



# WORKING WITH WOMEN AT RISK

## PRACTICAL GUIDELINES FOR ASSESSING LOCAL DISASTER RISK

ELAINE ENARSON  
with  
LOURDES MEYRELES  
MARTA GONZÁLEZ  
BETTY HEARN MORROW  
AUDREY MULLINGS  
JUDITH SOARES

INTERNATIONAL HURRICANE CENTER  
FLORIDA INTERNATIONAL UNIVERSITY  
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## PREFACE

For the past two years, a team of researchers in the US, Dominican Republic, St. Lucia, Dominica and El Salvador have worked across borders of all kinds to develop a new way of studying community capacity and vulnerability in the face of hazards and disasters. Our approach builds on the local knowledge of women whose extensive social roles, community and family work, and economic activities make them experts on risk at the household, neighborhood, and community levels. Yet their views are often overlooked even in community-based vulnerability research.

With financial support from the Center for Disaster Management and Humanitarian Assistance at the University of South Florida, team leaders in the Caribbean collaborated with grassroots women's groups to develop and test a new research model based on the expertise of local women and women's groups. As funding was generously provided for a second year, we were able to field test our model in different cultural and social contexts and revise the model accordingly.

The result is this step-by-step guide for assessing the resources and vulnerabilities of communities "through the eyes of women." The model includes: identification of a local community women's group to take on the project; training of women from the group as community researchers; guidelines for using various research strategies to collect original data about local hazards and risk; and ideas for synthesizing and utilizing the findings.

We offer the following research guidelines as a tool for others interested in planning, conducting, and carrying out gender-focused community vulnerability research. You will find specific ideas for organizing a training workshop for community women who then serve as researchers, including training materials and other reference material, and guides to successfully collecting and analyzing original data. We propose a model for organizing these findings into a comprehensive Community Vulnerability Profile. Finally, we present strategies for moving from analysis to action by sharing this work with community members, officials, the media and all those interested in safer communities.

We hope the document will help women's organizations and other groups plan and conduct successful research useful to their neighborhoods and communities in the face of multi-faceted hazards and the increasing global risk of disasters. We are confident the Community Vulnerability Profiles resulting from this methodology are unique and valuable documents which will also be of value to emergency managers and planners.

The community researchers and key informants who carried out these first field tests generously shared a lifetime of experience and knowledge. We know they join us in this

invitation to use, adapt, and pass along these research guidelines in the interest of our mutual goals—building safer, more just, and sustainable disaster-resilient communities for all.

WORKING WITH WOMEN AT RISK: PRACTICAL GUIDELINES FOR ASSESSING LOCAL DISASTER RISK is available for downloading on the project website ([www.fiu.edu/~lsbr/women](http://www.fiu.edu/~lsbr/women)), where you will also find copies of Community Vulnerability Profiles already completed, photographs, and additional materials. We hope you will add your own documents soon!

Elaine Enarson, Evergreen, Colorado

Lourdes Meyreles, Santo Domingo, Dominican Republic

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Dr. Betty Hearn Morrow of the Laboratory for Social and Behavioral Research at the International Hurricane Center, Florida International University and Dr. Elaine Enarson, Independent Consultant, Evergreen, Colorado, were Co-Principal Investigators during the first year, while Lourdes Meyreles, coordinator of the Caribbean Disasters and Society Project of FLACSO (Santo Domingo) served as project director and senior researcher in the second year.

Senior researchers Lourdes Meyreles and Dr. Judith Soares, Tutor Coordinator of WAND, coordinated the research in the first year and were joined by Marta González of FLACSO (El Salvador) in the second. We were fortunate that Audrey Mullings, deputy coordinator of the Caribbean Disaster Emergency Response Agency, participated as project consultant for two years. Ninnette Rodriguez of FIU provided valuable graduate student and translation assistance, and we were grateful to Pablo Toral for his translation of the English version of the Guidelines. In the second year, we benefitted enormously from the participation of Juanita Mainster who helped conduct workshops and supported the project in many ways. To Lilia Cunningham, heartfelt thanks for developing the project website. During the second year, Elaine Enarson served as project consultant and is the primary author of these guidelines.

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*In St. Lucia*

Beverley Augustin  
Luciana Augustin  
Kimberley Descartes  
Beverly Fontenelle

Scholastica Francis  
Juliette Norbert  
Brendaline Vigeo  
Bruno Williams

Greta Joseph  
Janeta Joseph

*In the Dominican Republic*

Miguelina Carreras  
Melania González  
Biviana Agüero  
Altagracia Peguero

Alina Hernández  
Ana Luisa Molina  
Martha Batista  
Lidia Espinal

Albania Rojas  
Odeida Ventura  
Margarita Melenciano

*In Dominica*

Irma Lanfond-Joseph  
Gracia Robin  
Janice Henderson  
Valda Laville

Thecla Frederick  
Angelina Laville  
Patsy Thomas  
Connie Williams

Sylvie Warrington  
Josephine Dublin-Prince

*In El Salvador*

Maritz Antonia Umanzor  
Bárbara de los Ángeles Palacios  
Erlinda Díaz  
María Santos Zepeda

Magdalena Ríos  
Reina Abigail Valle Ortega  
Teresa Ayala  
Reina Isabel Arévalo

Esperanza del Pilar Cortéz  
Eva del Carmen Martínez  
Mercedes Henríquez

**We join in dedicating this document to Gavina De La Cruz, who was keenly interested in the project and participated in the Haina training workshop in the Dominican Republic. Like others in her neighborhood, she made do with erratic electrical service but recently lost her life due to electrocution in her own kitchen. Her needless death is a tragic and dramatic illustration of the risks she and millions of other women in the world face every day.**

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**SECTION ONE:**

**USING THE GUIDELINES:  
ARE THEY FOR YOU?**



## SECTION ONE: USING THE GUIDELINES: ARE THEY FOR YOU?

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### ASSESSING LOCAL RISK

What natural and technological hazards make everyday life unsafe—and what can be done to reduce them? What makes everyday life particularly unsafe for women? These are complex questions all the more pressing to answer as the human and environmental toll of disasters continues to rise.

Rising numbers of people around the globe live in hazardous environments due, among other factors, to:

- naturally-occurring events such as hurricanes or earthquakes
- human-caused and technological dangers such as toxic waste contamination and unsafe housing
- armed conflict within and across national borders
- biological hazards such as cholera or HIV/AIDS

Catastrophic events such as deadly hurricanes leave many thousands of dead and cause untold loss and pain when they strike Latin America and the Caribbean. Even more destructive in the long term are small-scale disasters which hit neighborhoods and communities time and again. These localized floods, mudslides, droughts, or toxic spills are frightening and destructive, but attract far less international attention and humanitarian relief than more dramatic and catastrophic events.

