



## Gender Informed Monitoring and Evaluation in Disaster Risk Management

This note on **Gender Informed Monitoring and Evaluation in Disaster Risk Management** is the third in a series of guidance notes on gender issues in disaster risk management (DRM) in East Asia and the Pacific. Following a brief introduction, the note looks at the collection and analysis of sex-disaggregated data, needs assessments, pre- and post-disaster assessment and analysis, and gender indicators. Select references specific to gender and DRM are given at the end of this note.

Grounded in extensive field work in Lao PDR and Vietnam, and drawing on the significant amount of material already available, these guidance notes are intended to be first stop, practical documents that can be used to design and implement gender dimensions into disaster risk management work across the EAP region. The target audience is World Bank staff, clients and development partners active in the fields of gender and DRM.

### COLLECTION OF SEX-DISAGGREGATED DATA

**Good practice disaster risk management projects are informed by gender sensitive data and evidence during the design, implementation and the monitoring and evaluation phases.** This information is sourced by collating available secondary data sources (e.g., government census and socio-economic development data), conducting primary data gathering in the project area, and through regular monitoring and evaluation during program implementation.

**A key obstacle, however, in the development of gender sensitive DRM policies and projects is the lack of sex-disaggregated data** (i.e., data that can be separated by men and women). Without disaggregated data, it is difficult to identify, understand and address the different needs of men and women before, during and after a disaster. As gender considerations vary depending on socio-economic conditions and cultural beliefs, sex-disaggregated data is required at all levels. For example, national level disaggregated data is useful, but not sufficient for planning activities at the village level, as gender roles may vary from village to village within a country.



**Collection of sex-disaggregated data is an essential step in gender mainstreaming and eventually monitoring the gender outcomes of DRM activities.** At the outset of any DRM project, the availability of datasets will be evaluated. During this stage, the datasets should also be assessed against the gender mainstreaming criteria provided in the table below, and any gaps identified. Where possible, gaps should be filled by primary data gathering and analysis or through monitoring and evaluation during the project implementation phase. Key steps for collection and analysis of sex-disaggregated data include:

- Advocacy at the policy-level for the collection of sex-disaggregated data ;
- For any relevant surveying undertaken by a project:
- On survey forms, require surveyors to note the sex of the respondent;
- Train data collection and data entry teams in gender-based analysis;
- Ensure that women are included as members of survey teams; and
- Ensure that both men and women are interviewed.
- Consult known sources of reliable and relevant gender data to support DRM reporting, and provide resources as needed to elicit gender-sensitive data in all relevant primary data banks.

**The data collected are instrumental in helping identify the needs of men and women to shape the design of early warning systems, emergency preparedness plans, and post-disaster recovery programs among others, and to determine the allocation of funding.** Gender-sensitive monitoring and evaluation in DRM programs allow governments and partner organizations to swiftly react to the changing situation in affected areas and enable the involved institutions to make corrections in the program design and implementation plans, re-assess development outcomes and the underlying processes. This can improve the likelihood of achieving the development objectives outlined in the reconstruction programs, and helps the reconstruction partners to understand, effectively respond and shape the dynamic situation on the ground. **Table 1** lists information required, by sector, to support gender-sensitive monitoring and evaluation in DRM programs.



