Gender-Inclusive Disaster Risk Management

The Asia and Pacific region is the world's most disasterprone area. Between 1970 and 2010, the average number of people in the region exposed to yearly flooding increased from 30 million to 64 million, and the population living in cyclone-prone areas grew from 72 million to 121 million.¹

Women—with their extensive knowledge of communities, social roles of managing natural environmental resources, and caring responsibilities—increasingly play a critical role in disaster risk management. Empowering women is the key to strengthening disaster resilience of communities.

I. Key Gender Issues

Disaster impacts are not gender-neutral

The impact of disaster caused by natural hazards is not gender-neutral. A 20-year study on gendered nature of natural disaster shows that in societies where the socioeconomic status of women is low, natural disasters kill more women than men—both directly and indirectly through related postdisaster events. The study also shows that disasters kill women at a younger age than men, and that the impacts of natural disasters are never merely determined by nature on its own. The reason for the difference in mortality lies in the fact that women in general have lower socioeconomic status which, in turn, leads to unequal access to opportunities and unequal exposure to risks, making them more vulnerable to natural disasters.²

Women's increased vulnerability to disaster has many dimensions. Women's reproductive roles can limit their chances of survival—those in their final stages of pregnancy and women with young kids are less mobile. If basic health care infrastructure is severely damaged and access to obstetrical care is limited, chances of miscarriage as well as maternal and infant mortality increase.

Social norms and gendered roles may significantly affect women and girls' ability to survive the impacts of a disaster. Studies on the impact of the 2004 tsunami highlight that differences in self-rescue ability are partly determined by learned skills such as swimming and tree climbing which, in many contexts, are primarily taught to and practiced by men and boys. Further, dress codes can restrict women's ability to move quickly in times of disaster or restrict them from learning survival skills. Social norms may prevent women from relocating without the consent of a male family member, restricting women from getting information about evacuation centers or how to escape during disasters.

Women also have limited access to economic resources as well as information and technology, increasing their vulnerability and adaptive capacity to disaster. Traditional expectations and home-based responsibilities limit women's mobility and opportunities for political involvement, education, access to markets, and a myriad of other resources—the lack of which reinforces the cycle of vulnerability. Inheritance laws and traditions, marriage arrangements, banking systems, and social patterns that reinforce women's dependence on fathers, husbands, and

² E. Neumayer and T. Plümper. 2007. The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002. Annals of the Association of American Geographers. 97 (3). pp. 551–566. The paper is available online at http://eprints.lse.ac.uk/3040/1/ Gendered_nature_of_natural_disasters_(LSERO).pdf



ADB, UNESCAP, and UNDP. 2013. Asia-Pacific Aspirations: Perspectives for a Post-2015 Development Agenda, Asia-Pacific Regional MDGs Report 2012/13. Bangkok.



Flood-displaced women in search of dry areas to reestablish households during Typhoon Ondoy. Philippines.



Displacement, destruction of homes, and disruption of existing social protection mechanisms may expose women and girls to long-term effects and consequences. Pakistan.

sons all contribute to their unfavorable access to resources and their lack of power to change things.³

A key gendered impact of disaster is women's increased postdisaster workload. Women are often in the frontline of reestablishing households in relocated or reconstructed sites and collecting basic household needs such as water, food, hygiene items, and fuel. Such engagements may cause girls to drop out of school, disrupt women's skill building and other livelihood opportunities, and negatively impact women and girls' time poverty.

Existing gender roles can change in disaster settings

Disasters disrupt commerce and markets and destroy productive resources and infrastructure. In some cases, women become breadwinners as the male members are killed by disaster or choose to stay with the remaining property in order to safeguard the little that remains. This may put additional burden on women to find new sources of livelihood and continue the traditional role of taking care of the family.

Gendered response can reduce long-term social consequences

The immediate impact of disasters—displacement; destruction of homes, schools, and health services; loss of financial security and livelihood; and disruption of existing social protection mechanisms—may further expose women and girls to devastating, long-term effects and consequences. These may include early and forced

marriages, trauma, increased vulnerability to gender-based violence, exposure to sexually transmitted infections and HIV, and unintended pregnancies. Failure to apply gender lens in disaster risk management and response can reinforce or perpetuate these social consequences on women and girls.

