

## How is Gender relevant to Environment, Climate Change, Mitigation and Adaption?

**The integration of gender into research can feel like a new challenge for researchers in Higher Education (HE).** The international development sector has, however, been learning about the ways that gender is relevant in all aspects of poverty alleviation and development for several decades.

As part of the University of Edinburgh [genderED](#) project [Integrating Gender into GCRF Bids: Getting to Sufficiency](#) we have produced several thematic summaries describing how gender is relevant to different development themes, such as the environment or economic development. These guides are intended to support HE researchers who are tackling these challenges for the first time. This document provides a simplified and abridged summary of knowledge built up within the development sector, about the **relevance of gender in development and how to tackle gender issues in development projects**. It aims to provide a starting point for researchers unused to including gender issues in their own work and provides some links to more detailed resources.

### Key Messages

- Gender hierarchies vary across issues, communities and culture. Taking gender into account in projects requires **analysing how gender is relevant to local communities and your project and elaborating responses**.
- A good way to start is to **examine gender differences in decision-making; access to and control over resources and divisions of responsibility**. The University of Edinburgh has produced a **toolkit (see below) that provides a step-by-step process to help you do this kind of analysis in GCRF/Newton Fund** project applications.
- Interdisciplinary approaches and involving gender experts and local communities including local gender equality advocates **early on in project development** will also help you to do this well.

### Women Are More Likely to Suffer From the Effects of Climate Change

**Women in the Global South are disproportionately affected by disasters and natural hazards associated with climate change** (Bradshaw, 2015; Care International Mozambique, 2014). All people in low-income countries are much more likely to suffer the damaging consequences of the neglect and exploitation of the environment, than citizens of richer countries (Resurrección, 2017; UN Women, 2014). Women in low-income countries, however, are less likely than men to have power and influence over their own environment, are more likely to depend on it for work and their livelihoods and are less likely to have high levels of education. The starker these gender inequalities are in a community, the higher the likelihood that women will be, disproportionately harmed by climate change and disasters. (Bradshaw, 2015; Buckingham-Hatfield, 2000).

### How Gender Affects Risk, Preparedness, Vulnerability and Power

**The effects of gender hierarchies and roles are therefore highly relevant in solutions and responses to climate change.** As people in low-income communities have to adapt and change their lives as a

result of climate change, power relations and livelihoods strategies can shift, sometimes at great speed. During these times of social and economic change gendered hierarchies are often reinforced or exacerbated (Pearse, 2017).

For these reasons **heightened gender based vulnerability to disasters and hazards has been an important concern for development practitioners since at least the early 2000s**. Experience with **disasters** has shown that social and biological factors combine to differentiate risk, vulnerability and preparedness of women and girls, and men and boys to disasters, and that these gender differentiated risks vary widely across cultures (Ginige et al., 2014; World Health Organisation, 2014) .

For example, land property right systems in many countries act as a barrier to female ownership of land and often lead to feminized poverty. This means that women often have less access to resources required to adapt to climate change (Care International, 2019: 16). During disasters on the other hand the effect of social expectations regarding women's behaviour ('social norms') can have negative impacts. For example, social norms that prohibit women from leaving their homes unaccompanied can affect their willingness to flee to safety in disaster situations (Kratzer and Le Masson, 2016).

There are also gender differentiated health effects and outcomes during and after disasters, including higher death rates for women and girls. **For example women and girls are 14 times more likely than men to die during a disaster**<sup>1</sup>. Men on the other hand are over represented in first responder roles and can find themselves living in communities where almost all of their female relatives have died (Enarson, 2005). Women and girls also suffer from a heightened vulnerability to sexual and gender-based violence during and in the immediate aftermath of disasters (UNDP, 2010).

Finally, gender affects access to power and decision-making. In some communities, social norms and formal rules prevent women from leaving the home, or delegate political participation to men. This can leave women, especially those living in female-headed households marginalised in decision-making processes (Lovell et al., 2019; Oduro and van Staveren, 2015, p1–22; Oparaocha and Dutta, 2011). These hierarchies not only vary between countries but can, and often do, intersect with other structural inequalities such as caste, class, migration status, age, disability and sexuality (Lovell et al., 2019).

### Incorporating Gendered Analysis in Projects: Best Practice and Tools

Increasing awareness of these impacts of gender has sparked a movement to **focus on and include more women in environmental development policy** (Resurrección 2017: 73). Critics have also pointed out however that efforts to place women centrally in environmental development interventions should avoid two pitfalls. Firstly, it is important to **avoid treating women as tools for development** rather than autonomous people with human rights whose priorities and needs should be actively considered. Secondly, we should **avoid assuming fixed gender roles**. Instead, we should seek to understand how gender is relevant in each community's wider context of gendered hierarchies and natural resource dependence (Resurrección, 2017). This should include recognising women's capacities, instances of women's leadership and a focus on dynamic relationships between genders (Balgos et al., 2012,; Gaillard et al., 2017,; Mulyasari and Shaw).