How can people be safer in a world of increasing risk? How can we know what places us in harm's way?

We focus here on the everyday living conditions that reduce and increase

people's exposure to environmental and technological hazards in particular. These hazards are sometimes self-evident—the smoking volcano in the distance, nearby oil refineries or spring floods—but not always.

What makes people strong in the face of danger is even harder to see, and harder yet when we think of women and girls, so often typecast as victims in disasters.

### Local Hazards, Local Vulnerabilities

Some risky conditions are easily observed—a building poorly constructed to withstand an earthquake, for example, or a neighborhood lacking safe drinking water—while others are obvious only by their absence, such as effective communication systems to warn people of hurricane-force winds. But even when dangers are evident, risk is more than a function of the hazards that exist in our environment.

The vulnerability of people increases the effects of hazards, putting people at increased risk of harm—and this is not a technical but a social issue. People vary widely in their exposure to hazards and in their ability to anticipate, plan for, survive and recover from the effects of disastrous events.

Just as hazards relate to a particular environment, people's exposure to hazards and their capacity to "ride out the storm" are shaped by economic, political, and social conditions in particular environments.

- Are there functioning communication and electricity systems in this area? Do they reach this neighborhood or community? Do they reach all people equally?

- Where are the hurricane shelters or emergency evacuation sites—or are there any? Who here has reliable transportation to reach the school, community center, or other places of refuge?
- What happens if a landslide destroys the home they work in? How are people's livelihoods affected when nearby factories contaminate local water supplies or polluted air sickens their children?
- How close is the nearest clinic or day care center? Are people there prepared for an emergency?
- How do people make their needs known? How do they organize politically to make life better?
- How well do neighbors know one another, and can friends, kin, or neighbors help others in an emergency?

These are some of the questions needing answers when people begin to assess hazards and their vulnerabilities and capacities in the face of these hazards. Here, local people are the experts. And here, the perspectives of women and men are likely to vary.

### **Building on Local Knowledge**

All disasters are experienced locally by people in particular households and neighborhoods, whether we think of catastrophic events hitting thousands of people at once, the "creeping" disasters of deforestation or industrial pollution, small scale disasters like landslides or urban floods, or dramatic oil spills or explosions.

Risk assessment from this perspective is not simply a matter of collecting data about meteorological patterns (When will El Niño return? How active is the volcano?) or analyzing infrastructure

(How close to the school are the trucks carrying hazardous waste? Is the hospital equipped to respond to gas explosions?) or consulting census data (How many old people live here? How many people can read emergency warnings?).

Assessing risk means identifying clear and hidden hazards but also understanding how danger is constructed at the local level and who is most exposed. What are the root causes of unsafe living conditions putting people at risk?

To reduce risk, instead of simply documenting it, we need to understand how particular groups of people live with uncertainty and hazards of all kinds. What did local people do in the past to conserve water, or diversify crops, or prepare for the floods that arrive with certainty every year? What do they do now? How do they adapt to polluted waters once fished by locals or to drought?

How do women and men, respectively, cope with high rates of infant mortality or unemployment, with unhealthy water, erratic or no electrical supplies, lack of transportation and limited control over decisions directly affecting their own families? Are communities changing in ways that reduce or increase their exposure to hazards and disasters?

Volcanic eruptions, oil spills, and landslides happen to particular people in particular places. And it is local people who are the experts about what it takes to live with known risks and how risky conditions can be made safer.

Unlike scientific assessments based on computer-based mapping tools, which often lack a social dimension, community-based vulnerability assessments start with community organizing and depend on people's local knowledge.

This kind of risk assessment is a vital tool for learning what makes daily life risky and how people's lives can be made

safer. The people most directly affected can identify problems and suggest solutions, and are the best advocates for changes that make life safer.

This approach to assessing local risks does not focus on how people can be helped after a disaster, but on how they can and do work together to prevent hazardous conditions or events from becoming destructive and tragic disasters. It draws on gender analysis to highlight women's neglected knowledge and capacities in disaster contexts.

## **WHY IS GENDER IMPORTANT?**

Why study risk through women's eyes? Isn't that just part of the picture? And what about men?

Like age, gender is a factor that shapes every person's daily life. The relationships in society between women and men are a powerful force in every culture, resulting in differences as well as inequalities. Just as women and men are differently affected by economic and social development, they are differently affected by hazards and disasters.

Though gender is not always or necessarily the most important factor in people's experience of disasters, it is never irrelevant—for men as much as women. But we focus here on women to help correct the gender bias in most approaches today to vulnerability assessment and in emergency management generally.

For the most part, other models for assessing vulnerability and capacity do not begin from the ground up to develop a "bird's eye" view of risk. They tend to focus predominantly on the needs of particularly vulnerable social groups rather than balancing knowledge about needs with knowledge about skills and resources. Few studies are currently conducted by people who themselves are at risk.

Most vulnerability studies are also considered "gender neutral" because they do not attend to women and men specifically, and to the social relations between them. But this leads to "gender blind" research which overlooks differences and inequalities that are highly relevant before, during, and after disasters. For example, the land, skills, and jobs of men may be considered but not women's unpaid work in the home and community or the ways they earn income in the informal economy.

## **Seeing Risk Through Women's Eyes**

These Guidelines begin with women and what they know about their own community. For many reasons, this is an important and new perspective on risk.

Women have unique perspectives on community danger and safety. There is no uniform or universal "women's view" on risk and disaster. Being a woman means different things in different cultures, and these cultural differences matter in a crisis. Nonetheless, women across cultures have important insight about community danger and safety. They are very likely to be involved in community networks and organizations and in emergency response to people hurt by crises of all kinds. Many are highly vulnerable to the effects of disasters—though not automatically just because they are women.

Yet the dangers faced by girls and women simply because they are female are not reflected in most disaster research. Nor is much known about how the gender division of labor, for example, can cause the deaths of women and men, respectively, in disasters.

Unlike most studies of vulnerability, the model we use takes a community approach and a gendered perspective. This means that both capacities and vulnerabilities are explored, and that risk is assessed

within the context of daily living conditions. It also means that social vulnerabilities and capacities, rather than sheer physical exposure to technological or environmental hazards, is our focus. Finally, this model ensures that those most at risk take center stage.