Table 1: Collection of sex-disaggregated data by sectors

Core Area	Data for DRM	Information required to support gender mainstreaming
Demographics	Population	<ul style="list-style-type: none"> <li>• Include no. of women as a separate statistic</li> </ul>
	Age structure	<ul style="list-style-type: none"> <li>• Age structure of men</li> <li>• Age structure of women</li> </ul>
	Ethnicity (and other vulnerable groups such as disabled)	<ul style="list-style-type: none"> <li>• No. of women of each ethnicity</li> <li>• Age structure of men and age structure of women of each ethnicity reported separately</li> <li>• No. Of disabled women and men</li> </ul>
Family	Marital status	<ul style="list-style-type: none"> <li>• Marital status of heads of households</li> <li>• Age when girls are married</li> <li>• Age when boys are married</li> </ul>
	Family size	<ul style="list-style-type: none"> <li>• No. of women in each family</li> <li>• Age when women start having children</li> <li>• No. of children that the average woman will give birth to</li> </ul>
	Family structure	<ul style="list-style-type: none"> <li>• No. of male headed households</li> <li>• No. of female headed households</li> </ul>
	Dependency ratio	<ul style="list-style-type: none"> <li>• No. of women in the labor force</li> </ul>
	Decision-making system	<ul style="list-style-type: none"> <li>• Who from the family would attend a village meeting?</li> <li>• Who from the family would make a decision regarding a big purchase?</li> <li>• Who makes decisions regarding family relationships (e.g. marriages)?</li> <li>• Who decides education and training priorities for children?</li> <li>• Who makes decisions on family membership size?</li> <li>• Who makes decisions on the use of family resources?</li> </ul>
	Control of finances	<ul style="list-style-type: none"> <li>• Who controls family finances?</li> <li>• Whose decision (man/woman) carries more weight?</li> <li>• Who makes decisions on big purchases?</li> <li>• Who has access to family savings?</li> <li>• Does the family have a bank account? If so, in whose name?</li> <li>• Does the family have loans? If so, in whose name?</li> </ul>
Education	School attendance	<ul style="list-style-type: none"> <li>• % of school age boys attending</li> <li>• % of school age girls attending</li> </ul>
	Reasons for school non-attendance	<ul style="list-style-type: none"> <li>• Primary reasons for boys non-attendance</li> <li>• Primary reasons for girls non-attendance</li> </ul>
	Highest education level achieved	<ul style="list-style-type: none"> <li>• Highest level achieved by men</li> <li>• Highest level achieved by women</li> </ul>
	Literacy	<ul style="list-style-type: none"> <li>• Literacy rates of men</li> <li>• Literacy rates of women</li> </ul>
Housing and Land	Household structure	<ul style="list-style-type: none"> <li>• No. of female heads of household</li> </ul>
	Ownership	<ul style="list-style-type: none"> <li>• Title in name of male head of household, fe male head of household or joint?</li> <li>• Can women own property?</li> <li>• Percentage of land or property ownership by women.</li> </ul>

	Inheritance	<ul style="list-style-type: none"> <li>• How are land / property / businesses inherited?</li> <li>• Can women inherit?</li> <li>• Do women lose right to inheritance once married or only achieve right to inherit when married?</li> </ul>
Livelihood	Employment status	<ul style="list-style-type: none"> <li>• Wage employment – Men</li> <li>• Wage employment –Women</li> <li>• Who continues to have wage-employment or formal work after marriage?</li> </ul>
	Types of employment/ income sources	<ul style="list-style-type: none"> <li>• Are there certain types of jobs that only men do? Only women?</li> </ul>
	Wages	<ul style="list-style-type: none"> <li>• Is there a wage gap between men and women?</li> <li>• At what income levels or job types is the wage gap most observed?</li> <li>• Estimated share in family income – Men</li> <li>• Estimated share in family income – Women</li> </ul>
	Worker associations / unions	<ul style="list-style-type: none"> <li>• Sex specific worker associations / unions</li> </ul>
	Informal vs. Formal	<ul style="list-style-type: none"> <li>• Is either section (informal or formal) dominated by men? Is either dominated by women?</li> <li>• Percentage of women involvement in informal economy/livelihood sources</li> <li>• Time component of women involvement in the formal and informal sector</li> </ul>
Health	Morbidity	<ul style="list-style-type: none"> <li>• Main causes of illness in men</li> <li>• Main causes of illness in women</li> </ul>
	Mortality	<ul style="list-style-type: none"> <li>• Main cause of death for men</li> <li>• Main cause of death for women</li> </ul>
	Health services	<ul style="list-style-type: none"> <li>• Barriers to women accessing health services (e.g. must get permission from husbands / can only visit female physicians / etc.)</li> <li>• Number of incidence and ranking of household resources allotment among family members for accessing formal health services</li> <li>• Incidence of women's reliance on informal medical providers</li> </ul>
	Maternal health Sexual health / family planning	<ul style="list-style-type: none"> <li>• Maternal mortality rates</li> <li>• Contraception use among men</li> <li>• Contraception use among women</li> <li>• Reasons for not using contraception</li> </ul>
Social services	Money lending	<ul style="list-style-type: none"> <li>• Are women allowed to take out a loan?</li> <li>• Is the lending criteria (e.g. amount of collateral; interest rates) the same for men and women?</li> <li>• Who is legally responsible for household loan payments?</li> </ul>
	Availability of childcare Availability of care for elderly and infirm	<ul style="list-style-type: none"> <li>• Formal childcare providers (male / female)</li> <li>• Informal childcare service providers (relatives, etc.)</li> <li>• Who is primarily responsible for providing elderly care among household members?</li> </ul>
	Participation	<ul style="list-style-type: none"> <li>• Membership of village committee (no. of men / women)</li> </ul>



