

EAST ASIA AND PACIFIC REGION

Social Development Notes

INNOVATIONS, LESSONS, AND BEST PRACTICE

Making Women's Voices Count in Natural Disaster Programs in East Asia and the Pacific

By Zoe Elena Trohanis, Zuzana Svetlosakova, and Helene Carlsson-Rex

Introduction

The East Asia region is highly prone to the impacts of natural disasters. Situated in the Ring of Fire, countries in the region are regularly hit by typhoons, earthquakes, floods, and other events. Natural disasters can have major impacts on the social and economic welfare of a population, and often pose serious obstacles in the achievement of sustainable social and economic development. Moreover, impacts from disasters are not uniformly distributed within a population and tend to disproportionately affect the poorest and most marginalized groups.

Women are at a particular risk. Women often experience higher rates of mortality, morbidity and post-disaster diminishment in their livelihoods. Several underlying factors exacerbate women's vulnerability to the impacts of disasters, such as lack of means to recoup lost assets, limited livelihood options, restricted access to education and basic services, and in many cases, also socio-cultural norms.

There are costs in ignoring gender aspects in disaster recovery and risk management strategies.¹ Failure to consider gender in Disaster Risk Management (DRM) programs is likely to lead to overlooking the full range of damages and needs, which can hinder reconstruction, recovery and long-term development of countries that repeatedly suffer from disaster impacts. Research indicates that a gender-blind response to natural disasters can reinforce, perpetuate and increase existing gender inequality, making bad situations worse for women.

This note explores some of the underlying issues that are linked to gender and vulnerability to natural disasters and offers examples of how to address some of these issues in disaster risk management programs.

¹ World Bank (2000:47).



GAP funded



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Disasters in East Asia and the Pacific

The countries of East Asia and the Pacific (EAP) are among the most vulnerable in the world to the physical, social, and economic effects of natural disasters. The Asian continent and the Pacific islands represent only 30 percent of global land-mass, but have sustained over 50 percent of all recorded disaster events.² The region has sustained 82 percent of total disaster fatalities and its population represents 85 percent of all people affected by disasters since 1997 (IFRC, 2007). The frequency of natural disasters has quadrupled in the past two decades from approximately 120 events annually in the 1980s to about 500 per year today (Oxfam, 2007). Table 1 represents the economic impacts of natural disasters and the number of disaster events in the region since the 1950s.

Why Are Gender Issues Important In Disaster Risk Management?

Disasters result from a combination of natural hazards and human vulnerability. In other words, the level of risk is determined by the level of perceived hazard and vulnerability. While the calculation of hazards takes into account estimations and projections of natural phenomena (wind

² UNISDR (2009) Global Assessment Report.

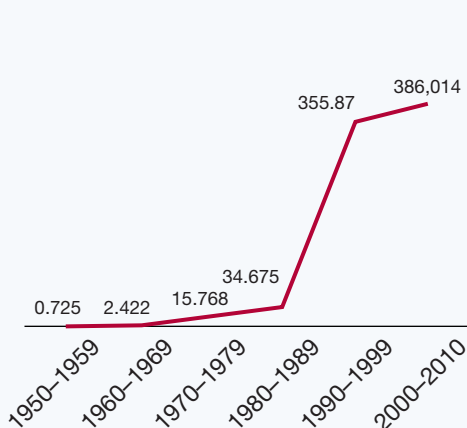
speed, rainfall levels, etc), the assessment of vulnerability is a dynamic and often complex process which considers a range of economic, social, cultural and other factors.³

The different needs, opportunities and risks facing women and men, are important elements when defining vulnerability and has implications for emergency response, recovery and long-term development of a given region or country. Gender issues refer to culturally based expectations of roles and behaviors of both males and females. By taking into account the different impact of disasters on men and women, policies and interventions for sustainable recovery and reconstruction as well as for risk reduction, preparedness and mitigation programs can become more effective and targeted.

