

Flood Resilience Measurement for Communities (FRMC)

Inclusion and disaster resilience

Insights for gender and disability-inclusive disaster resilience-building



Authors:

Teresa M. Deubelli (IIASA), Lydia Darby (Practical Action), Daniela Donia (Plan International), Adriana Keating (IIASA), Manuel von der Mühlen (Plan International), Seona McLoughlin (Concern Worldwide), George Williams (Practical Action), Bernadette Crawford (Concern Worldwide)

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Introduction

Climate-related hazards, including floods, threaten people's lives and livelihoods – no matter their gender, (dis)abilities or other characteristics that might make them marginalized (such as poverty, ethnicity, and/or religion) (Mowat, 2015). However, as different people experience different levels of exposure and vulnerability to hazards, the impacts of such hazards differ vastly, often reflecting, and reinforcing, gender and disability inequality, socially constructed stigma, expectations, and norms (Erman et al., 2021). And, while climate-related extremes and disasters threaten people around the globe, their impact is exacerbated by existing layers of marginalization and (in)equality (Le Masson, 2016; Erman et al., 2021).

Because of this, there is a need to understand the relationship between gender, disability, and disaster resilience and provide practical guidance for using the Zurich Flood Resilience Measurement for Communities (FRMC) to understand gender and disability dynamics and account for them in flood resilience-building interventions.

This primer is for FRMC users who are in the process of implementing the Next Gen version of the FRMC. It is important to note that there may be slight variance between the approaches of different organizations, and therefore this primer covers only the fundamentals and essentials.

Who is the Zurich Flood Resilience Alliance?

Introduction to the Alliance booklet

What is inclusion?

Inclusion, the opposite of exclusion and marginalization, refers to the notion that all services, opportunities, and establishments are open and accessible to all. Inclusion impacts all aspects of society, from how we interact with each other to the opportunities, rights, and resources we enjoy. Socio-cultural beliefs, practices, and norms influence the shape our interactions take and may create obstacles to inclusion and equality for diverse identities and abilities (Jhpiego, 2020; Darby, 2021).

For example, women's opportunities to become leaders in their country or even their community are often hampered by attitudes towards women in leadership: women only make up around a fourth of parliamentarians worldwide and are similarly underrepresented in managerial positions (ILO, 2017; UN Women, 2020a). Likewise, women's perceived equality to men is not translating into tangible equality in terms of pay, as evidence from Switzerland shows, where women earn 14.8 per cent less than men (Plan International, 2020b). This is a challenge shared across the globe, with women in Indonesia earning 23 per cent less than men for equal work (UN Women, 2020b). While these numbers remain low, people with disabilities remain far from achieving these gains: only around 1 per cent of politicians in the EU have an impairment (Waltz and Schippers, 2021) and often people with disabilities face multiple barriers to participating in political life (Virendrakumar et al., 2018). In terms of participation in the labour market, people with disabilities also face substantial barriers and are underrepresented across the globe

(Vornholt et al., 2018; Khayatzadeh-Mahani et al., 2020). Women and girls conduct a disproportionate amount of unpaid care and domestic work, which results in them having less time to engage in the labour market compared to men and boys (United Nations Economic and Social Council, 2016).

To overcome these obstacles, it is important to understand the key concepts. Box 1 summarizes the key concepts as we use and understand them in the Zurich Flood Resilience Alliance.¹

Importantly, in the Alliance we recognize that gender and (dis)ability are only two aspects of social identity; others include age, status, ethnicity, class, religion, sexual orientation, and socio-economic status. We understand that adopting a gender- and disability-sensitive approach hinges on the recognition of the diverse needs, contexts, and dynamics that shape vulnerability and resilience. Each individual can have many identities that affect how they interact with and are viewed by society. Disasters tend to exacerbate existing inequalities and can impact intersecting identities differently, which is why it is important to unpack these intersecting identities to understand discrimination and exclusion and identify pathways for inclusion. We thus promote an **intersectional approach** to flood resilience building and, more broadly, to climate and development action that accounts for the intersection between and interaction of different social identities for an elderly woman living with a disability will lead to her experiencing a disaster differently from other groups in her community and make her one of the most vulnerable to impacts.