For all these reasons, the research methods used in these guidelines build on the ideas, feelings, and observations of women. In addition to being astute social observers, women have been found by researchers to be, on balance, more likely than men to:

- manage and use natural resources on a daily basis
- organize locally to address immediate family and community needs such as lack of clean water
- have limited economic resources to anticipate, prepare for, and recover from a major disaster
- respond to people's on-going needs in the extended recovery period following a major disaster
- be under-represented politically but strong informal leaders
- be connected with school systems and children's education
- have influence over others through strong social networks
- be effective communicators
- be attentive to emergency warnings and preparedness
- be safety-conscious or "risk averse"

The world is not "gender blind" and our assessments of risk cannot be either.

Until all studies of hazard and disaster are gender-sensitive, we won't have the knowledge we need about the world as it is. And until we look at disasters through women's eyes, we won't know enough about half the world's population in disaster situations.

## **Guidelines for Community Vulnerability Research**

These Guidelines will guide you every step of the way as you study community risk with, by, and for some of the most vulnerable and most resourceful people in any community—women.

Who are they for? These Guidelines are based on the experience of grassroots women in the Caribbean who worked through local women's organizations to learn more about the risks they face and how to reduce them. They are intended primarily for use by women's groups, though the Guidelines may also be useful to other community groups, educators, development agencies, emergency managers and researchers wishing to identify and assess the hazards of everyday life and the resources, capacities, skills, and knowledge of local people who live in hazardous places and times.

What is included? Here you will find a step-by-step guide for your women's group to plan and carry out a local assessment of disaster risk. The Guidelines offer project facilitators planning tips to help you get started, training materials for the research workshop, background information, and suggestions for how to utilize the research findings.

Who will use the results? This action research project will result in a written Community Vulnerability Profile. The document summarizes the research results and can help community members promote steps to reduce risk. It is a useful tool for women's groups and for

informing emergency managers about local capacities and vulnerabilities.

Who does the research? The Guidelines assume that grassroots women can and will become effective community researchers. Research is challenging for everyone, and especially for community women without the benefit of extended education or training and perhaps—at the outset—without much self-confidence in their abilities as researchers.

The Guidelines build on local women's knowledge to develop realistic research skills and increase awareness of vulnerability and resilience to disaster. We

find that this model of vulnerability research affords women who tend to be marginalized in disaster planning and response (and in disaster research) new confidence in their abilities and critical insight into the urgency of reducing risk. Women talking with other women about hazards and disasters is a powerful first step.

You may well find that the community researchers urgently want to carry the work forward as community vulnerability educators and activists.

Using these guidelines to train community researchers does not guarantee specific

#### **GENDER FACTORS INCREASING RISK FOR GIRLS AND WOMEN**

- Childbirth- and pregnancy-related health limitations
- Longer life span and increased mobility limitations, chronic illness, disabilities
- Limited reproductive control
- Greater risk of domestic and sexual violence
- More likely to be sole economic providers
- Lower incomes, more economic dependency; less access to credit
- Fewer land rights; less control over labor
- More often employed as part-time, "flexible" workers, and in free trade zones
- More responsibility for dependents
- More dependent on child care centers, schools, clinics, and other public services
- Less access to transportation
- Higher illiteracy rates, lower levels of schooling and training
- More dependent on water, fuel wood, crops and other natural resources
- Less free time and personal autonomy
- More often socially isolated
- Less decision-making power in homes and political institutions
- Subject to "intersecting vulnerabilities," e.g. as impoverished women raising families in substandard housing; underemployed disabled women subject to sexual violence; frail older women who are illiterate
- Low representation in emergency management organizations and professions
- Less knowledge of how to access emergency assistance or capacity to do so

results or substitute for other studies. But becoming community vulnerability researchers is one tool among others to empower women as agents of change in their own communities.

### **Women and Disaster: Understanding Vulnerabilities**

Of course, not all women are equally vulnerable or exposed to the effects of hazards and disasters in identical ways. Women's lives, like men's, are shaped both by gender relations in a particular culture or time and by everything else about them—their age, their physical capacities, their ethnic or racial status and economic conditions, to name a few.

Research conducted around the world from a gender perspective does suggest that women are likely to be especially vulnerable to disasters simply because gender inequality is so widespread. The daily lives of girls and women may increase their exposure to all kinds of unsafe conditions and hazardous events. Women also tend to have less power in household decisions, just as they are under-represented in political decision-making. When their voices aren't heard, their immediate needs or long-term interests may not be taken into account.

Many social trends changing the face of societies today are especially likely to affect women, for example pressures on governments to privatize social services, which undermines the social safety net, and the trend toward longer life spans. Rising rates of poverty mean rising rates of female poverty in most cases. In some, but not all cultures, rising rates of households headed by women results in greater vulnerability to poverty. Around the world, women face increased demands on their time and energy as well as increasing risk of disaster.

### **Women and Disaster: Understanding Strengths and Capacities**

Knowing that women in unsafe living conditions may be highly vulnerable in

disasters often leads to the stereotype of women as passive, helpless, and needy victims in the face of emergencies.

To the contrary, the division of labor may encourage women to act proactively to conserve the natural resources they depend on to earn income. The paid jobs women take on in health care, education, and the human services give them essential skills and networks in disasters.

As primary health care providers in the home, women strive to keep families healthy, and as family educators, they teach children about safety and self-protection. Very often, it is also women who carry the stories of a neighborhood or family, and keep languages and cultural traditions alive through family celebrations and special meals. These too are assets, for example when communities are severely impacted by an earthquake and people face relocation. In many communities, women's voluntary work behind the scenes helps organize people for social change. The contribution they make to household incomes is a vital resource when families are hit by disasters and must start again. Certainly women's domestic labor—cooking, cleaning, sewing, caring for livestock and household gardens, making houses into homes—is essential. And their emotional strength and strong interpersonal and family networks help when people must bury loved ones and rebuild lives and livelihoods.

Are women victimized by disasters, or are they heroines who save the day? Neither of course. But only when women's skills, knowledge, abilities, and networks are recognized—as well as the factors which make their daily lives so risky—can women and men work together as full and equal partners to make communities safer.

## WOMEN AS "KEYS TO PREVENTION"

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- Family roles making them important risk communicators and educators
- Managing environmental resources for sustained use to support households
- Extensive caregiving networks and resources; women are healers
- Leadership roles in local community networks and organizations
- Survival and coping skills in emergencies, including food preservation
- Informal physical and mental health care skills and experience
- Occupational specialization in jobs central to disaster preparedness and recovery, such as teachers, counselors, and health care providers
- Local knowledge of the community, including living conditions, location, and needs of those most in need of assistance in a crisis
- Social networks and intimate ties with others
- Cultural knowledge; oral historians

**SECTION TWO:**

**WHERE TO START?  
PLANNING AND  
PREPARATION**



## SECTION TWO: WHERE TO START? PLANNING AND PREPARATION

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### PLANNING RESEARCH WITH COMMUNITY-BASED ORGANIZATIONS

Knowing where you want to go and how to get there is a vital part of planning. In this section, we outline the major steps involved in conducting this action research project, which are also pictured in Appendix A [Research Process Overview].