Disasters often reveal the weaknesses and strengths of a social system as they tend to mag-

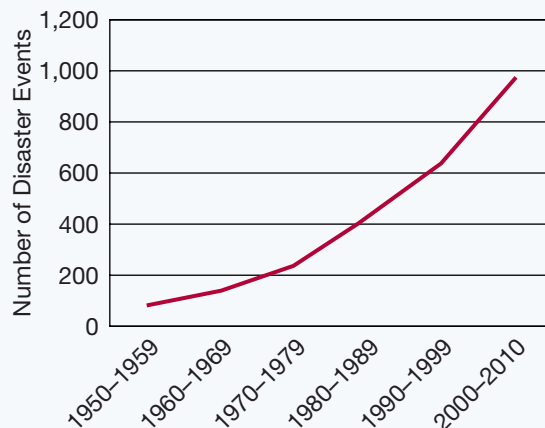
³ According to UNISDR (2009), “two elements in combination increase or decrease disaster risk: a potentially damaging event or phenomenon (hazard), and the degree of susceptibility of the elements exposed (vulnerability). A natural hazard like a hurricane or earthquake will pose a greater or lesser risk, depending on its own physical intensity, and the vulnerability and capacities of the people exposed to the hazard. Gender-based differences and inequalities have a strong negative or positive effect on the vulnerability and capacities of people exposed to hazards.”

Table 1: Economic damage (in \$USD billion) and number of disaster events for select Asian countries*



Source: EM-DAT/CRED, Accessed June 3 2011.

*Select countries: Cambodia, China (incl. Hong Kong), Indonesia, Japan, Korea DPR, Korea Rep, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Taiwan (China), Thailand, Viet Nam.



Source: EM-DAT/CRED, Accessed June 3 2011.

*Select countries: Cambodia, China (incl. Hong Kong), Indonesia, Japan, Korea DPR, Korea Rep, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Taiwan (China), Thailand, Viet Nam.

nify existing patterns. The pre-existing vulnerabilities in a society frequently have gender dimensions. Disasters can reinforce, perpetuate and increase gender inequality, often making bad situations worse for women and vulnerable groups.

The gender differences are the most telling in the aftermath of a disaster, as in most cases, the mortality rates for women are higher than those of men. For example, women died in significantly larger numbers in the 1991 Bangladesh cyclone, the 1993 Maharashtra earthquake⁴, the 1995 Kobe earthquake⁵, as well as the 2004 Indian Ocean tsunami in Indonesia, India and Sri Lanka⁶. Specifically, women accounted for 90% of the 140,000 people killed in Bangladesh in the 1991 cyclone disaster, 61% of the deaths in Cyclone Nargis in Myanmar, 55–70% of Banda Aceh tsunami deaths, including in Kuala Cangko, which was one of the worst affected districts in the North Aceh, Indonesia, with an 80% female fatality rate (WEDO, 2008)⁷. There are many likely reasons for the higher mortality rates for women following disasters, such as: (a) the physical capacities of women, including the ability to climb trees and/or the inability to swim, (b) the need to protect other vulnerable family members such as children and elderly, and (c) the livelihood patterns and timing of when disasters have occurred. However, in some cases, such as typhoons and flash floods, men tend to suffer greater fatalities given their

roles as rescuers. Table 2 highlights some factors related to disasters and how they impact men and women differently.

Women in the EAP region are exposed to a number of socio-economic risks, linked to the region’s economic development as well as to wider social and cultural changes. This note focuses on four factors that put women at a particular risk from natural disasters and have implications for how natural disaster risk management programs are designed and carried out. These factors include: i) vulnerability; ii) livelihoods; iii) education and participation; and iv) land titling and inheritance rights.

Vulnerability Factors

Socially constructed vulnerability refers not only to the economic position of women, but also has to do with wider cultural and legal position of women in a given society. In many Asian countries, women hold the traditional position as caretakers in charge of protecting children and elderly, and securing the household’s assets. They tend to spend more time in their homes, which are often poorly constructed and highly vulnerable to natural hazards. Losses of family members, community support systems, shelter, assets, and infrastructure due to natural disasters all have differential impacts on men and women.