¹ It is important to note that gender and disability concepts have and will continue to evolve, and their exact meaning may vary depending on the discourse and applicable sector(s) in which a project engages.

Box 1 Key concepts

- **Gender** refers to the socially constructed attributes, expectations, and norms (e.g. social, economic, political, and cultural) associated with being female, male or identities that do not fit within a male/female classification. Gender interacts with but is different from sex, the different bio-physiological traits of persons.
- **Disability** refers to persons who have long-term physical, mental, intellectual or sensory impairments that, in interaction with various attitudinal, environmental, and institutional barriers, hinder the full realization of their rights as well as their full and effective participation in society on an equal basis with others.
- **Inclusion** is the process of improving the terms for individuals and groups to take part in society and to fully enjoy their rights. It involves improving the opportunities available to girls, boys, youth, in particular those who are marginalized and excluded, including people with disabilities, those who are excluded on the basis of the social groups they identify with or are associated with, as well as respecting their dignity.
- **Diversity** acknowledges that each individual is unique. It means recognizing, accepting, celebrating, and finding strength in individual differences such as gender, age, nationality, race, ethnicity, ability, sexual orientation, socioeconomic status, religious beliefs, political beliefs, or other ideologies.
- Gender and disability dynamics refers to how these factors determine the way in which different genders and people living with disabilities relate to each other and the resulting differences in power between them.
- **Gender norms** are the shared expectations or rules about how each gender • should behave. The concept of gender norms has, at its core, the notion of unequal power relations and prestige between men, women, girls, and boys.
- Gender and disability equity refers to fairness across genders and (dis)abilities, and builds on equal access to opportunities, rights, and resources (equality) and compensating disadvantages.
- Gender and disability mainstreaming is the process of incorporating a gender and disability perspective into policies, projects, and organizational cultures.
- Gender- and disability-sensitive approaches account for gender- and disability-specific inequalities and for the diverse interests and needs of different genders, (dis)abilities, and other marginalized groups within a specific context, and make sure everybody has the same opportunities to participate in every aspect of life to the best of their abilities and desires.
- **Agency** is the ability to define one's goals, to make decisions that affect one's life, and to act upon them.

Sources: Le Masson, 2016; Virendrakumar et al., 2018; Jhpiego, 2020; , Plan International, 2020a, Darby, 2021; Erman et al., 2021; White et al., 2021.

Why does inclusion matter for resilience?

Inclusion plays a role in a wide range of factors associated with disaster resilience, which we understand as 'the ability of a system, community or society to pursue its social, ecological and economic development objectives, while managing its disaster risk over time in a mutually reinforcing way' (Keating et al., 2017).

Inclusion influences things such as a person's wealth, level of agency, and access to decision-making processes, as well as to opportunities, rights, and resources. These in turn influence individual, household, and even community coping capacities, as well as vulnerability and, to some extent, exposure. As a result, disaster impacts are shaped and influenced by persistent inequalities, which in turn may affect gender and disability dynamics (see Figure 1).

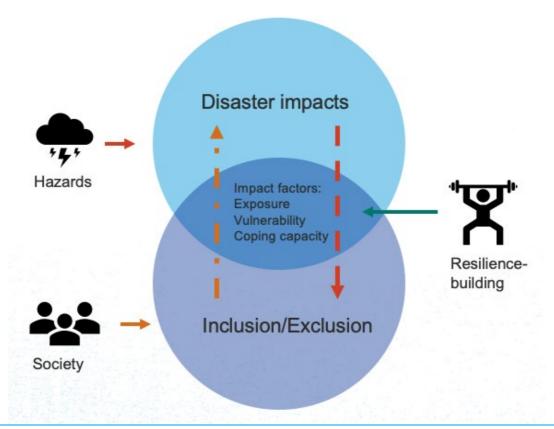


Figure 1 (In)equality dynamics and disaster impacts. Source: adapted from World Bank, 2021

Often, women and people with disabilities are disproportionately affected by disasters in several outcomes, including life expectancy, unemployment, labour force re-entry, and relative asset losses, but also in terms of agency that may be threatened, such as when the head of household needs to approve evacuation or when someone cannot evacuate on their own because a disability limits their mobility (Erman et al., 2021) (see Box 2). As climate change continues to spiral, more and more hazards interact with persistent gender- and disability-related inequalities (McGinn and Venkateswaran, 2020; Lovell, 2021; White et al., 2021).