Gender-based violence

- Availability of legal sanctions on intra- and extra-family violence
- Can women seek recourse to the law if subject to domestic violence?
- Can women seek recourse to the law (or other sanctions) for violence perpetrated against them, free of damage to their or their family's honor?
- Do women access health or other support groups, if there are any?

## POST-DISASTER NEEDS ASSESSMENT AND THE HUMAN RECOVERY NEEDS ASSESSMENT

**Following a natural disaster, the main entry point is the post-disaster damage and needs assessment (PDNA).** The PDNA is a joint methodology developed and agreed upon by the United Nations and the World Bank to assess the post-disaster damage and losses linked to the development of corresponding recovery needs and programming of funding. In the post-disaster context, the extent of damages, losses, and reconstruction needs can be measured using a globally-recognized methodology known as the Damage and Loss Assessment (DaLA). The DaLA was created by the United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) and later refined by the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR). This methodology is one of the instruments utilized by the PDNA. Asia Pacific Economic Community (APEC, 2010) has recently developed "Guidelines and best practices for post-disaster damage and loss assessment" in which gender dimensions feature strongly.

**The Human Recovery Needs Assessment (HRNA) is a useful qualitative assessment process** used by UN Agencies to conduct an assessment of the human recovery and needs of affected populations, bringing in the community perspective in the overall aggregation of disaster damages and losses and the corresponding crystallization of recovery needs. Many practitioners view the HNRA as a complementary qualitative tool which, alongside the quantitative assessment of damages, losses and needs provided by the DaLA, gives a more holistic and bottom-up picture of the overall recovery needs, incorporating community-based perceptions. When producing these qualitative assessments, UN Agencies typically employ methods such as group discussions and surveys conducted within sample populations.

## PRE AND POST-DISASTER ASSESSMENT AND ANALYSIS

International organizations advocate the use of an 'empowerment approach' (IRP/UNDP 2008), also referred to as a 'gender conscious approach' (ADPC 2004), which seeks to go beyond simply allocating resources to meet gender specific needs and to address the existing inequalities that result in one sex (usually women) being more vulnerable to natural hazards. This approach can be adopted during all phases of DRM. Two examples of the use of these tools are provided in an annex to this guidance note.

**The impacts of not collecting gender specific data can contribute to reinforcing inequities.** For example, lack of information about shelter options, limited literacy, culturally restricted mobility, and responsibilities to care for the young and the elderly can all contribute to the particular vulnerability of women after a disaster. Entitlement

programs have traditionally favored men over women, tenants of record, bank-account holders, and perceived heads of households. The post-disaster damage and needs assessment can help ensure equity by disaggregating mortality and morbidity by gender and age, and taking into account losses suffered in the informal sector.