Women may also experience specific health vulnerabilities. Malaria, cholera, impaired psychosocial health and other health-related impacts in the aftermath of a disaster not only affect women’s health but also increase burdens on their care responsibility. Increased conflicts driven by disasters can also increase women’s vulnerability to violence. These and other vulnerabilities

⁴World Bank/IEG (2009:50) citing Center of Studies in Social Science (1999) Survey of Rehabilitated Households Affected by Killari Earthquake (Latur and Osmanabad Districts).

⁵Neumayer and Pluemper (2007:555).

⁶Oxfam International (2005:7).

⁷ Women’s Environment and Development Organization (WEDO) http://www.gdnonline.org/resources/WEDO_Gender_CC_Human_Security.pdf.

Table 2: Factors affecting the resilience of men and women

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| <ul style="list-style-type: none"> ■ Division of labor (activity/place) ■ Visibility levels ■ Human development factors including nutrition pattern, literacy levels and health ■ Recourse to legal protection (inheritance/land rights) | <ul style="list-style-type: none"> ■ Survival skills ■ Access to information ■ Supply of information ■ Access to resources (emergency aid/ loans/ insurance) ■ Influence over decision-making processes |
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Source: Adapted from WBI Distance Learning: Gender Aspects of Disaster Recovery and Reconstruction

should be assessed and taken into consideration into disaster risk management strategies, since men and women have different needs and priorities. For example, women tend to prioritize their health, safety and resource needs at the household and community levels.

Livelihood Factors

Men's livelihoods are often more visible as women tend to engage in the informal sector and in lower-skilled occupations, earning on average less than men. In Vietnam, almost half of working women are self-employed in agriculture, compared to a third of working men, and around 26 % of working women are self-employed outside of agriculture compared to 19% of men.⁸ In Cambodia around 53% of economically active women, compared to 32% of men, work in the unpaid labor category, such as housework or self-employment.⁹ While women's paid and unpaid labor account for a large part of countries' economies, women's assets such as jewelry, tools, and supplies, are less likely to be accounted in damage and loss assessments.

As a result, after disasters, compensation schemes and lost asset and livelihood restoration tend to focus solely on men's needs, leaving women in a more vulnerable position. For instance in the aftermath of the 2004 Indian Ocean tsunami, assistance was available in the form of replacing fishing boats but there was scarce support to help replace women's fish processing tools and marketing vehicles.¹⁰ Lacking resources consequently impedes or slows down the ability to recover.

Women's roles during physical reconstruction are often considered marginal, while their contributions to the social side of reconstruction are often unappreciated—including childcare, household maintenance and care of the elderly. There is evidence that gender blind relief efforts leave women marginalized in their efforts to access support if they rely on existing structures of resource distribution that reflects the

⁸ World Bank (2008) Gender Analysis of the 2006 Viet Nam Household Living Standard Survey.

⁹ World Bank (2008) Gender Aspects of Vulnerability.

¹⁰ WBI Distance Learning: Gender Aspects of Disaster Recovery and Reconstruction.

patriarchal structure of society (Neumayer and Pluemper, 2007:555).

Female-headed households are regarded as one of the most vulnerable groups throughout all countries in the region. In Cambodia, some 725,000 households are headed by women, who tend to suffer particular economic disadvantages. In Cambodia, China and Indonesia, women tend to lose their rights over land in case of widowhood or divorce. Evidence from Lao PDR also indicates that divorced women and widows can be exposed to social exclusion, which in turn reinforces their vulnerability to poverty.¹¹

Education and Participation factors

The institutions making decisions related to disaster risk management policy and legislation are invariably male dominated. Often, women are seen as vulnerable 'victims' rather than as active change agents. While they carry a disproportionate burden of a disaster, women's voices are often excluded from decision making processes about how to manage disaster risks and the recovery process, and their particular needs are often overlooked.