Box 2 Disasters' impact on women and people with disabilities

Women, children, and people with disabilities are at least four times more likely to die in disasters than men.¹

- Health services for pregnant women, people with disabilities, and young children are difficult to access during and after disasters.
- Lower access to communication technologies limits their access to relevant information during and after the disaster, thus limiting opportunities to evacuate and seek safe shelter.
- Lack of swimming skills and restrictive clothing mean women and people with disabilities are more likely to die during a flood.
- Social norms, such as the need to get permission to leave the house, limited mobility due to disability, or care work, hamper access to safe shelter.

Women and people with disabilities often shoulder the brunt of disasterrelated resource losses.

- Because women and people with disabilities tend to be poorer, their ability to cope with disaster impacts is reduced.
- Unequal power dynamics lead to unequal resource distribution among household members, leaving women and people with disabilities behind.
- Women's assets are often more likely to be sold in times of hardship.

The impacts of disasters are worse for women and people with disabilities.

- Girls are at higher risk of forced or early marriage and pregnancy after a disaster, and are more likely to be pulled from school to take care of the household after a disaster.
- The support needs of people with disabilities tend to remain largely unseen, unheard, and unaccounted for in disaster risk management planning, resulting in reinforced poverty and stigmatization post-disaster.
- Domestic and sexual violence against women, children, and people with disabilities increases during and after disasters, and accessing help is more difficult.

Sources: Gartrell et al., 020; Erman et al., 2021; White et al., 2021

Effective resilience-building targets the overlapping area in Figure 1, where disaster impacts and (in)equalities related to gender- and disability-based in/exclusion interplay and considers how gender and disability dynamics shape vulnerabilities and exposure. In turn, effective resilience-building aims at promoting coping capacities that account for different levels of ability, gender, and other drivers of exclusion (Erman et al., 2021). **Disasters in turn can reduce resilience to future disasters, as already marginalized groups may find themselves in more marginalized situations, as disproportional disaster effects further trap them in cycles of exclusion. At the same time, post-disaster coping mechanisms, such as migration of male household members due to crop failures while families stay behind, or access to women-specific microlending, may have**

positive implications for women's role within household power dynamics, offering opportunities for female resilience (Le Masson, 2016; Erman et al., 2021).

Intersectional resilience-building activities that account for peoples' diverse identities, needs, priorities, and capacities to address the root causes of risk then offer opportunities for reducing the negative impacts of disasters and promoting equality for marginalized groups (Lovell et al., 2019; Darby, 2021; Deubelli and Venkateswaran, 2021). Women, children, youth, and people with disabilities can play a leading part in disaster risk reduction, preparedness, and recovery activities, enabling enhanced understanding of local, gender-specific needs and more effective use of available skills and capacities. At the same time, recognizing the role of women, children, youth, and people with disabilities in enabling resilience can trigger positive spill-over effects on the community's power dynamics (White et al., 2021). These different groups should be actively involved in decisions related to resilience, especially those that directly affect them. An effort should be made to ensure that women, children, youth, and people with disabilities can participate and lead in resilience strengthening.

The FRMC: understanding the inclusion/exclusion dynamics of resilience

The Flood Resilience Measurement for Communities (FRMC) developed by the Zurich Flood Resilience Alliance allows users to generate 'a snapshot of resilience' – evidence on a community's resilience to floods and what the change made by resilience-building efforts entails. It offers a robust data gathering and analysis framework that enables a detailed understanding of the factors influencing a community's resilience, including those linked to gender dynamics. By offering a detailed overview along the five capitals (5Cs) of sustainable livelihoods – human, natural, physical, social, and financial – it helps highlight any interconnections and dependencies in the data and offers the deep, systemic, and multi-dimensional insight needed for more effective policy and project design that accounts for gendered and other socio-economic drivers, including (dis)abilities and barriers to resilience (Figure 2).