#### A. Making Commitments

Is this a project for your group or organization? If so, you will need to put other goals and objectives aside.

**Time:** Conducting a vulnerability study will take at least 3 months and may take longer.

- Who in your group or organization can work on this project?
- For how long?
- How much time do you have for collecting and analyzing data?
- For writing and sharing your results?

**People:** Depending on the size of your community, conducting a vulnerability study will involve from 10 to 15 people, or more, not including women in the community who are interviewed.

The study can involve just your organization or it may involve partnering with another local group or organization. In either case, to carry out the study you will need people able and willing to carry it out. These include:

**A project coordinator** with at least 8 hours a week available who will oversee the administration of the project, trou-

bleshoot problems, facilitate all community meetings and take a lead role writing up the results. These responsibilities can also be shared with others.

**A writer** who will take the findings from the researchers and turn it into a user-friendly Community Vulnerability Profile. This person need not be a specialist but does need experience analyzing information and writing reports. This can be done by the project coordinator or another person. Writing up the findings can also be a group activity undertaken by the community researchers and field coordinator with the Project Coordinator in an oversight role.

**A field coordinator**, either within your own group or in your partner organization, who works closely with the researchers during the training and then during the research and analysis process. The field coordinator ensures accountability and consistency in the research. Ideally, the field coordinator should be very close geographically to the study sites. Don't underestimate the demands on her time. She will work closely with the community researchers and also with the project coordinator. Flexibility is important.

**Community researchers** (5-10) people who live in the area under study and are able, willing, and ready to attend a two-day training workshop, conduct original research for 4-6 weeks, help analyze and report the data, and share the findings with community members and emergency management authorities. Selecting community researchers with functional literacy is important, as they will be asked to read interview guides and write interview summaries, but not all researchers must have the same reading and writing abilities.

## **B. Finding Partners**

Your women's group may have sufficient resources to carry out the vulnerability assessment but partnering with other groups or agencies may also be necessary or desirable. Partner agencies may be able to help fund the project or provide other kinds of support.

If so, be sure to begin and end this project as a collaborative venture with full consultation and consensual decisions.

Don't plan the research and then look for partners! Private voluntary agencies, nongovernmental organizations, national and international organizations, community groups, and women's organizations are all potential partners and funders.

Consider collaborating with:

### **Women's and community groups**

- Crisis centers
- Community development groups
- Work-based associations, unions, collaboratives
- Child care groups and schools
- Faith-based groups
- Housing collectives
- Women organized around environmental issues
- Political women's organizations
- Senior women or disabled women's groups
- Social or cultural groups
- Women's professional groups (e.g., women in academia, or women environmental scientists)
- Organizations of women health workers

### **Development and disaster organizations**

- Local emergency management agency
- National or regional emergency management organization
- International organizations, e.g. United Nations Development Program, International Labour Organization, World Health Organization, Pan-American Health Organization, etc.
- International development agencies, e.g. US Agency for International Development, Canadian International Development Agency, etc.
- Humanitarian relief agencies, e.g. Oxfam, International Federation of Red Cross/Red Crescent, Save the Children, etc.

### **Other government agencies**

- Environmental resource agencies
- Urban planning agencies
- Research centers
- Economic planning and development agency
- Women's bureaus
- Municipal authorities

## **C. Securing Resources**

If your women's group seeks outside financial help to undertake this project, here are some tips:

- Study grants previously awarded by the funding organization
- Make personal contact, if possible, to explain the project
- If there is a formal grant application process, follow it in detail—check and double check!
- Provide ample background information

about your group, the people participating in the project, and why you think the research is worthwhile

- Write a reasonable budget with basic categories like stipend, travel costs, and office supplies. Don't forget to check your math and do be realistic about your costs
- If your first request is rejected, don't give up! Ask for feedback on why you weren't successful and try again, even with the same organization, if possible

## THE PLANNING MEETING

Holding a planning meeting is very important. It may well be the first time that members of your women's group have met personally with other groups or agencies interested in reducing the risk of natural disasters. Take time now for introductions, background, and plenty of talking. You share a lot of common interests or you wouldn't be at the planning meeting, but there may also be different perspectives or interests that are important to air. Plan to meet over a meal, if possible.

### A. Scheduling

Be sure to plan the first meeting in a place and time convenient to people with differing work and family responsibilities, and remember that not everyone has reliable personal transportation.

You won't know without asking, so it's important to ask at the outset how the meeting can best be arranged to suit all. Is child care needed? How about translators or wheelchair-accessible facilities?

Make this first meeting as participatory and interactive as possible. The meeting organizers should take a back seat.

Work now to set basic ground rules for your work together. Ensure that time for speaking is fairly distributed and

## RESOURCES NEEDED FOR RESEARCH

The project can be conducted with or without financial support but these resources are helpful.

People with time to coordinate the project.

Workspace and modest office supplies; if possible, telephones and access to computers

Funds from the CBO or agency or outside donors sufficient to:

- Compensate researchers

**required:** for their out-of-pocket expenses such as child care, transportation, lost wages

**recommended:** for their training as researchers and the time they spend gathering data.

- Compensate the project coordinator, field coordinator, and writer, if possible
- Provide space, refreshments, and supplies for all community meetings (planning meeting, 2-day training, action meeting, and final community workshop)
- Meet administrative costs (modest telephone or fax bills, some local transportation costs for those directly involved in the project)
- Provide researchers with notebooks and pens, tape and tape recorders, disposable cameras and other incidentals.

that all views are respected and heard. Some people will have more experience than others speaking out in groups. Be sure to hear from everyone.

Stress the importance of open communication and agreeing on important decisions so everyone can support them.

### B. Selecting Participants

Naturally, the key people at the first planning meeting should represent all the groups or agencies interested in participating. Be as inclusive as possible. We

don't suggest inviting outside persons at this point but only those likely to be directly involved. These include:

- All those in your community group who will be overseeing or participating personally in the research training, data collection, data analysis and report writing;
- Representatives from the partner agencies or groups you want to work with, including key administrative and support people;
- The person from your group who is likely to be the coordinator of the community researchers (the field coordinator), if this person has been identified at this point;
- Others whose work may be impacted, such as co-workers or local officials.

### **C. Exchanging Information**

The goals and accomplishments of your women's group may not be well known to others at the meeting, and you will certainly want to learn more about your potential partner. Take advantage of this opportunity to share background information and explain why you are concerned about hazards and disasters.