Women as agents of change for disaster risk reduction and strengthening resilience

Engaging and empowering women are beneficial means of strengthening resilience to disaster risks. Just as gender roles and relations shape vulnerability to disaster, conversely they also shape people's capacity to prepare, withstand, and recover. Women have particular experience and skills to contribute to disaster risk management due to their role as primary caregivers within the family and often within the wider community. They have strong local knowledge of natural resources, surroundings, and valuable links with others in the area. If women's specific perspectives are not factored into disaster risk management and response, the knowledge is lost.

II. Gender-Inclusive Assessments

A gender-inclusive assessment built on a thorough gender analysis enables a more accurate understanding of the needs, vulnerabilities, and capacities of women and men; and facilitates the design of appropriate and effective programs that meet the specific needs of women

M. Anderson. 1994. Understanding the Disaster-Development Continuum: Gender Analysis is the Essential Tool. Gender and Development. 2/1. Oxford: Oxfam GB and Routledge. http://www.jstor.org/discover/10.2307/4030182?uid=17647&uid=3738824&uid=2129&uid=2&uid=70&uid=3&uid=17632&uid=67&uid=62&sid=21103273915167

Case Study: Pakistan Flood—Gender-Inclusive Needs Assessment

The Asian Development Bank and the World Bank led a gender-inclusive damage and needs assessment following the massive flooding across Pakistan in 2010. The needs assessment examined the devastation and identified major needs for recovery and rehabilitation. The assessment was based on data collected from separate focus group discussions with displaced women and men living in relief camps, along with interviews with key observers such as teachers, humanitarian workers, village leaders, and representatives from nongovernment organizations.

The postdisaster needs confirmed that preexisting gender inequalities in Pakistan had exacerbated after the floods and that the trend was expected to continue. In particular, the assessment identified that (i) many women and girls felt a loss of honor and dignity due to lack of privacy in the camps; (ii) several suffered from severe malnutrition and poor hygiene conditions; (iii) women had limited access to incomes, assets, or livelihoods; and (iv) they faced an increased vulnerability to violence against women and girls.^a

On the basis of the findings of the needs assessment, the following gender issues emerged for postflood reconstruction: (a) women's inclusion in the reconstruction process, (b) professional jobs for women, (c) gender-sensitive facilities such as vocational schools for women and health clinics, and (d) land acquisition by women.



Focus group discussions with women living in relief camps. Pakistan.

^a ADB. 2011. A Story Within a Story: ADB Helps Women during Pakistan's Post-Flood Reconstruction. Manila.

and men and recognizes existing capacities. Gender-inclusive vulnerability assessment, as well as postdisaster assessment, facilitates gender-equitable disaster risk management and response practices. In its absence, traditional approaches are likely to be adopted and inequalities are reinforced.

Features of a gender-inclusive assessment

- Value of the control of the control
- Sex-disaggregated data: Ensure that all assessment tools include sex-disaggregated data. Equally important is to disaggregate heads of household information by sex to ensure that households headed by women have equitable access as beneficiaries to disaster preparedness and response programs. Such measures are particularly crucial in societies where ownership of land and property is primarily vested in men
- Data collectors: Ensure recruitment of a balanced number of women and men as data collectors and that diversity within the target population is reflected in staff composition. Select data collectors with local language skills to enable a more comfortable environment for women and men to share information.
- Methodology: Incorporate culturally appropriate and participatory data collection methodology as this has a major impact on the quality of response. Try to (i) interview women separately from men, (ii) have women data collectors interview women participants, (iii) gather the opinions of recognized women's representatives as well as women in grassroots organizations and nongovernment organizations whose views may not be the same as those of the predominantly male local leaders, and

- (iv) as much as possible, provide a confidential setting for information gathering.
- Training: Provide training to all data collectors on gender-sensitive data collection methodology including skills to observe perceived vulnerabilities and constraints.
- Additional preparation: In the context of displacement resulting from disaster, gender-based violence—including sexual violence—is a serious problem, and needs assessment activities can further traumatize a survivor. Ensure that data collectors have information on local first aid psychosocial service providers and medical facilities for referral of trauma or violence survivors.