Unequal educational outcomes, such as the ability to read, heighten the vulnerability of women and girls and limit their ability to benefit from information campaigns and early warning systems. Information, coordination and allocation of responsibility are vital in effective emergency response and recovery. In addition, school dropout rates for women and girls are higher than for boys, in Lao PDR the rates are estimated at 42% and 36%, respectively.¹²

Land titling and inheritance rights

Targeted education can help increase implementation of equality provisions in legal framework. This is important particularly in land titling and inheritance rights. Among most Lao PDR ethnic minority groups, the pattern of agricultural land ownership is patrilineal, and land documents tend to be registered in men's names. Data suggests that in 1998 only, 16 % of land was registered in

¹¹ WBI Distance Learning: Gender Aspects of Disaster Recovery and Reconstruction.

¹² World Bank (2008) Gender Aspects of Vulnerability.

the wife's name, although 40% of the land came from the wife's parents.¹³

In Indonesia, in areas where land titling has been carried out, registration data from 1998 shows that only 30% of titles are in women's names. The Indian Ocean Tsunami that struck Indonesia in 2004 affected over 800km of coastline and destroyed up to 53,795 land parcels. A World Bank study (2010), based upon experience from the Reconstruction of Aceh Land Administration System (RALAS) project to support reconstruction of housing and communities in post-tsunami Aceh and North Sumatra, finds that the tsunami disaster put women on the verge of losing livelihoods and assets, as women's land and property rights were not acknowledged uniformly, and that affected women found it difficult to register and secure a title certificate for inherited claims.

¹³ World Bank (2008:15) Gender Aspects of Vulnerability.

Countries in EAP need to ensure the implementation of inheritance rights to help women in recovering from losses and contribute to resilience to disasters. Prior registration of houses and land ownership taking into consideration both the male and female owners is also an indispensable step further in helping with relocation or asset compensation processes. Experience from post-tsunami Aceh suggests that the participation of women in determining land and property rights is crucial to successful recovery and reconstruction programs (WB, 2010). More details are given in the case studies below.

What can be done to increase gender sensitivity in post-disaster recovery programs?

The Independent Evaluation Group (IEG) review of the World Bank's disaster risk management portfolio from 1984-2005 found that 10 out of

CASE STUDIES

Good Practices: Land Titling and Inheritance Rights

Indonesia: Gender Impacts of Land Titling in Post-Tsunami Aceh

The objectives of the Reconstruction of Aceh Land Administration System (RALAS) project, which was supported by the Multi-Donor Trust Fund for Aceh and North Sumatra, were to: (a) recover and protect land ownership rights of the people in Tsunami-affected areas; and (b) to rebuild the land administration system. The project included a Community-Driven Adjudication (CDA) process to land titling, utilized community land mapping (CLM) and community consensus on land parcel boundaries and inventory of land ownership. These elements were then used by the government in its land titling process. After four years of implementation, the project supported the issuance of 222,628 land title certificates to tsunami disaster survivors, their heirs or adjoining land owners. A total of 63,181 titles, about 28% of all titles distributed, were distributed to female owners, individually or as joint owners with their spouses.

Source: World Bank (2010) Study on Gender Impacts of Land Titling in Post-Tsunami Aceh.

India: Gender Impacts of Titling in Men's and Women's Names in Post-Tsunami Tamil Nadu

The recovery program designed in Tamil Nadu state following the 2004 Indian Ocean Tsunami presented an opportunity in the affected states to further improve women's property ownership. The general absence of land titles in some areas before the tsunami, both for men and for women, made it easier to incorporate gender considerations in assigning land and house ownership. In Tamil Nadu state, new property titles have been jointly registered in the name of the female and male heads of the family in projects that were financed with World Bank credit, while resale was not permitted to avoid the forcing of spousal signatures. The same practice was encouraged in the Pondicherry state.