You may want to locate and copy some of the general readings suggested in Appendix V [Selected Resources] for review by others attending the planning meeting, and perhaps a copy of the Introduction to the Project letter as well [Appendix J].

Prepare these materials and, if possible, circulate them in advance of the planning meeting so people can come prepared:

- Background information (see above)
- Proposed meeting agenda
- Contact information for all participants
- Flyers or other information about your group

Before the meeting, ask your partner agency, if any, to bring descriptive material about their members and their activities. Don't assume people know about the community work of other groups, even when they work in the same area. Use the planning meeting for information exchange and the beginnings of personal networks at the community level.

### **D. Setting an Agenda**

People from your organization are convening the meeting so you should draw up a working agenda. [See Appendix B, Planning Meeting Agenda.] Also decide on a meeting facilitator, whose first task is to introduce the agenda and ask for other ideas. Confirm the general timeframe. Are you going to work through lunch? Will you need a follow-up meeting?

Allow plenty of time for people to discuss the essential goals and objectives of the project. What are we trying to accomplish by studying vulnerability? Why are only women involved? This is the time for participants to ask questions, express alternative views, and have substantive input into the design of the project. These Guidelines are just that—guidelines for your group or agency to consult and, of course, to change.

Allow time for a break and open discussion. People's real questions or worries tend to surface in informal conversation. Be sure to ask for feedback throughout the meeting and encourage people to share their concerns and questions. There will be lots!

### **E. Confirming the Division of Labor**

Who will fill which roles? Who will take responsibility for what?

Being very clear about who does what and when is essential in any project. Now is the time to secure commitments.

What is expected of the partners in the project? If only one group or organization will be organizing the research, what are the primary tasks and who will take them

on? Who can help and how?

In addition to the local women doing the research, the project will need people who can help supervise and coordinate. You may want to include others who can offer specific skills or resources to the project as well.

## **F. Setting the Timeframe**

Timing is important. Emphasize the importance of agreeing on a timeframe and planning to stick with it. Funding may depend on timely progress, and people's energy and enthusiasm usually lag over time. Will you do the training workshop 3 weeks or 3 months from now? How long do you expect the community investigations to take, and how long will it take the people who will be analyzing the data to write it up?

Setting realistic goals is always important—and so is flexibility down the road.

## **G. Planning Ahead**

The training period may or may not include follow-up sessions after the training workshop. Think ahead now about what would work best for your group.

Would a follow-up briefing from a local emergency manager be useful? That person could explain local preparedness and response systems and discuss local hazards.

Perhaps you will want to plan a follow-up meeting involving the community researchers, field coordinator, and project coordinator to practice some of the research methods.

Or you may need a short follow-up meeting to clarify the specific tasks (and compensation, if any) of the women conducting the research.

In some cases, this may not be necessary. Personal contacts or telephone contacts (where possible) may do. In other cases, it may be a good idea to meet again with more or different people at the table.

Exchange contact information and see that everyone present receives a copy. Plan now for regular consultation. Stay in touch!

## **H. Confirming the Study Sites**

Before the training workshop can be conducted, you will need to know just who will be doing the research and where. The project coordinator and field coordinator should arrange to meet some or all of those groups interested in participating. Visit them in their own neighborhood or community center. They will have learned about the research through their women's group, but can learn more from informal conversation with you. Go over the goals of the research and the responsibilities of the community researchers in detail so women can make informed decisions about whether or not to participate.

If you are not working in your own community, plan a field trip to meet local women from the group you will be partnering with.

You can learn a great deal about hazards and vulnerabilities simply by observing. Most importantly, the community researchers will have an opportunity to ask questions and learn more about what it means to be a "community researcher."

A field visit will also give those outside the women's group a good idea of the capabilities and limitations of potential participants. This is important background knowledge.

Now you know who you are working with, where, how, when and why. You're ready to begin planning for the training workshop!

## WHAT ARE THE PRIMARY PROJECT TASKS?

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- Overall coordination, including administration of funds (if appropriate) and final reporting
- Field coordination to assist the community researchers throughout the project and liaise with project coordinator
- Primary research, including attending the research methods workshop, choosing the sample, collecting and analyzing data, and consultation with others
- Supervision of community research, including trouble-shooting, selecting the sample, practicing methods of data collection, analyzing data, etc.
- Planning and conducting follow-up meetings (for more methods practice, for action planning, for presenting findings)
- Writing the Community Vulnerability Profile
- Reproduction and distribution of the Profile
- Overall project evaluation
- Follow-up community education or political advocacy or community organizing, as needed

**SECTION THREE:**

**PLANNING AND CONDUCTING  
THE TRAINING WORKSHOP**

## SECTION THREE: PLANNING AND CONDUCTING THE TRAINING WORKSHOP

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The primary purpose of the research training workshop is to collectively develop a research strategy for assessing vulnerability and capacity in the community at large.

In this section, we offer specific ideas about how to make the most of the training you will offer to women able and willing to serve as community researchers.

### PREPARING FOR THE WORKSHOP

#### A. Where, When and How Long?

Attending a training workshop asks a lot of people, especially women who may have to forego income, arrange for child care, and make other complex household arrangements.

All the more reason to plan carefully and prepare well in advance. We have written these guidelines assuming a two-day training workshop but recommend flexibility. Local women who have conducted community research before may not need the full two days. More often, you will find community researchers asking for more time.

Allow at least a month between the planning meeting and the community workshop so that you may consult with potential community researchers about the time they can devote to the training workshop.

When will the workshop training be? Consult with representatives of the women's group to determine whether weekdays or weekends are better.

You will need a facility located very close to the homes or workplaces of the women attending the workshop and carrying out the research. If possible, find a place

with child care and kitchen facilities. It should be large enough to split off into small groups for discussion.

#### B. Who Should Attend?

It is very important that the workshop include only those who will be carrying out the research. You may find that some community members or agency staff may wish to participate out of general interest though they will not be continuing as researchers.

As there is limited time to focus on learning and practicing new research skills, we strongly advise against including them in the workshop. Explain that the training workshop is specifically for those conducting the research but that they would be welcome later in the project, for example at the final community meeting when findings are presented and action recommendations debated.

#### What makes a good community researcher?

Following introductory discussions and meetings, a pool of women who are interested in being trained as community researchers will emerge.

It is up to the field coordinator, who personally knows potential community researchers, to select women to attend the research training workshop.

She should look for women who know their communities well and whose own life experience makes them a local expert on living with risk. These women know what brings people together in their community and what divides them, differences between neighborhoods, where the most vulnerable people live



and how, what resources people have, and what hazards exist.