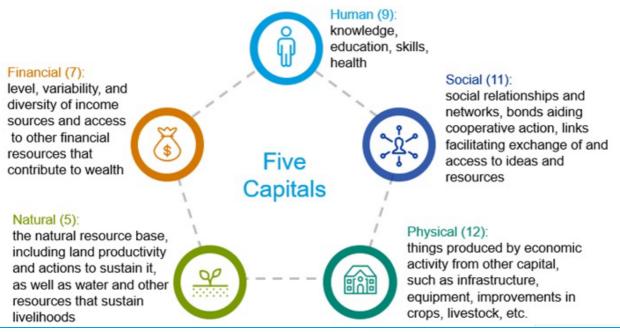


Figure 2 Schematic of the five capitals (5Cs) of the FRMC.

Thorough quantitative and qualitative data on what drives and hampers resilience, disaggregated by gender, age, and disability, but also by other socio-economic factors such as economic status and/or ethnicity, is imperative for accounting for the diverse needs and capacities of marginalized groups in resilience-building efforts (Lovell et al., 2019). Inclusion-informed data collection considers the roles, responsibilities, needs, and safety of all participants, understanding that these factors will be different due to intersecting identities and lived experiences. This includes accommodating the different needs of different genders, as well as those of people with disabilities and other marginalized groups during data collection.

Improving resilience-building policy and project designs hinges on enhancing our understanding of the inclusion/exclusion dynamics of resilience, which in turn unlocks opportunities for all of us.

Each step of the FRMC data collection process includes considerations to ensure women, men, girls, boys, people with disabilities, and other marginalized groups are able to actively participate. Box 3 presents some considerations and guiding questions to think about while going through the data collection process.

Box 3 Gender and inclusion considerations specific to focus group discussions, household surveys, and key informant interviews

Focus group discussions (FGDs)

When deciding on the composition of the group, take into account power dynamics between participants in the group. Will they feel free to speak openly? When selecting participants, separate groups by sex, age, and power dynamics. Participants may not feel comfortable sharing openly in front of people of the opposite sex, older community members, or people with more influence. Focusing on the composition of the group will ensure that considerations are made to encourage active participation by all participants.

Some examples of separate groups include youth-only, women-only, married women, ethnicity, migrant status, and ability. These groups will need to be determined based on the community context and power dynamics. Conduct FGDs in physically and psychologically safe spaces. If possible, ensure there are gender sensitive and accessible WASH facilities at the FGD location (sex-segregated washrooms, locks on the inside of stalls). Ensure anonymity, privacy, and confidentiality if discussing sensitive topics so participants feel safe expressing themselves without fear of retaliation. Consider safety implications of when and where the FGD is held. Is it safe for the participants to travel to/from the location?

Household (HH) surveys

Ensure diverse respondents are included in the household surveys and they are representative of the community make-up. Conduct interviews in a private and safe space; for example, if a woman is responding for her household, she may feel more comfortable to speak openly if other family members are not present.

Ensure respondents provide their consent for the HH survey.

Is buy-in needed from family members or community leaders for women, girls or marginalized groups to participate in the HH surveys?

Consider where the interview will take place (in or outside the home) to ensure participants feel that they can speak openly.

Key informant interviews (Klls)

During selection of KIIs, is there a diverse representation of groups within the community (particularly from marginalized groups)?

Where and when will the KIIs take place? Is it a safe location and time if they need to travel to/from the interview?

Consider whether the interview location is accessible for those with disabilities. Do any measures need to be taken to improve accessibility?

Inclusion and intervention design: promoting disaster resilience for all

As development planners and project designers, we need to account for the diverse root causes and multiple vectors of people's vulnerability to climate-related hazards, and of their different coping capacities and exposure (Le Masson, 2016; Erman et al., 2021; White et al., 2021). This enables us to design policies and projects that accurately account for context-specific inclusion/exclusion realities. Engaging and working with people in communities who are marginalized to understand their perspectives and priorities on disaster risk management is an important aspect of this, as is including diverse and otherwise marginalized voices in co-designing interventions. Box 4 outlines how the inclusiveness of programming can be measured on a continuum, with transformative programming having a high potential to contribute to gender equality and inclusion.