**Data collection techniques and processes are important elements for consideration.** Given resource and time constraints, full-fledged household surveys may not be feasible; other techniques, such as focus groups and one-on-one interviews become more crucial. When preparing the program, the team must strive to balance quantitative and qualitative data collection techniques to obtain a balanced gender perspective. For example, ensuring appropriate team composition so that data can be collected on women's vulnerabilities/capacities separately, setting up special desks at aid distribution centers for women and girls, and establishing specific monitoring mechanisms, such as Continuous Social Impact Assessments, can help ensure that women and men both can access recovery resources, participate publicly in planning and decision making, and organize themselves to sustain their involvement throughout the recovery process.

An example from Myanmar following Cyclone Nargis in 2008 is given in the box below, which shows how post-disaster needs assessments have been used to address gender issues.

### Case Study:

#### Gender Integration in the Post-disaster Needs Assessment in Myanmar (2009)

The Government of Myanmar, ASEAN and United Nations Post Nargis Joint Assessment (2008) highlights the disproportionate impacts of the disaster on women. This assessment collected gender disaggregated data which identified that 61 percent of the people killed as a result of the cyclone were women and that this figure was much higher in some villages and among the key productive and reproductive age group. The report calls on "relief and recovery strategies to incorporate an understanding of the social realities and impact of the cyclone, including the needs, experiences, and contributions of each gender to foster an environment promoting non-discriminatory humanitarian assistance, through comprehensive and representative consultation with the affected population" (GOM, ASEAN / UN 2008;26).

The consideration of gender concerns was promoted by a Women's Protection Working Group consisting of representatives from UN agencies and a large number of NGOs; and the Department of Social Welfare, Relief and Resettlement, Myanmar and funded by the UNFPA and UNHCR. Two assessments were commissioned, one in August 2008 and another in December 2009 to capture a holistic overview of women's experiences, needs and challenges as a result of the Cyclone in the areas of health; reproductive health; population movement; social and cultural practices; psychosocial needs; food and nutrition; education, protection; safety and security; and access to resources and services.

*Sources: ASEAN, Government of Myanmar and UN (2008), 'Post Nargis Joint Assessment'. UNFPA Women's Protection Assessment Working Group (2010), "Women's Protection Assessments: Post Cyclone Nargis, Myanmar"*

## PROJECT MONITORING AND EVALUATION: INDICATOR DEVELOPMENT

**A key aspect of project design is the development of performance indicators based on the gender analysis.** Guidance Note 2 provides advice on gender mainstreaming into policies and the project cycle. Good gender indicators, whether quantitative or qualitative, should be realistic, meaningful and determined by or with those concerned. The example below provides insights into how the Java Reconstruction Fund, which was created to support Post-Yogyakarta earthquake recovery in Indonesia, incorporated gender sensitive objectives, indicators and targets into the design of its projects and ensured that the monitoring and evaluation mechanisms captured the required information to report on results. Developing indicators and targets will depend on the type of project being designed.

### Case Study: Java Reconstruction Fund – Satisfaction Targets and Indicators

The Yogyakarta Earthquake of May 27, 2006 ranked among the most costly natural disasters in the developing world over the past decade. Total damage and loss was estimated at US\$3.1 billion. The damage was heavily concentrated on private homes. In the months following the earthquake the government and international community began to implement an US\$800 million reconstruction program to rebuild earthquake affected areas. The Java Reconstruction Fund consisting of contributions from European Governments and managed by the World Bank made up about 13 percent of this portfolio providing assistance for permanent houses, and transitional housing while permanent housing was being constructed.

The JRF placed an emphasis on adequate user satisfaction of both men and women beneficiaries and outlined a number of indicators and targets. The relevant section of the JRF's Results Framework is provided below (JRF Progress Report 2007). The framework also highlights the importance of linking indicators and targets to M&E mechanisms. The JRF Progress Report (2009) indicates "an independent impact evaluation on satisfaction involving over 1,000 samples confirmed that 96.0% men and 94.4% women are either satisfied or very satisfied with the houses" (JRF 2009;19).