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<sup>1</sup> See UN Women's video [The facts about gender equality and the Sustainable Development Goals](#)

Towards this goal, many large development organisations such as Oxfam and CARE have created and published guidelines for how to address gender issues within emergency responses to disasters. These build on more general practices of ‘gender sensitive situational analysis’ (see our briefing, ‘How is gender relevant to development?’ on our [webpage](#)) and blend them with more specific insights into the most important factors affecting vulnerability to climate change and access to resources that can enable adaptation to it. Care International’s updated 2019 ‘Climate Vulnerability and Capacity Analysis Handbook’ for example, provides a comprehensive set of tools that can help researchers build up a complex, and gender sensitive, picture of a community’s vulnerabilities and capacities, and the local political and socio economic structures affecting community decision making and distribution of resources.

This kind of situational analysis often reveals relevant differences in men and women’s different daily activity patterns, levels of literacy and access to technology. Taking these factors into account enables the elaboration of more effective interventions that can have significant positive impacts. For example, early warning systems that account for differences in literacy and access to technology are more likely to result reach men and women equally and to reduce the significantly higher death rate of women in disasters. Rescue strategies can also be devised that take account of men’s and women’s differing locations and the higher likelihood of women’s responsibilities for children and the elderly (Ginige et al., 2014).

Recognising the relevance of gender within environmental fields of development thus means **thinking beyond the natural environment to consider gender-differentiated access to different types of infrastructure in rural and urban environments**. Women and girls have disproportionately less access to, and control over, energy, water and transport systems (ICUN Global Gender Office, 2018; UN Habitat, 2013). Energy poverty, for example, is recognised as a deeply gendered issue that affects men and women differently, but which disproportionately burdens women (Oparaocha and Dutta, 2011, p.265–271). Gender-sensitive energy and urban planning frameworks and processes aim to tackle these issues.

Many international NGOs are working towards building knowledge to tackle these problems (Lovell et al., 2019; UN Habitat Gender, 2016). These resources address the wide range of gender issues that are relevant in planning for climate change and during disaster response, from women’s needs for reproductive health services to ensuring that women’s voices are heard in decision-making processes. These kinds of materials provide useful resources for academic researchers devising and designing a GCRF development research project.

It is therefore important when planning projects related to climate change, the environment and development, to consider how gender is relevant in a specific country or society by conducting gender sensitive situational analysis. The University of Edinburgh’s new guide to completing the GCRF Gender Equality Statement on our [webpage](#), provides a framework to begin this kind of analysis. It provides a concise step-by-step guide directly aligned to the specific dimensions outlined in the GCRF mandatory Gender Equality Statement.

Below we provide a small selection of resources that explore the relevance of gender to climate change; disaster; energy and cities.

## Key Resources

### Gender and Climate Change

- [Climate and Development Knowledge Network \(2016\) 10 Things to Know: Gender Equality and Achieving Climate Goals](#)
- [BRIDGE Gender and Climate Change Resource Page](#)
- Care International (2019) Climate Vulnerability and Capacity Analysis Handbook Version 2.0: [Informing Community-Based Adaptation, Resilience and Gender Equality](#)

### Gender and Disasters/Emergency Relief

- Care International: [Women and Girls in Emergencies](#)
- UNDP (2013) [Gender and Disaster Risk Reduction](#)
- Gender and Disasters Network [resource page](#)
- Prevention Web [the knowledge platform for disaster risk reduction gender theme resources](#)
- [Gender Responsive Resilience & Intersectionality in Policy and Practice, Networking plus partnering for resilience](#)

### Gender and Energy

- [Environment and Gender Information \(EGI\) platform](#)
- ENERGIA (2019) Women's Empowerment and Electricity Access: [How do grid and off-grid systems enhance or restrict gender equality?](#)

### Gender and Cities

- UN Habitat (2014) Gender Mainstreaming In Spatial Planning: [A Step-By-Step Approach For Municipalities. Municipal Spatial Planning Support Programme](#)
- UN Habitat (2013) [Gender and the Prosperity of Cities](#)

## Attributions

This briefing note was produced as part of a genderED project for the University of Edinburgh. The project was funded through the University of Edinburgh's Scottish Funding Council GCRF allocation. The Principal Investigator was Prof Fiona Mackay (Director of genderED, University of Edinburgh). The project was managed by Dr Rosalind Cavaghan (Independent Consultant and Visiting Researcher, University of Edinburgh). The project team included Boel McAteer, Dr Romina Istratii (SOAS) and Dr Kate Newman (Christian Aid).