Box 4 Gender and inclusion programming continuum

Transformative: there is an explicit intention to transform unequal power relations. The focus goes beyond improving the condition of diverse groups of women, girls, and people with disabilities, and seeks to improve their social position (how they are valued in society) as well as the full realization of their rights. This programming has high potential to contribute to gender equality and inclusion.

Aware: seeks to improve the daily condition of diverse groups of women, girls, and people with disabilities by addressing practical gender and exclusion issues. They do not try to transform gender and power relations. This programming has medium potential to contribute to gender equality and inclusion.

Neutral: recognize gender equality and inclusion issues but do not do anything about them, and so tend to reinforce gender inequalities and exclusion. This programming has no potential or little potential to contribute to gender equality and inclusion.

Unaware: do not recognize gender and exclusion issues and tend to aggravate gender and exclusion inequalities. This programming has no potential to contribute to gender equality and inclusion.

[S]Source: Plan International, 2020a.

Each organization will have its own guidance on how to incorporate gender and inclusion into programming interventions and enhance the understanding of power dynamics. Examples from the work by Plan International and Concern illustrate how tapping into the opportunities linked to gender-transformative and disability inclusive programming can promote communities' overall disaster resilience. For example, activities related to understanding gender equality, inclusion, and power dynamics can be found in the following resources and adapted for the resilience programming context:

- Breaking the Barriers: Engaging Men and Women to promote Gender Equality
- Women and Girls' Empowerment: Programming and Activities Guide

References

- Darby, L. (2021) 'Back to basics: Gender equity and social inclusion in flood resilience' [blog], 15 July https://floodresilience.net/blogs/gender-equity-and-social-inclusion-in-flood-resilience/> [accessed 10 May 2022].
- Deubelli, T.M. and Venkateswaran, K. (2021) *Transforming resilience-building today for sustainable futures tomorrow*. IIASA http://pure.iiasa.ac.at/id/eprint/17398/1/WP-21-005.pdf
- Erman, A., De Vries Robbe, S.A., Thies, S.F., Kabir, K., and Maruo, M. (2021) *Gender Dimensions of Disaster Risk and Resilience*, World Bank, Washington, DC https://doi.org/10.1596/35202>.
- Gartrell, A., Calgaro, E., Goddard, G., and Saorath, N. (2020) 'Disaster experiences of women with disabilities: barriers and opportunities for disability inclusive disaster risk reduction in Cambodia', *Global Environmental Change* 64: 102134 https://doi.org/10.1016/j.gloenvcha.2020.102134>.
- International Labour Organization (ILO) (2017) *World Employment and Social Outlook: Trends for Women* [online] International Labour Office, Geneva <http://www.ilo.org/wcmsp5/groups/public/---dgreports/--inst/documents/publication/wcms_557245.pdf> [accessed 10 May 2022].
- Jhpiego (2020) 'Gender Analysis Toolkit For Health Systems: Gender Concepts and Definitions' [online] https://gender.jhpiego.org/analysistoolkit/gender-concepts-and-definitions/ [accessed 10 May 2022].
- Keating, A., Campbell, K., Mechler, R., Magnuszewski, P., Mochizuki, J., Liu, W., Szoenyi, M., and McQuistan, C. (2017) 'Disaster resilience: what it is and how it can engender a meaningful change in development policy', *Development Policy Review* 35(1): 65–91 <https://doi.org/10.1111/dpr.12201>.
- Khayatzadeh-Mahani, A., Wittevrongel, K., Nicholas, D.B., and Zwicker, J.D. (2020) 'Prioritizing barriers and solutions to improve employment for persons with developmental disabilities', *Disability and Rehabilitation* 42(19): 2696–706 https://doi.org/10.1080/09638288.2019.1570356>.
- Le Masson, V. (2016) *Gender and Resilience: From Theory to Practice* [online], BRACED Knowledge Manager <https://reliefweb.int/sites/reliefweb.int/files/resources/10224.pdf> [accessed 10 May 2022].
- Lovell, E. (2021) Gender Equality, Social Inclusion and Resilience in Malawi. In 2021 (Issue July). ODI <https://bracc.kulima.com/sites/default/files/2021-07/Gender%20equality%20social%20inclusion%20and%20resilience%20in%20Mal awi_BRACC%20July%202021.pdf>
- Lovell, E., Twigg, J., and Lung'ahi, G. (2019) *Building resilience for all: intersectional approaches for reducing vulnerability to natural hazards in Nepal and Kenya*. ODI https://cdn.odi.org/media/documents/12930.pdf>
- McGinn, C. and Venkateswaran, K. (2020) Mainstreaming Gender within Local Government Climate and Disaster Risk Assessments: A Review of Methodology and Practice in the Philippines in the framework of the Global Initiative on Disaster Risk Management (GIDRM)