**Table 2: Common tools used to incorporate gender in pre and post-disaster assessment and analysis**

Tool	Description / Methods
Harvard Analytical Framework (Gender Roles Framework)	Utilizes an activity profile to identify men's and women's "reproductive" or "productive" activities before during and after the disaster.
The Moser Gender Planning Framework	Similar to the Hyogo Framework for Action (HFA) (using activity profile) but makes explicit the idea of women's "three roles" in production, reproduction, and community management.
Access and Control Profile	Assesses women and men's access and control to relief assistance, recovery assistance and other benefits (e.g. training, cash income from relief and recovery assistance, ownership of assets).
Practical and Strategic Needs Profile and Influencing Factors	Analyses practical needs of men and women and the need to change their position in the family. Data collected on how community norms, family/community power structure, religious beliefs, demographic factors, legal parameters and access to education, health and other services shape and/or contribute to roles of men and women in family and in the larger society.
The Gender Analysis Matrix	Each project objective is analyzed at four levels of society: women, men, household and community by various groups of stakeholders. Analyzes impacts on men's and women's labor practices, time, resources, and other socio-cultural factors, such as changes in social roles and status.
The Women's Empowerment Framework	Analysis of project design or sector program to determine whether it supports women's empowerment.
The Social Relations Approach	Analyzes social relations of gender with respect to rules, people, resources and power. Considers relationships within states, markets, communities and households.
Capacities and Vulnerabilities Framework	<p>Analyses three types of capacities/vulnerabilities:</p> <ol style="list-style-type: none"> <li>1. Physical/material</li> <li>2. Social/organizational</li> <li>3. Motivation/attitudes.</li> </ol> <p>Considers five factors</p> <ol style="list-style-type: none"> <li>1. Gender disaggregation</li> <li>2. Disaggregation based on other differences</li> <li>3. Changes over time</li> <li>4. How capacities and vulnerabilities affect each other.</li> <li>5. Scale/Level of analysis and relationship between scales.</li> </ol>

Source: Adapted from IRP/UNDP 2008; ADPC 2004



Table 3 provides a list of sample indicators and targets that may be useful to practitioners. It is important to note that indicators should be consistent across post-disaster needs assessments to ensure their impact can be measured across different disasters.