## References

- Balgos, B., Gaillard, J.C. and Sanz, K. (2012). The Wariaks of Indonesia in Disaster Risk Reduction: The Case of The 2010 Mt Merapi Eruption in Indonesia. *Gender and Development*, 20 (2), 337–348.
- Bradshaw, S. (2015). Engendering Development and Disasters. *Disasters*, 39 54–75.
- Buckingham-Hatfield, S. (2000). *Gender and Environment*. London: Routledge.
- Care International (2019). *Climate Vulnerability and Capacity Analysis Handbook Version 2.0: Informing Community-Based Adaptation, Resilience and Gender Equality*. Available from <https://careclimatechange.org/wp-content/uploads/2016/06/CARE-CVCA-Handbook-EN-v0.8-web.pdf>.
- Care International Mozambique (2014). *Gender-Sensitive Climate Vulnerability and Capacity Analysis (GCVCA): Practitioners Guide*. Available from [https://careclimatechange.org/wp-content/uploads/2016/02/GCVCA\\_Practitioners-Guide-FINAL-July-2014.pdf](https://careclimatechange.org/wp-content/uploads/2016/02/GCVCA_Practitioners-Guide-FINAL-July-2014.pdf).
- Enarson, E. (2005). *Women, Gender & Disaster : Men & Masculinities*. Available from [https://www.gdnonline.org/resources/GDN\\_GenderNote3\\_Men&Masculinities.pdf](https://www.gdnonline.org/resources/GDN_GenderNote3_Men&Masculinities.pdf).
- Gaillard, J.C. et al. (2017). Beyond Men and Women: a Critical Perspective on Gender and Disaster. *Disasters*, 41 (3), 429–447.
- Ginige, K., Amaratunga, D. and Haigh, R. (2014). Tackling Women's Vulnerabilities through Integrating a Gender Perspective into

- Disaster Risk Reduction in the Built Environment. *Procedia Economics and Finance*, 18 (September), . Elsevier B.V.327–335. Available from [http://dx.doi.org/10.1016/S2212-5671\(14\)00947-2](http://dx.doi.org/10.1016/S2212-5671(14)00947-2).
- ICUN Global Gender Office (2018). *Energizing Equality: Sub-Saharan Africa's Integration of Gender Equality Principles in National Energy Policies and Frameworks*. 759. Available from <https://www.usaid.gov/sites/default/files/documents/1865/iucn-egi-energizing-equality-web.pdf>.
- Kratzer, S. and Le Masson, V. (2016). 10 Things to Know: Gender Equality and Achieving Climate Goals. Available from [https://cdkn.org/wp-content/uploads/2016/05/10-things-to-know\\_Gender-equality-and-achieving-climate-goals\\_WEBfinal.pdf](https://cdkn.org/wp-content/uploads/2016/05/10-things-to-know_Gender-equality-and-achieving-climate-goals_WEBfinal.pdf).
- Lovell, E., Twigg, J. and Lung'ahi, G. (2019). *Building Resilience for All: Intersectional Approaches for Reducing Vulnerability to Natural Hazards and Climate Change*. Available from <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12697.pdf>.
- Mulyasari, F. and Shaw, R. (2013). Role of Women as Risk Communicators to Enhance Disaster Resilience of Bandung, Indonesia. *Natural Hazards*, 69 (3), 2137–2160.
- Oparaocha, S. and Dutta, S. (2011). Gender and Energy for Sustainable Development. *Current Opinion in Environmental Sustainability*, 3 (4), . Elsevier B.V.265–271. Available from <http://dx.doi.org/10.1016/j.cosust.2011.07.003>.
- Pearse, R. (2017). Gender and Climate Change. *WIRE's Climate Change*, 8 (451), 1–16.
- Resurrección, B. (2017). Gender and Environment in the Global South: from 'Women, Environment and Development' to 'Feminist Political Ecology'. In: Macgregor, S., ed. *Routledge Handbook of Gender and Environment*. London: Routledge.
- UN Habitat (2013). *Gender and the Prosperity of Cities*. Available from <https://www.alnap.org/help-library/state-of-women-in-cities-2012-2013-gender-and-the-prosperity-of-cities>.
- UN Habitat Gender (2016). *UN Habitat Gender Journey*. Available from [https://unhabitat.org/sites/default/files/download-manager-files/UN-Habitat gender journey.pdf](https://unhabitat.org/sites/default/files/download-manager-files/UN-Habitat%20gender%20journey.pdf).
- UN Women (2014). *World Survey on the Role of Women in Development: Gender Equality and Sustainable Development*.
- UNDP (2010). *Gender and Disasters*. Available from [https://www.undp.org/content/dam/undp/library/crisis prevention/disaster/7Disaster Risk Reduction - Gender.pdf](https://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/7Disaster%20Risk%20Reduction%20-%20Gender.pdf).
- World Health Organisation (2014). *Climate Change and Health*. Available from <https://www.who.int/globalchange/GenderClimateChangeHealthfinal.pdf>.