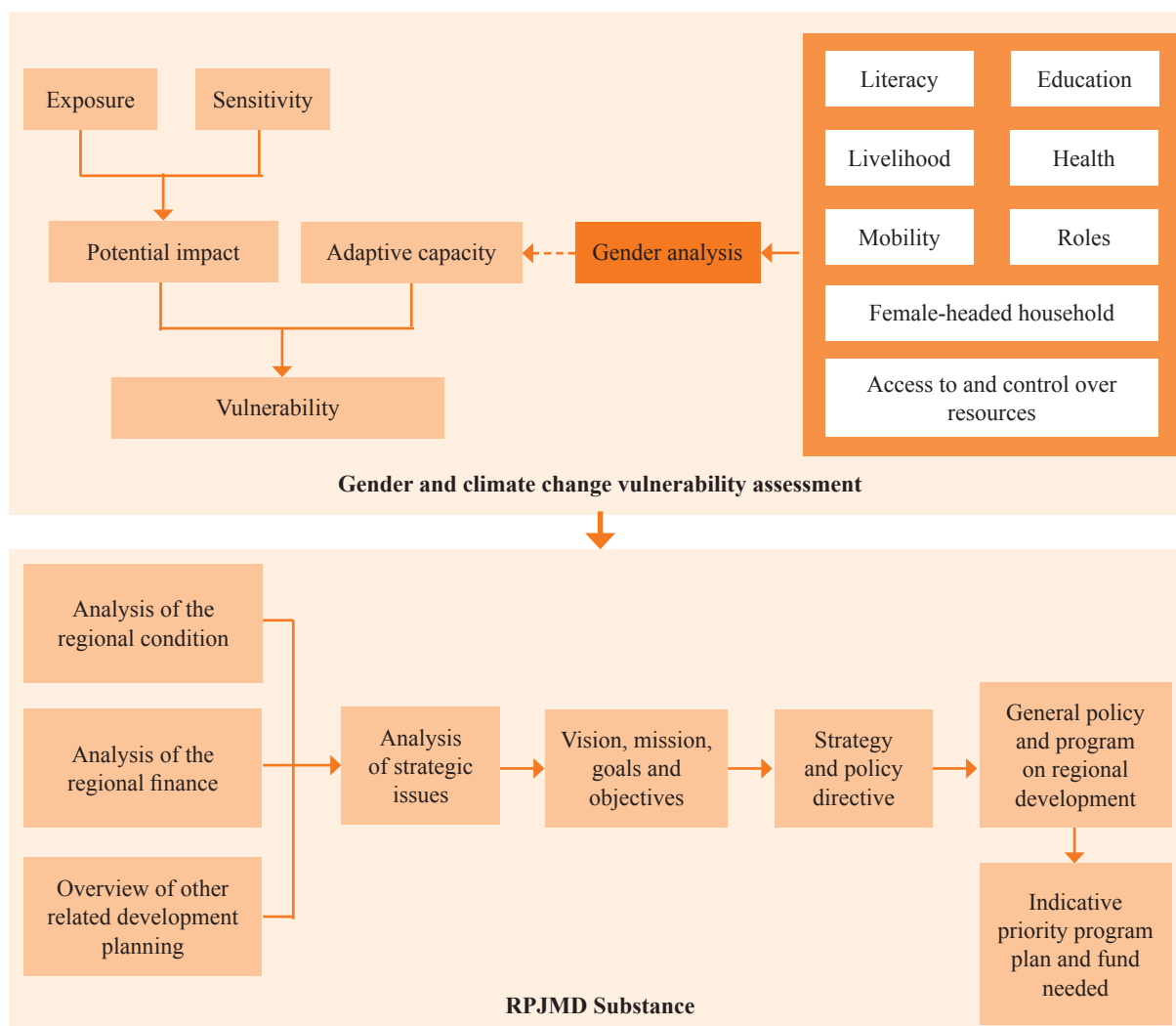
Integration of gender and climate change adaptation into medium-term development planning

Gender is an important analytical lens because it highlights the different ways that women and men manage risks and access opportunities, and the implications of this

differential access for reducing vulnerability to climate change. For this reason, gender needs to be mainstreamed into policies and programmes related to climate change adaptation, including policy and regulatory frameworks. Gender and climate change adaptation need to be integrated into medium-term development plans, especially at district/city level (see Figure 2).

An analysis of the gender dimensions in climate change vulnerability assessments shows how and why the effects of climate change and gender inequality are closely linked to each other, and how women and men overcome challenges relating to climate and vulnerability. The results of these assessments can enrich the content of local development plans pertaining to population and the environment, and local government should incorporate this into their strategic planning. Gender is an important aspect of climate change vulnerability which policy makers must take into consideration when outlining district/city development vision and goals, and gender-responsive policies and programmes to address gender inequality in climate change adaptation need to be formulated.

Figure 2. Integrating gender analysis and vulnerability assessments into district/ city medium-term development planning



Source: Author’s analysis (2016), modified from Australian Greenhouse Office (2005)

The role of government institutions is important; these institutions have the interest and power to achieve sustainable development, which includes building climate resilience at local level. Recently, both national and local government institutions have started to consider gender mainstreaming in the formulation and implementation of climate change adaptation policy and programmes in Indonesia. Institutions with legal authority in decision making are overseeing the process to avoid the overlapping or duplication of policies. Government institutions are therefore key in helping to reduce gender gaps in climate change adaptation programmes and can facilitate their implementation.

At national level, the Ministry of Women's Empowerment and Child Protection has published *Technical guidelines on gender-responsive climate change adaptation at local level* to increase the knowledge of all stakeholders of mainstreaming gender into climate change adaptation. It has carried out training programmes at pilot projects of the Asian Cities Climate Change Resilience Network (ACCCRN) member cities in Indonesia. It is expected that this collaboration and capacity building at provincial and district/city level with various stakeholders will support the achievement of national goals. At the same time, local government will have the awareness and capacity to integrate climate change adaptation and gender into their policies and programmes.

The study results also show that gender mainstreaming in climate change adaptation is easier to implement in urban areas than in rural ones, for two main reasons. First, the level of individual capacity (as indicated through education), behaviour, awareness, and cultural norms determines how responsive people are to climate change, and these levels tend to be higher in urban areas. Second, policy makers (ie local government) in urban areas are increasingly more aware of the need for climate change adaptation, as evidenced by the formation of a city team for the Resilient City Strategy (initiated and supported by the ACCCRN programme). Climate change adaptation can be implemented effectively if there is a common understanding of climate change issues and a commitment by all stakeholders to address climate change impacts at the local level.

Gender mainstreaming in climate change adaptation is complex, and it is not the only focus area when seeking to address the challenges of climate change. Education, economic conditions, cultural norms, and the role of government are a bundle of factors which have to be examined comprehensively to effectively implement gender mainstreaming in climate change adaptation.

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

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References

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