Because they are active in their women's group, they also have organizational skills needed to carry out the research. They may have already raised money for a school, built a community center, organized relief in a hurricane or flood, and done other work with outside development agencies, academics, or government agencies.

Look for women who represent as wide a range of views as possible. Try to include women at varying stages of life and in different ethnic and economic groups. Selecting women who are more highly educated and employed as professionals will produce different results than when the study is carried out by local women with fewer resources.

It may be important in your community to involve these women as they may be most at risk or have significant networks, experience and local knowledge important to the research. In this case, project planners should work especially closely with the researchers to fully utilize and help develop their skills without imposing undue or unrealistic demands. Some training materials or parts of the training workshop may be more difficult, and writing the interview summaries may be challenging. But they can certainly succeed as researchers and benefit from participating with a bit more time and strong support from the workshop instructors and the field coordinator.

### **Compensation?**

We strongly recommend compensating the grassroots researchers for data collection and analysis. If possible, we also urge compensation for attending the training workshop and other meetings. Many women will forego earning opportunities to be there. At a minimum, out-of-pocket expenses must be compensated in order to work with women in different economic circumstances.

### **Competition?**

We find that women are eager to participate and very eager to learn more about hazards and disasters.

Work closely with the field coordinator to select participants, avoiding personalizing the selection as much as possible.

It is not advisable to include many women who have powerful roles within the women's group or who may dominate the group for other reasons.

### **What about men?**

This project assumes that women's life experiences best equip them to be community researchers. In some places, it may be effective to have men interviewing women but gender barriers can bias the results. Generally it is advisable in this context that women study women.

### **C. Training Resources**

Each community researcher should receive a folder or binder with training materials.

In addition, we suggest that the folder include flyers, posters, buttons, fact sheets, or other pieces of information on local emergency preparedness and disaster response. Check with your local emergency management authority well in advance to have sufficient quantities on hand.

If possible, have extras on hand for community researchers to distribute to their respondents during the study. This is not only a gesture of good will and thanks but increases local knowledge about existing resources.

The Appendix includes additional material to support the general discussion about hazards and disasters from women's perspectives:

- Women and Disaster: What's the Connection? The brochure can be

## WORKSHOP SUPPLIES AND EQUIPMENT

- White board or chalk board
- Flip chart or pins and tape for posting material
- Marking pens and paper
- Comfortable chairs
- Large drawing surface
- Workshop folder with all duplicated materials
- Name tags for participants
- Cameras
- Tape recorders and tape for each researcher
- Identification tags for researchers

duplicated and shared with respondents as well as researchers.

- Photographs of women living in dangerous situations, mitigating hazards, as disaster responders, coping with the aftermath, etc.
- First-person quotations from women around the world about hazards and disasters.

We also provide a resource list of basic readings which workshop planners may want to consider using. [See Appendix S, Selected Resources on Women and Disaster.] Your group, university faculty, development agencies, government offices and others may have other useful material for the workshop folder and perhaps photos and stories from previous disasters in the area.

### D. Facilitation

Who takes the lead role for the training workshop? Ideally, two people should share the role. Each should be knowl-

edgeable about women's living conditions locally and also about local hazard and disaster experiences.

However, these Guidelines provide sufficient background and materials for any person with experience conducting group meetings to facilitate successfully.

## TEACHING ACTION RESEARCH SKILLS

We offer a general template for covering all the important ground in two (busy) days. You will want to review and adapt it as needed to suit your community and priorities. You may want to add more time or cut back on some material for a shorter workshop.

However you organize your time, be prepared for change! Being flexible and responsive to those participating is the key to a successful workshop.

### A. Day One: Introducing Key Ideas

Start off with introductions and a thorough discussion of the general goals of the research project and the specific objectives of the two-day training workshop. [See Appendix C, Training Workshop Agenda.]

Be just as clear about what part the community researchers will play after these two days of training. Review the benefits to the community. What do women especially stand to gain?

Initiate an open discussion of the agenda prepared by the workshop facilitators. Find consensus on the agenda and time-frame and on ground rules for the discussion, with attention to the importance of attending on both days and arriving on time.

Hint: Changes made to the workshop agenda should not cut short the time reserved on the second day for teaching

and practicing research skills.

### 1. Introduce core concepts

The first part of the workshop is very important as it offers women a new way of thinking and speaking about risk. Slowly introduce such core terms as hazard, vulnerability and risk using Appendix U [Disaster Risk Management Glossary] as a resource. Bring concepts to life through illustrations from concrete experience or, if relevant, past disasters that affected the region.

Begin by brainstorming about well-known or obvious hazards in the local area and about how people have coped with these or tried to reduce them. Ask for [or volunteer] personal or community experiences that illustrate the key concepts summarized in Appendix F [Ideas about Disasters], for example their personal experience working with hazardous materials in export manufacturing zones or taking children to school across a river without a bridge.

To orient the discussion to research, ask women to think of questions they could

### TEACH CHALLENGING CONCEPTS INTERACTIVELY

Skits about disaster events can help women relate their life experiences as a woman to disasters. They can act out events involving women only and then do the skit taking the part of men. This helps bring out the significance of any gender differences.

Pairing off to practice interviewing one another (or role-playing interviews for the group) helps researchers share ideas about how to ask open-ended questions and how to fine-tune the interview guide to fit their particular study area.

Drawing a risk map lets women visually see the difference between technological hazards and environmental ones. Keep the risk maps drawn posted on the wall during the workshop.

Talking about some of the stories and pictures provided (or making copies of these handouts for everyone) will help bring the material to life. Community women can also share drawings of scenes they have seen.

Women can be given "vulnerability cards" (short profiles of people in risky situations, prepared in advance by the workshop organizers) and then asked to work with a partner to act out how women might cope, to encourage a balanced focus on vulnerabilities and capacities.

Flash cards can be prepared in advance with key concepts like "vulnerability" or "coping strategies" or "technological hazards." These can be traded by women who take turns explaining them to the group using local details.

Using the women and disaster brochure as a resource, organize a skit involving researchers explaining to an emergency manager or local authority why gender is relevant.

Draw pictures of what a "disaster resilient" community would look like. Compare this with the risk maps already drawn.

ask people in their own neighborhoods about unsafe conditions. Begin by speaking generally: What makes people's lives risky around here? Who gets hurt and how? What hazards do we all face together? What happened during the last disaster here?