III. Gender Design Elements in Strengthening Disaster Resilience

Women are essential players for effective risk assessment, early warning, and strengthening of disaster resilience. Below are some examples of possible gender-inclusive actions to strengthen disaster resilience at the national and community levels.

Strengthening disaster resilience at the national level

- Support gender mainstreaming in national policies, relevant laws, plans, and budgets related to disaster risk management.
- Facilitate establishment of disaster risk management committees, with representation from national ministry and/or line agencies responsible for women and social welfare and women's organizations, along with mechanisms in place to review decisions from gender lens.
- Facilitate access to loans to households headed by women or women from low-income households to strengthen homes or livelihoods against natural hazards.
- Ensure that eligibility for training programs and microcredit is not dependent on landowning status or gender.⁴
- Facilitate national capacity for sex-disaggregated data collection through information management systems and capacity building of disaster management officers and focal points.

⁴ ADB. 2013. Investing in Resilience: Ensuring a Disaster-Resistant Future. Manila.

Strengthening gender-inclusive disaster resilience at the community level

- Incorporate targeted disaster risk management activities into community-based programs (e.g., conditional cash transfer programs in the Philippines include family and community disaster preparedness as part of family development sessions).
- Develop community education and awareness-raising initiatives on disaster risk and measures to strengthen resilience through radio spots, text messaging campaigns, and street theater, particularly targeting women and girls in rural communities.
- Use informal games, competitions, publications, and preparedness drills to engage girls in schools on disaster preparedness strategies.
- Conduct separate community mapping with women and girls to identify vulnerabilities as well as existing resources (e.g., community assets that can be used as evacuation camps) and services (e.g., local medical service providers). Regularly update these community mapping exercises as vulnerabilities and capacities change over time.
- Identify critical facilities such as evacuation sites;
 emergency housing facilities; and water, sanitation, and

- health facilities that are accessible to both women and men. Establish a community information board to display such information in local languages and with illustrations.
- Ensure that local government disaster risk management plans include gender-inclusive elements such as gender-inclusive risk assessment and vulnerability and/or capacity analysis and targets for women's involvement in developing risk and hazard maps, community-based risk management procedures and activities for preparedness and response, development of action plans for postdisaster recovery, and early monitoring and/or warning activities.
- Support community mechanisms to enable inclusion of 40% women participation in local disaster risk management committees.
- Train women to conduct vulnerability and risk assessment; safe building techniques; and routine maintenance of homes, factories, schools, and community assets for disaster resilience features.
- Support skill building on coping strategies that would facilitate women and girls in disaster settings (e.g., swimming lessons in flood-prone areas and preparation of go-bags in earthquake-prone areas).
- > Establish gender-sensitive early warning system using communication channels that are easily understood,



Women can serve as agents of change for disaster risk reduction and strengthened resilience. Philippines.

Case Study: Pakistan—Empowering Women through Postdisaster Housing Reconstruction

Following the 2005 Pakistan earthquake, the Asian Development Bank's *Earthquake-Displaced People Livelihood Restoration Program* helped rebuild permanent seismic-compliant homes for 2.7 million people, of which 55,000 belonged to households headed by women. More than 20,000 women were trained in building houses to withstand future earthquakes. While most families did not build the houses themselves, the training helped them ensure that their new homes met the recommended standards.^a

Local customs denied women the right to own or inherit property, limiting women's access to emergency supplies, reconstruction initiatives, and other services due to lack of identity papers, land title documents, and banking experience. The program initiated mobile registration services as well as legal aid centers in the most remote areas. As a result, women, particularly households headed by women, gained land titles that were traditionally held almost exclusively by men.

- ^a ADB. 2012. *GAD Case Study: Women Step Up After Earthquake (Pakistan)*. http://www.adb.org/themes/gender/case-studies/women-step-after-earthquake
- used, and accessible to both men and women. Support communities to hold regular preparedness drills involving both women and men.
- Ensure that women and girls have relevant identity cards and bank accounts to access disaster response support.
- Support women's organizations to organize microinsurance policies to allow community women to protect their tools and sources of livelihood.