Source: World Bank Institute, Distance Learning Series: Gender Aspects of Disaster Recovery and Reconstruction – Case studies. <http://vle.worldbank.org/moodle/course/view.php?id=349&page=1140>

CASE STUDIES

Women's recollection of the 2005 floods: Ban SopBor, Laos

More than 80% of flooding in Nongbok occurs in the floodplain of the Xaibangfai River. Seven villages in the district are particularly flood prone: Ban Pongkiew, Ban Namphou, Ban SopBor, Ban Sayphong, Ban Xamnady, Ban Saduea and Ban Phonesao Ear. The 2005 floods events in Nongbok had impacts across the district, affecting 71 out of 72 villages, 4,841 households, and a total of 27,961 people. Impacts on agriculture were particularly severe in Nongbok, in comparison to other districts in Khammouane Province. The floods inundated an estimated 10,500 hectares of paddy fields and 6500 hectares of crop areas. Almost 70% of the rice fields in Nongbok were severely damaged. Women in Ban SopBor reported that immediately before the 2005 flood event, the village experienced strong winds and heavy rain for up to three days. Before the onset of the floods, the Village Head issued an early flood warning to the villagers. Women were actively involved in the early warning process and helped in disseminating the flood warning and other disaster related information to the members of the household by doing a door-to-door information campaign in the village (World Bank, 2011).

CASE STUDIES

Good Practice: Female headed households

Indonesia: Indonesia's Empowerment of Female Heads of Households

Following the 2004 Indian Ocean Tsunami, the Female Heads of Households Empowerment Program (PEKKA), with support from the Japan Social Development Fund through the World Bank, was expanded to look at post-disaster recovery. The program evolved from the idea to document the lives of widows in conflict areas, and give them access to resources in order to help them overcome their economic problems and trauma. A US\$1.7 million grant was provided to fund a program on "Support for Female Headed Household during Aceh Reconstruction." The number of direct beneficiaries was 5,000 persons from both women headed household groups and other social groups. Efforts included capacity building and training, scholarships for more than 2,000 poor children, and the reconstruction of houses and social facilities. By the end of 2008, 239 houses in Aceh and two social facilities had been rehabilitated or rebuilt.

Sources: World Bank <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/INDONESIAEXTN/0,,contentMDK:22202412~menuPK:224605~pagePK:2865066~piPK:2865079~theSitePK:226309,00.html>

PEKKA Website http://www.pekka.or.id/8/index.php?option=com_content&view=category&layout=blog&id=71&Itemid=110&lang=en

71 post-disaster recovery projects were designed to consider women's needs and vulnerabilities as part of recovery efforts. Forty-one of these projects have been completed and further found that, "the Bank has done better at reconstructing infrastructure than at reducing vulnerabilities and addressing their root causes. It has yet to discover the best ways to respond when gender or the locations and "informality" of neighborhoods within settlements make vulnerability irregular" (WB/IEG, 2006:69). While much work remains to fully address gender issues in disaster risk programs, a number of good practice case studies are emerging.

The Way Forward

The United Nations Hyogo Framework for Action to 2015 calls for signatory countries to integrate gender perspectives into all DRM policies, plans and decision making processes. While countries and regional bodies in the East Asia Pacific region are starting to address gender in broader development policy, most (with the exception of the Philippines) are making slow progress in the area of DRM (UNISDR, 2009).

Utilizing both men's and women's capabilities has great potential for strengthening reconstruc-

tion efforts as well as supporting broader social change and economic development. Post-disaster situations offer a window of opportunity for positive changes in social justice, legal inequalities and reducing vulnerabilities. Build-back-better approaches are based on the principle that recovery and reconstruction policies will improve disaster preparedness and reduce disaster risk. Community based approaches should be designed to include gender appropriate considerations in order to create an enabling environment for sustainable development and to facilitate recovery efforts in the event of a disaster.