**Table 3: Sample indicators / targets for gender sensitive monitoring in DRM programs**

DRM Phase	Indicator	Target
Risk Identification	<ul style="list-style-type: none"> <li>No. of women participating in community hazard mapping exercises.</li> <li>No. of identified risks that have a specified gender component.</li> </ul>	<ul style="list-style-type: none"> <li>50-50 participation of women and men during community hazard mapping exercises.</li> <li>Multi-hazard risk assessment maps that include gender-specific data from populations in diverse cultural and hazard contexts.</li> </ul>
Preparedness and Early Warning	<ul style="list-style-type: none"> <li>No. of early warning systems targeting women and men.</li> <li>No. of women reached through early warning mechanisms.</li> <li>No. of women's groups participating in preparedness drills.</li> <li>Satisfaction levels of women and men in preparedness and early warning initiatives.</li> <li>Demonstrated understanding of early warning initiatives by women and men.</li> </ul>	<ul style="list-style-type: none"> <li>Early warning systems that explicitly target both men and women in diverse cultural groups and hazard contexts.</li> <li>Women's groups participating actively in disaster preparedness drills.</li> <li>Equal levels of satisfaction and understanding.</li> </ul>
Disaster Risk Reduction	<ul style="list-style-type: none"> <li>No. of leadership roles in disaster risk reduction institutions and no. of these roles that are filled by men versus women.</li> <li>No. of disaster preparedness committees dedicated to women.</li> <li>Proportion of emergency response plans with designated leadership roles for diverse women's groups.</li> <li>Number of educational training packages developed that are sensitive to the vulnerabilities and capacities of women and men in diverse cultures and hazard contexts;</li> <li>Proportion of women and men participating in DRM activities.</li> <li>No. of women / men facilitators.</li> <li>Number of women and men receiving gender-specific training.</li> <li>Satisfaction levels of women and men with DRR initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>Women in leadership roles in disaster risk reduction institutions and all of these roles that are filled.</li> <li>Disaster preparedness committees dedicated to women.</li> <li>At least 75% of emergency response plans with designated leadership roles for women's groups.</li> <li>All educational training packages developed are sensitive to the vulnerabilities and capacities of women and men in diverse cultures and hazard contexts;</li> <li>Equal number of women / men facilitators / trainers.</li> <li>Equal numbers of men and women receiving training.</li> <li>Equal levels of satisfaction.</li> </ul>
Post Disaster Response and Recovery	<ul style="list-style-type: none"> <li>Number of women and men officials and community members involved in post disaster data collection.</li> <li>Proportion of women / men receiving land allocations, emergency rations, replacement livestock, seeds, loans.</li> <li>Proportion of economic recovery funds reaching women/men including livelihood development, employment, entrepreneurial activities etc.</li> <li>Satisfaction levels of women and men with post disaster management and reconstruction.</li> </ul>	<ul style="list-style-type: none"> <li>Equal numbers of women and men officials and community members involved in post disaster data collection.</li> <li>Proportion of women / men beneficiaries receiving land allocations, emergency rations, replacement livestock, seeds, loans close to one.</li> <li>Proportion of economic recovery funds reaching women/men including livelihood development, employment, entrepreneurial activities etc. close to one</li> <li>Changes at start and end of emergency support in women and men's levels of nutrition, health, education, vulnerability.</li> <li>Equal levels of satisfaction.</li> </ul>



## Annex: Examples of Common Tools to Incorporate Gender into Pre- and Post-disaster Assessment and Analysis

To promote informed monitoring and evaluation in disaster risk management, international organizations advocate the use of an 'empowerment approach' (IRP/UNDP 2008), also referred to as a 'gender conscious approach' (ADPC 2004). By addressing the existing inequalities that result in one sex (usually women) being more vulnerable to natural hazards, this approach seeks to go beyond simply allocating resources to meet gender specific needs. A gender conscious or empowerment approach can be adopted during all phases of DRM.

Gender-based community mapping, focal group- and community discussions are practical examples of how women's and men's separate voices and concerns can be obtained as part of the DRM consultation process. Two examples of the use of such approach are provided below, drawing from project experiences in Indonesia and Cambodia.



### Example 1: Harvard Analytical Gender Roles Framework

Gender Roles	Before the disaster		During the disaster		After the disaster	
	Women	men	Women	men	Women	men
Ensuring food availability	✓		✓	✓	✓	
Care for children	✓		✓	✓	✓	
Collect water	✓			✓	✓	
Collect fuel	✓		✓		✓	
Go to market	✓		✓		✓	
Clean house and wash clothes	✓	✓			✓	✓
Take care of sick	✓		✓		✓	
Give health education	✓		✓		✓	
Repair house	✓	✓			✓	✓
Attend community meeting	✓	✓			✓	✓
Draw evacuation plans	✓	✓		✓	✓	✓
Receive warning	✓				✓	
Evacuate families and others	✓	✓	✓	✓	✓	✓
Guard house	✓			✓		
Get capital for small business	✓					

(Example from Kampung Pulo, Jakarta, Indonesia, Care International, 2002).