Capacity building and project management

Institutional support to develop capacity on disaster risk management and response are crucial in delivering effective disaster response support. Such capacity building needs to be targeted at government as well as community-based organizations.

- Include 40% women in community and local government capacity-building activities on disaster risk management, response, and recovery—including protection of assets.
- Partner with local women's groups to integrate disaster risk management elements into local credit, livelihood, and self-help groups' capacity development curricula.
- Engage women as staff, consultants, and facilitators.

- Provide gender sensitization and disaster risk management awareness training for executing and implementing agencies and municipal and elected officials.
- Expose project directors and staff to good practices in gender mainstreaming in strengthening disaster resilience and disaster response, covering both operational work and human resource development policies.
- Establish sex-disaggregated monitoring, reporting, and evaluation systems.

IV. Gender Design Elements in Disaster Recovery Assistance

In a postdisaster context, the sense of urgency that often pervades recovery efforts can lead to shortcuts in consultative processes. While the Asian Development Bank does not get directly involved in disaster relief efforts, it is important for teams to consider the gender dimensions of the early relief stage as they tie into the longer-term recovery phase. Recognizing that women and men have different needs for disaster recovery and ensuring that gender concerns are addressed in response programming can serve as an opportunity to create more equal gender relationships in affected postdisaster communities.



Women and men participate in capacity-building sessions on disaster risk management. Philippines.

A. Community Infrastructure Reconstruction

Best practice planning for restoration and reconstruction of lifeline community infrastructures takes into account the specific needs of both women and men. Restoring infrastructure supports women's economic empowerment through increased access to income generation activities, strengthened mobility, and access to a variety of services.

- ➤ Establish women's communal spaces in safe and accessible locations. These spaces can be a venue for women to breast-feed in private, participate in confidential psychosocial counseling sessions, link with disaster response service providers, and engage in livelihood skills-building sessions.
- Women's communal spaces can also be used by gender-based violence survivors to access

- information and referral services in a confidential setting.
- ➤ Consult with women and girls in disaster-affected communities to identify the spatial design and location of such spaces. Where *purdah*⁵ is observed, ensure that the space is only accessible to women and girls.
- Train disaster-affected women to be coordinators of women's spaces and to link the spaces with activities identified by community women for their empowerment.
- Ensure that women participate directly in decision making on local security arrangements.
- Construct pavements and install streetlamps to allow women and girls to move around and travel safely in the relocation or reconstructed sites.
- Provide capacity-building support to women's groups for participation in community facility management committees.

⁵ *Purdah* is the practice that includes the seclusion of women from men or strangers by means of concealing clothing (including the veil) and by the use of high-walled enclosures, screens, and curtains within homes. (Source: Encyclopedia Britannica)

B. Water Supply and Sanitation

Similar to normal situations, in postdisaster settings women continue to be the primary collectors, transporters, users, and managers of water and promoters of sanitation activities. Gender-inclusive design and location of water and sanitation facilities can reduce women and girls' time poverty, enable them to spend more time on income generation or education, and prevent risks from potential abuse and gender-based violence.

Water Supply

- Design water infrastructure in consultation with women regarding their preference for technology (e.g., taps, pumps, or wells).
- Consult women and men separately to identify most appropriate timings for water distribution. Where water facilities are time restricted, efforts should be made to keep these to daylight hours, unless women request otherwise.
- Ensure that the maximum distance from any household to the nearest water point is 500 meters, and the queuing time at the water source is no more than 30 minutes. Consult with women to identify any safety concerns with regards to the location of the water point.
- Ensure equal training opportunities for males and females (50% for each) in system operation and maintenance.

Sanitation

- Sexual harassment often increases in the confines of rehabilitation sites. Sanitation facilities are one of the most vulnerable areas for women and girls. The location of sanitation facilities should ensure that risks to women using them are not increased. Consult women and men separately to identify design and location of these facilities.
- ➤ Ensure that the communal latrines and bathing facilities are separate and segregated (with visible signage), located in safe areas, culturally appropriate, provide privacy, have adequate lighting, and designed with appropriate locks on the inside.
- Discuss menstruation needs with women and girls while designing sanitation facilities. This may entail ensuring privacy, adequate water, or provision for sanitary cloth disposal.
- Ensure equal training opportunities to women and men (50% for each) on public and personal hygiene awareness.