To address these types of issues, there are a number of key issues that World Bank staff and/or Government policy-makers may consider when integrating gender aspects into disaster risk management programs. They should address the following questions:

- How are women, men, girls and boys included in the design and planning process?
- How are women, men, girls and boys affected by disaster in the project area?
- What are the key community and social norms concerning the roles of men and women in government, wider public and the local community?
- What are the implications of the questions listed above for disaster risk management in terms of needs, access to assistance and contribution to community efforts?
- How does the project address these gender issues in project design with respect to: a) aims, objectives and indicators; b) project components; c) institutional and implementation arrangements; d) M&E framework; and e) proposed strategy and guidance documents.

The World Bank is also developing a set of tools for task teams and clients that include case studies, indicators for success, and methods for integrating gender into DRM projects and programs. The tools will be available online via the East Asia and Pacific website at: <http://www.worldbank.org/eap/eapdrm>. Other resources include:

- The Gender and Disaster Network (<http://www.gdnonline.org>)

- The World Bank's Gender and Development website (<http://www.worldbank.org/gender>)
- The Global Facility for Disaster Reduction and Recovery (<http://www.gfdr.org>)
- Preventionweb (<http://www.preventionweb.org>)

References

- Enarson, Elaine; Fortherrgill, Alice; Peek Lori (2007) *Gender and Disaster: Foundations and Directions* in Havidán, Rodríguez et al. (2007) *Handbook of Disaster Research*.
- IFCR (2007) World Disaster Report. Focus on Discrimination. <http://www.ifrc.org/Global/Publications/disasters/WDR/WDR2007-English.pdf>
- Neumayer, Eric and Pluemper, Thomas, (2007) The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy 1981-2002, *Annals of the American Association of Geographers* 97:3, p. 551-566. <http://www2.lse.ac.uk/geographyAndEnvironment/whosWho/profiles/neumayer/pdf/Disastersarticle.pdf>
- Oxfam International (2005) The Tsunami's Impact on Women. Oxfam Briefing Note. http://www.oxfam.org.uk/what_we_do/issues/conflict-disasters/downloads/bn_tsunami_women.pdf
- Oxfam International (2007) Climate Alarm—Disasters increase as climate change bites. Briefing Paper. http://www.oxfam.org.uk/resources/policy/climate_change/downloads/bp108_weather_alert.pdf
- UN ISDR (2009) Global assessment report on disaster risk reduction
- UN ISDR (2009) Making Disaster Risk Reduction Gender-Sensitive Policy and Practical Guidelines. <http://www.unisdr.org/europe/publications/v.php?id=9922>
- UNDP (2010) Human Development Report 2010. <http://hdr.undp.org/en/media/PR6-HDR10-RegRBAP-E-rev5-sm.pdf>; http://hdr.undp.org/en/media/HDR_2010_EN_Chapter5_reprint.pdf
- UNISDR (2009) Global Assessment Report.
- World Bank (2001) World Development Report.
- World Bank/IEG (2006) Hazards of Nature, Risks to Development, Independent Evaluation Group (IEG).

World Bank (2006) Gender analysis of Viet Nam Household Living Standard Survey 2004. Unpublished report. Washington.

World Bank (2008) Analysis of impact of land tenure certificate titling husband and wife in Viet Nam. Ha Noi.

World Bank (2008) Gender Analysis of the 2006 Viet Nam Household Living Standard Survey.

World Bank (2008) Gender Aspects of Vulnerability, by Carmen de Paz and Valerie Kozel.

World Bank Institute Distance Learning Series: Gender Aspects of Disaster Recovery and Reconstruction.

<http://vle.worldbank.org/moodle/course/view.php?id=349&page=1140>

World Bank (2010) Study on Gender Impacts of Land Titling in Post-Tsunami Aceh.

World Bank (2011) Gender and Disaster Risk Management Assessment for East Asia and Pacific Region. Summary of Findings and Recommendations for the Development of Tools to Support Gender Mainstreaming in DRM.

Contacts

Zoe Trohanis, Infrastructure Specialist, EASIN: 202-458-1378

Zuzana Svetlosakova, Consultant, EASIN: (zsvetlosakova@worldbank.org)

Helene Carlsson Rex, Senior Gender Specialist, PRMGE: 5784+6227 / 856-21-450-010