## **2. Identify local resources**

Using examples arising from the discussion above, as well as agency materials included in the folder, identify and briefly evaluate the local emergency management system. Explain what agencies or departments are responsible for helping people prepare for and cope with disasters and who can help people afterwards. This can be sketched on a flip chart or blackboard to frame the discussion of local experience dealing with hazards and disasters.

Identifying and assessing local resources and people's awareness of them is an important part of the first day.

## **3. Connect women's lives to disasters**

For the rest of the first day, the focus should be on women, making explicit the connections between gender relations and disasters.

Draw on personal observation or ideas to answer these questions: What makes different women's lives here risky? Which women would have the hardest time in a natural disaster caused by an extreme environmental event like drought or volcanic eruption? Would this answer change if we think instead of a toxic spill or explosion? How have women dealt with threatening conditions in the past?

Be sure that women's strengths and capacities are identified and discussed as well as the problems or limitations they may face.

Use the photographs and words of women around the world to illustrate some of the issues facing girls and women in disaster contexts. These are likely to spark lively discussion and can help women make the connection between gender relations and disaster vulnerability.

This is also the time for group discussion of women's and men's differing and overlapping experiences in past disasters, if any, in this particular area. Try to direct the discussion from the emergency itself to what, if any, steps community members took to reduce local threats to safety or to cope with the disaster.

Some women may wish to work on informal skits that convey these ideas, or draw pictures, or sketch out hazards in rough risk maps. There are many creative ways to make these ideas come alive.

The facilitator can focus attention on changes over time in disaster resilience and vulnerability by asking women to describe how community life has changed since "your Granny's time." Do they think their daughters will be less or more at risk?

The discussion can also explore differences, both among women and between women and men. What roles did different women play in the last disastrous event here? How did their activities differ from men's?

## **4. Practice asking the right questions**

Our approach to studying vulnerability seeks general findings from particular women's experiences, thoughts, feelings, and ideas. Respondents are asked very broad questions with no simple "yes or no" or "how many" answers. The words a woman chooses to describe her daily life and the community around her are very important.

## HOW DOES BEING A WOMAN MATTER?

Linking gender and disaster is one of the main objectives of the research training workshop.

In all workshop activities, draw attention to gender by asking the community researchers how being a woman makes a difference:

- Would that have been as likely to happen to a man? Why or why not?
- How do you think your brother or father would answer that question?
- If your experience was different from your partner's, did it matter to you?
- Is the work that you do as a woman every day part of the problem?
- Is the work that you do as a woman every day part of the solution to the problem you described?
- Are there worries or problems in women's lives that make attending community meetings about disaster preparedness harder on women? Consider domestic violence, for example, or pregnancy.
- Are there issues in women's lives that make it harder for them to survive a landslide, rebuild after an earthquake, or deal with polluted water, for example?

Draw cultural values and social patterns into the discussion as they clearly relate to women's ability to cope with, survive, and recover from disasters.

The most important part of becoming a disaster researcher in two short days is learning how to ask guiding questions.

The core questions we suggest were developed on the basis of lessons learned from women's groups testing this model. [See Appendix K, Guiding Research Questions.] They ask women to respond to open-ended questions about general concerns:

- Perceptions of safe and unsafe conditions
- How people cope with unsafe conditions
- Awareness of environmental and technological hazards

- Who in the community is least and most vulnerable
- What local people do to solve problems and cope with disasters
- Recent disaster experience, if any
- Ways people can prevent disasters
- How women are organized
- How being a woman matters
- Patterns of community change
- Possible action steps

The Guiding Research Questions are just that—a guide. Ideally, a subset of all questions should be asked of all key

## AN ELDERLY WOMAN IN HURRICANE GEORGES

The house was very run down and not at all safe but the elderly woman insisted on staying there considering that God and her faith would save her from harm. She was in charge of two grandchildren, whom she assured God would also save. In the middle of the hurricane, the woman's house roof was blown away and she had to shelter herself and the children under a big table ("la mesa," meaning the only table in the house). In the middle of the hurricane, the neighbors (one of the community researchers and her family) had to run to get them all out of the house and into their home for safety. They specified that no authorities came to offer shelter or help before the hurricane came. The neighbors were the ones to offer her help from the beginning.

*Community researchers in the Dominican Republic developed a skit using this story during their training, demonstrating their acting abilities and presenting an important concept in a humorous and dramatic way.*

informants with the agreement of the researchers and workshop instructors. For example, if there have been no major disasters in this area, skip questions about past disaster experience. Ask versions of the questions that reflect the local culture and living conditions.

Above all, help researchers use the Guide flexibly, using their common sense. Key informants who are bored by the questions or find the interview too long will not add much. Some interviews will be shorter than others and some answers less complete. Researchers can follow general answers with additional "probes," or follow-up questions to develop themes or explore new ideas.

Community researchers can ask respondents to first speak about their own experience but then talk about these topics as they relate to family, friends, co-workers, neighbors, and the community generally. In this way, each respondent provides a birds-eye view of risk which can be compared and contrasted with others.

Allow plenty of time to review the guiding research questions to be used and the kinds of responses they may prompt. Be sure to leave time today and tomorrow for practice interviewing using these questions. The facilitator may want to conduct a mock interview with a volunteer or the group can work in pairs to practice asking and answering the guiding questions.

At the end of the first day, ask everyone to think about the guiding questions overnight and imagine they or their mother or friend were asked to answer these same questions: How would they answer them? Would the questions encourage them to

## WOMEN REDUCING RISK

The woman who is in charge of the short wave radio for the community hears that the Lempa River dam will be opened. She informs other community women who then take charge and organize activities so the community can be evacuated. They gather the children, and then all the animals. They form watch groups or committees that will inform the others what the flood situation is. They organize shelters where they take the most vulnerable people.

*This skit was developed and performed by women during the 2002 training workshop for community researchers in the rural community of El Coco in El Salvador.*

volunteer information or give quick “yes” and “no” answers?

Don't end the workshop without consensus on the Guiding Research Questions. As these must be asked consistently by all researchers, be sure everyone understands them and agrees to follow the research guide to the best of their ability.

End the day by distributing notebooks to all researchers for recording their interviews. You'll need them tomorrow for practice interviewing.

## B. Day Two: Introducing Methodologies

Begin the second day by asking for feedback about yesterday. Do the ground rules need changing? Does anyone want to raise concerns or problems? This is also a good time to ask for feedback on the Guiding Research Questions.

Most of the second day is geared to hands-on training in how to define a study sample, ways of gaining information, record-keeping, and other tasks necessary to conduct meaningful research.

### 1. Setting limits

Community researchers are not professional social scientists—their skills and experience lie elsewhere. Women attending the workshop will wonder what exactly they are to do to “assess vulnerability” or “contact key informants” and whether they can do it.