In postdisaster settings, women continue to be the primary collectors, transporters, and users of water Pakistan

C. Housing Reconstruction

One of the long-term impacts of natural hazards is the destruction of housing and community structures. Gender-inclusive housing reconstruction programs provide a unique opportunity to ensure gender equity through joint housing titles as well as equal participation of women and men in the design and implementation of community spaces.

Prioritize vulnerable women, particularly households headed by women, below-poverty and unemployed women, and socially marginalized women, in the

⁶ In accordance with Humanitarian Charter and Minimum Standards in Humanitarian Response, The Sphere Project.



Women's engagement in housing reconstruction led to modifications to accommodate need for privacy, sanitation, and space. Aceh.

allocation of temporary shelters as well as reconstructed houses.

- Involve women in the design of houses and other community spaces. Ensure that temporary shelters and reconstructed houses are culturally appropriate in design and constructed to accommodate women's needs for privacy, safe water supply, and sanitation facilities.
- Keep housing design simple to avoid extra work for women.
- Ensure equal participation of women and men in reconstruction jobs.
- Provide tools and child care and breast-feeding centers to facilitate women's participation in jobs.
- Ensure joint titling (husband and wife) of all new housing.
- Engage women's nongovernment organizations and community-based organizations for information dissemination.

D. Livelihood Restoration Programs

Livelihood restoration programs are at the heart of all disaster recovery initiatives. Timely and gender-inclusive livelihood restoration programs can provide essential cash flow for the local economy to restart and contribute to developing a more equal community where vulnerable populations, such as households headed by women, have access to livelihood support activities.

- Ensure cash-for-work and food-for-work programs are targeted equally to women and men and include types of work that allow women to fully participate. Careful monitoring is needed to ensure that such programs do not add to women's already expanded workloads without developing their skills or capacities.
- Ensure social support services (access to child care, safe transport, and psychosocial counseling) to create

Case Study: Empowering Women through Land and Housing Titles in Tsunami-Affected Aceh

While supporting reconstruction of tsunami-damaged houses, the Asian Development Bank's *Earthquake and Tsunami Emergency Support Project* facilitated women's involvement in housing reconstruction and access to joint land titles and house ownership certificates. Married beneficiaries were provided joint (male and female names) land titles and house ownership certificates, while households headed by women were given individual titles and certificates. Becoming land and property owners meant women could now use these assets as collateral to access loans for self-sustaining livelihood enterprises.^a A sex-disaggregated housing database further ensured protection from procedural irregularities.^b

In addition, women's involvement was explicitly solicited in the reconstruction of houses. The project conducted consultations with community women, women's organizations, and local nongovernment organizations in the design of the reconstructed houses. As a result, modifications were made to the spatial design of houses and surrounding areas to accommodate women's need for privacy, appropriate kitchen and cooking space, and water supply and sanitation concerns. Community structures, such as street labeling, house numbering, neighborhood greening (one tree per house), septic tank maintenance, and playgrounds and/or playing areas for children, were also incorporated in the design.

a supportive and enabling environment for women to participate in livelihood activities including cash-forwork and food-for-work.

- Adopt a policy for equal participation of women and men in vocational skills, leadership training, income generation, and microfinance programs. Consider on-the-job training for women and girls to develop their technical skills.
- Where possible, include a business start-up kit and linkage to markets after skills training targeting women entrepreneurs.
- Set specific gender targets for livelihood support services.
- Ensure households headed by women are included in the list of beneficiaries.
- Ensure that vocational training programs provide equal opportunities—including nontraditional options for women—and do not perpetuate gender-based labor discrimination.
- Encourage the formation of women's livelihood groups, cooperatives, and credit groups to build social capital and facilitate formation of a social safety net.⁷

E. Rural Roads Reconstruction

Reconstruction of rural roads can facilitate women's economic recovery and empowerment through access to road construction jobs as well as potential markets.