.<https://www.preventionweb.net/files/73288 mainstreaminggenderwithinlocalgover .pdf>

- Mowat, J.G. (2015) 'Towards a new conceptualisation of marginalisation', European Educational Research Journal 14(5): 454–76 <a>https://doi.org/10.1177/1474904115589864>.
- Plan International (2020a) A Glossary of Gender and Inclusion Terminology and Definitions.
- Plan International (2020b) Gender equality in Switzerland: Young people are optimisticrightly so? < https://www.plan.ch/fileadmin/user upload/Report-GenderEquality2020-PlanIntSwitzerland.pdf>
- United Nations Economic and Social Council (2016) Women's Economic Empowerment in the Changing World of Work: Report of the Secretary-General [online], Commission on the Status of Women https://www.un.org/ga/search/view-doc.asp?symbol=E/CN.6/2017/3 [accessed 10 May 2022].
- UN Women (2020a) 'Why is women's leadership not in the headlines?' [online] <https://www.unwomen.org/en/news/stories/2020/9/compilation-five-stories-ofwomens-leadership> [accessed 10 May 2022].
- UN Women (2020b) Gender Pay Gaps in Indonesia [online] <https://asiapacific.unwomen.org/sites/default/files/Field%20Office%20ESEAsia/Do cs/Misc/2020/09/id-Gender-Pay-Gap-Statistic-in-Indonesia-September-2020.pdf> [accessed 10 May 2022].
- Virendrakumar, B., Jolley, E., Badu, E., and Schmidt, E. (2018) 'Disability inclusive elections in Africa: a systematic review of published and unpublished literature', Disability & Society 33(4): 509-38 <a>https://doi.org/10.1080/09687599.2018.1431108>.
- Vornholt, K., Villotti, P., Muschalla, B., Bauer, J., Colella, A., Zijlstra, F., Van Ruitenbeek, G., Uitdewilligen, S., and Corbière, M. (2018) 'Disability and employment-overview and highlights', European Journal of Work and Organizational Psychology 27(1): 40-55 <a>https://doi.org/10.1080/1359432X.2017.1387536>.
- Waltz, M. and Schippers, A. (2021) 'Politically disabled: barriers and facilitating factors affecting people with disabilities in political life within the European Union', Disability & Society 36(4): 517-40 <a>https://doi.org/10.1080/09687599.2020.1751075>.
- White, A., Quix, E., Dewi, S., Remlinger, J., and Pompetzki, B. (2021) Diving into the Gap: Gender dimensions of Climate Risk Management [online], Global Programme on Risk Assessment and Management for Adaptation for Climate Change (Loss and Damage), GIZ, Bonn < https://www.giz.de/en/downloads/GIZ-GP-(2021)_Diving into the gap Genderdimensions of Climate RiskManagement.pdf> [accessed 10 May 2022].
- World Bank (2021) 'Gender dynamics of disaster risk and resilience' [online] <https://www.worldbank.org/en/topic/disasterriskmanagement/publication/genderdynamics-of-disaster-risk-and-resilience> [accessed 10 May 2022].



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