**Example2: Gender Conscious Assessment of Vulnerabilities, Capacities & Risk Perceptions of Men and Women: Flood Impact on Women and Girls in Prey Veng Province, Cambodia, June 2002**

Vulnerabilities		Capacities	
Women	Men	Women	Men
<b>1. Physical / Material</b>			
<p>Decreased ability to catch fish, other aquatic organisms</p> <p>Need for plastic sheeting and family boats, temporary shelters</p> <p>Need for fishing lines and hooks</p> <p>Lack of safe boats</p> <p>Lost/reduced opportunities for income generating activities</p> <p>Inability to swim, fear of handling and riding boats, fear of leaches</p>	<p>Under-employed as rice farmers</p> <p>Decreased ability to catch fish, other aquatic organisms</p> <p>Need for plastic sheeting and family boats, temporary shelters</p> <p>Need for fishing nets</p> <p>Lack of safe boats</p>	<p>Housework, cooking</p> <p>Collecting fruit</p> <p>Rice farming (transplanting, harvesting)</p> <p>Agricultural and non agricultural labour force</p> <p>More fish to catch, process and sell</p> <p>Health care provider</p> <p>Water managers</p>	<p>Livestock raising</p> <p>Boat transportation</p> <p>Rice farming (ploughing, harvesting, transporting)</p> <p>Agricultural and non-agricultural labour force</p> <p>More fish to catch and sell</p> <p>Construction of temporary shelters</p> <p>Cutting and collecting trees for firewood, collecting fodder</p> <p>Post flood heavy structural construction</p>
<b>2. Social / Organisation</b>			
<p>Migration to cities and Thailand for work (seasonal or permanent)</p> <p>Additional responsibilities to replace lost labour</p> <p>Availability of loans with high interest from private money lenders;</p> <p>Personal safety concerns</p> <p>Little evidence of organized community spirit. Responses mainly ad hoc</p> <p>Expected to provide labour for community road building or hire labour outside</p> <p>Involvement limited only to receiving emergency aid</p>	<p>Migration to cities and Thailand for work (seasonal or permanent)</p> <p>Personal safety concerns</p> <p>Little evidence of organised community spirit. Responses mainly ad hoc</p> <p>All-male village authorities that do decision making</p> <p>Male dominated and non participatory decision making process</p> <p>Male dominated committees not able to meet needs of women and girls as there is no representation</p>	<p>Ability to arrange, manage and renegotiate loans</p> <p>Availability of migrant workers returning from outside</p> <p>Availability of traditional birth attendants despite risks</p> <p>Availability of loans with low interest from credit agencies</p> <p>Post flood community duty road construction</p> <p>Take precautions for personal and family safety and security</p>	<p>Take charge of productive activities, movement / evacuation</p> <p>Availability of migrant workers returning from outside</p> <p>Post flood community duty road construction</p> <p>All male village authorities</p> <p>Take precautions for personal and family safety and security</p> <p>Principal / final decision maker</p> <p>Availability of information about flooding from village public address system, radio, TV, other villages</p>



Poorly represented in village structures, local political decision making bodies, committees

Culture prevents disagreeing with husband

Not able to concentrate to listen for information or watch TV due to other tasks / less access to information / communication

Poor communication / information about flood from different sources

Can influence decision making if she has greater earning power

Can make decisions for domestic issues or if little money is involved

### 3. Motivation / Attitude

Inability to ensure family survival through rice production

Working hard to feed family

Inability to repay loans  
Insecurity when husbands/fathers are away

Desire to permanently migrate to other places

Increased workload after flooding, increased stress, exhaustion

Self-reduction in food consumption leading to illness

Reduction of household expenditures

Victims of domestic violence

Lack of privacy and sanitation

Unconcerned about village environmental hygiene and water related diseases

Inability to ensure family survival through rice production

Working hard to feed family

Inability to repay loans  
Reduction of household expenditures

Alcoholism leading to domestic violence

Ability to fish and sell for cash income to buy other food items

Able to cope with flood evacuation, relocation, refuge conditions

Don't consider difficulties faced as disastrous

Determination to find food and money to feed children

Reduction of household expenditures

Desire for children to have more equal status with men and more equal influence in decision making