- Set targets for employment of disaster-affected women on the basis of their current level of participation in road construction in the area, plus an increase in participation levels to provide a measure of affirmative action. Where employment is part of cash and/or food for work, ensure that households headed by women can access the opportunities.
- Ensure commitment to equal wages and working conditions from community and private sector managers, and adequate facilities for healthy and safe work (e.g., separate toilets).
- Provide women with basic construction and maintenance skills training, and teach them how to organize themselves as a working group.

^a ADB. 2010. Rebuilding Lives and Homes in Aceh and Nias, Indonesia. Manila.

^b R. Kausar. ADB Leads in Land Tenure and Tsunami and Earthquake Victims in Aceh and Nias. Unpublished.

⁷ ADB. 2013. *Investing in Resilience: Ensuring a Disaster-Resistant Future.* Manila.

Case Study: Gender-Inclusive Assistance in Tsunami-Affected Sri Lanka

In tsunami-affected areas in Sri Lanka, many women had to assume the role of household heads along with their traditional domestic and care roles and responsibilities. The Asian Development Bank's *Tsunami-Affected Areas Rebuilding Project* incorporated gender-inclusive design features to ensure these women actively participated in the project and had access to livelihood options such as employment in small-scale community infrastructure reconstruction, provision of skills training, and support for establishing livelihood ventures. Following project implementation, women earned relatively higher incomes as a result of skills training, livelihood programs, loans provided through women's organizations, and establishment of market centers for products. The project also assisted women with replacement of essential documents, such as national identity cards, birth certificates, and land titles, lost in the tsunami.



Response to tsunami-affected areas included livelihood options for women to support their economic rehabilitation. Sri Lanka.

Facilitate women's access to road construction employment opportunities through the provision of basic working tools, protective clothing, and child care and breast-feeding centers.

F. Health Service

Gender-inclusive health services provide life-saving medical and reproductive health services while facilitating access to nutrition awareness and gender-based violence response services.

- Provide reproductive health services, psychosocial counseling, clinical management for rape survivors, and referrals through health centers and subhealth centers.⁸
- Ensure health facilities are designed to accommodate women's need for privacy and have policies and provisions in place to implement confidentiality and security of all client information. Where necessary, equip health facilities with emergency transport.
- Develop gender-sensitive health behavior, change, and communication materials.
- In societies where *purdah* is practiced, ensure that female doctors and health staff attend to women clients.
- Engage schools, community-based organizations, and local community groups to create awareness about nutrition, hygiene, and health, particularly targeting adolescent girls and women.

G. Education

Gender-sensitive educational facilities contribute immensely to disaster recovery, particularly through provision of a safe space for girls and boys and promotion of well-being and normalcy. Education facilities also provide opportunities to support awareness and

preparedness for future disasters through inclusion of survival skills for disaster risk management.

- Provide gender-specific extracurricular activities and psychosocial counseling that promote resilience and healing for girls. Include sessions on preparing for natural hazards (information on contents of go-bags, evacuation sites, and swimming classes).
- Establish confidential complaint reporting mechanism on sexual harassment. Ensure adequate awareness about such a mechanism and adequate follow-up with clear procedures.
- For those who have missed time at school due to displacement as a result of a disaster, provide bridging course to facilitate reentry to formal education system.
- Construct separate toilets for girls. Ensure that the toilets have adequate lighting, locks from inside, and include facilities for disposal of sanitary cloths.
- Use creative strategies to proactively recruit and retain female teachers. Ensure that female teachers have opportunities to reach high-profile positions and not just entry-level ones.
- Train both male and female teachers on gendersensitive teaching strategies.
- Design gender-sensitive curricula addressing the specific needs, perspectives, and experiences of girls and boys, including reproductive health and HIV/AIDS content.
- Include scholarship programs to cover costs for tuition, textbooks, uniforms, and boarding facilities for girls. Where scholarships are not possible, integrate policies that reduce costs of schooling—especially for girls' families—through inclusion of feeding programs, books distribution, and take-home rations.
- Consider implementing nonformal education program (literacy, numeracy) for those who may be illiterate or may not have had the opportunity to complete their schooling.

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Reproductive health services include family planning, antenatal care, postnatal care, obstetric and neonatal complication support, and prevention and treatment of reproductive tract infection and sexually transmitted infections, among others.