Ability to fish and sell for cash income to buy other food items

Able to cope with flood evacuation, relocation, refuge conditions

Don't consider difficulties faced as disastrous

More mobile, able to use boat transportation

Reduction of household expenditures

### 4. Risk Perception

Normal occurrences, part of nature & life

Results in flood shortage (esp. rice production and availability)

Threatens food security, family survival and health

Requires evacuation and or relocation

Normal occurrences, part of nature & life

Results in food shortage (esp. rice production and availability)

Threatens food security, family survival and health

Requires evacuation and or relocation

Requires migration for work, exposure to physical / sexual abuse / harassment

Less normal work during flood and additional new activities

Reallocation of gender responsibilities, especially among older children

Psychological mental stress in child care, concern for husband, family health etc

Increased workload, exhaustion, stress, worries.

Changes in farming practices

Increased debts / inability to repay loans

House fires blamed on women

Leads to pregnancy and child birth complications (transportation / safety)

Requires migration for work

Increased workload during flood

Reallocation of gender responsibilities, especially among older children

Increased exposure to higher risk activities

Destruction of agricultural production

Changes in farming practices

Increased debts / inability to repay loans

Alcoholism, domestic violence

House fires caused by women

## ADDITIONAL RESOURCES

- Asia Pacific Economic Community (2010), Guidelines and best practices for post-disaster damage and loss assessment, [www.ag.gov.au](http://www.ag.gov.au)
- Asia Disaster Preparedness Center, Community Based Disaster Risk Management Field Practitioner' Handbook (2004) <http://www.adpc.net/pdr-sea/publications/12handbk.pdf>
- IRP / UNDP (2008), Guidance Note on Recovery – Gender, [www.recoveryplatform.org](http://www.recoveryplatform.org).
- Inter-agency Steering Committee (2006), 'Gender Handbook in Humanitarian Action - Women, Girls, Boys and Men – Different needs, Equal Opportunities', <http://www.humanitarianreform.org/Default.aspx?tabid=656>,
- International Recovery Platform's Knowledge for Recovery Series – Info Kit 7 (2009), [www.recoveryplatform.org/](http://www.recoveryplatform.org/)
- UNFPA Women's Protection Assessment Working Group (2010), Women's Protection Assessments: Post Cyclone Nargis, Myanmar, [http://reliefweb.int/sites/reliefweb.int/files/resources/F6CAA5ECD-57BC6054925776100202353-Full\\_Report.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/F6CAA5ECD-57BC6054925776100202353-Full_Report.pdf)
- World Health Organisation (2005), Gender Considerations in Disaster Assessment, sourced [www.who.int](http://www.who.int)



## CONTACTS:

For further information, please contact  
Helene Carlsson Rex, Senior Social Development Specialist  
([Hcarlsson@worldbank.org](mailto:Hcarlsson@worldbank.org))  
Zoe Trohanis, Senior Infrastructure Specialist  
([Ztrohanis@worldbank.org](mailto:Ztrohanis@worldbank.org))  
East Asia and Pacific Disaster Risk Management Team  
([eapdrm@worldbank.org](mailto:eapdrm@worldbank.org))

*Photo Credits: p.1 Evangeline Pe; p.2 Nonie Reyes; p. 7 John Paul de Rosario;  
p.10 Evageline Pe (top); Jonathan Cellona (bottom);  
inside back cover (second bottom left) Jerome Ascaño*



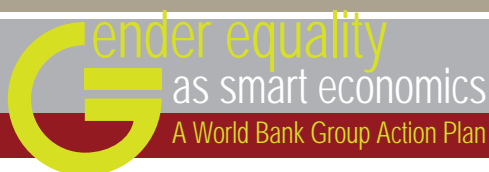
THE WORLD BANK

### East Asia and the Pacific Region

The World Bank

1818 H St. NW, Washington, D.C., 20433

<http://www.worldbank.org/eap>



**GFDRR**  
Global Facility for Disaster Reduction and Recovery