An important part of the workshop is setting reasonable expectations for researchers.

- No, they are not expected to be sociologists or scientists
- Yes, they are expected to be responsive to the field coordinator by

collecting data in a certain area within a certain timeframe following certain guidelines

- Yes, they are expected to be “objective” by following basic scientific rules they will learn in this workshop
- Yes, they are expected to gather information completely and to the best of their ability
- Yes, they are expected to help analyze the data so that others can learn from it
- Yes, they are expected to revise their methodology and try again if necessary

### 2. Choosing a study area

Where does a “community” begin and end? What are the boundaries of a “neighborhood?”

This study begins from the assumption that every place people live entails some degree of risk. But we cannot reasonably study everyone in every place.

Consider working in pairs or small groups to compare notes about natural divisions and borders. Ask what “communities” may exist in the local area. These are some:

**Physical boundaries:** different sides of the railroad track or river, up the hill or down, above the sea or along the beach

**Social-economic boundaries:** the migrant community, the homeless down by the river, the people in the best houses

**Language boundaries:** people who speak different languages often live in different worlds [but do they face the same hazards?]

**Political boundaries:** people living on different sides of a political border but along the same river or below the same toxic waste dump

Following this discussion, the group can decide what makes sense in their area—dividing up the region along which boundaries? Everyone studying the same area, or splitting up? Working in pairs to study one particular neighborhood (where new migrants live, or where people speak the old language, or where the very poorest people live) or a broader area (the new section of town, the beachfront, the people just outside town)?

When these decisions are made, each community researcher should be clear about the physical boundaries of her work area. This is where she will study vulnerability and no place else.

### 3. Studying research methods

Now, on the second day of the workshop, an opportunity is provided to reach consensus on the guiding research questions and to learn and practice ways of collecting and analyzing data.

Remind the researchers on Day Two that these are new skills and that learning any new skill takes time and practice. Stress that your expectations are realistic. Nobody becomes an expert in an afternoon!

It is vital to reserve ample time for questions and for airing concerns or doubts that may surface now.

### 4. Selecting the sample

Not everyone can be interviewed. In fact, a great deal about risky living conditions can be learned by choosing a few key people to talk with in more depth. [See Appendix L, Guide To Selecting A Sample.]

We recommend avoiding the traditional survey approach unless there are reasons to hear from large numbers of people

who are randomly selected as respondents. Instead, we recommend working closely with the community researchers to identify categories of "key informants" and plan which of these to contact.

There are many possible key informants with important points of view and life experiences. The researchers should strive to select a sample which reflects the range of women's living conditions and life experiences in this particular region or community.

Choosing a good mix of informants is critical. Without this, only women facing a particular risk (air pollution, sewage spills) and not others (pesticides, deforested hillsides) will be reflected in the

#### CLARIFY EXPECTATIONS!

Confusion about who is doing what and where can seriously delay or undermine a research project.

These things must be clear to all and should be recorded:

- Who else is definitely on this team of community researchers?
- Who is the field coordinator? How do I reach her?
- How long do I have to complete my part of the research?
- What are the boundaries of my study area?
- How many key informants will I interview?
- Who else will I study and how?
- How do I record the information I collect? How do I analyze it?
- Who takes the data from me? What happens to it?
- How do I get help with any problems?



results. Selecting women whose lives reflect more than one of these conditions (for example, senior women with language barriers but extensive community knowledge) is one way to make a small sample more inclusive.

While the sample will not represent all social groups equally, the project manager, field coordinator, and community researchers should carefully review the final sample of informants to be contacted. Does it give undue weight to one factor or one social group to the exclusion of others? Is it diverse enough to represent the diversity of women who live here?

## 5. Choosing the best research method

The guiding questions can be answered in many different ways. We offer guides for the methods below. [See Appendix M, Some Research Methods.]

- Semi-structured intensive interviews with key informants
- Life history with selected informants
- Group interviews organized around topics or social groups
- Photo essay
- Risk map

The research methods we recommend are flexible. They allow for following up new ideas and for a different mix of interviews, life histories, and group discussions in every community.

Data collection can be complicated by language problems. Involve multi-lingual women as researchers when possible and plan ahead to translate your data if necessary.

The facilitator will need ample time to review with community researchers the noteworthy characteristics of each method. Helpful hints are provided, for example, on the importance of controlling a group discussion and asking open-ended questions. Use specific examples to show how different methods can be used:

- How did people here cope with the last disaster? A group photo essay could not answer this question. It could, however, very graphically point out hazards the community faces every day.
- How are women organized here? How have they worked together in groups or coalitions of groups—or have they? These would be good topics for a group

### POSSIBLE KEY INFORMANTS

Women living in hazardous areas or conditions ... Women inadequately housed...Women who are sole household providers ... Elderly women or widows living alone ... New women in the community ... Recent migrants ... Minority women (any excluded group) ... Women caring for disabled or ill family members ... The poorest women ... Disabled or ill women ... Young mothers ... Grandmothers raising children ... Abused women...Unemployed women ... Women working in a free trade zone ... Women working from their homes ... Women working in occupations affected by hazards ... Women vendors ... Rural women or women living in isolated areas ... Urban women in shanty towns ... Renters ... Illiterate women ... Women living on the street ... Prostitutes ... Women likely to be ignored or excluded for any reasons ... Women respected by others ... Women on local disaster committees ... Women leaders or authorities.

Who comes to mind in your own community?  
Who can you learn the most from?

discussion as one answer will prompt others.

- How do your everyday living conditions affect your ability to solve problems created by an earthquake, for instance? As the key informants all live very differently, this is a question for an individual, not a group. Also, women may hesitate to discuss problems such as domestic violence in a group.
- What did women do during the last disaster? How about men? Here a life history with an older woman would be a good technique. Another informant who recently migrated here would be a poor choice.

### **Intensive interviews and life histories**

These are likely to be used most often so the training should focus on them, using the handout to guide discussion and the guiding questions to practice asking and answering questions. The facilitator should stress the importance of leaving sufficient time for in-depth discussion with key informants. Return visits may be needed.

Strive for interviews that feel like interesting conversations. Remind the researchers to ask for detail (stories, examples, specific memories) and to record these in their notes if tape recorders are not used.

The "life history" interview can easily bog down in chronologies of personal detail (births, deaths, jobs). Remind the researchers that this is another tool in their toolkit but not always appropriate. The life history conversation should clearly relate life events to hazards and disasters. For example, taking the life history of an older woman who survived a major hurricane might involve questions like "How did you care for the baby then?" "How did you earn your living before and after?"

Chose life history subjects carefully.

### **Group discussions**

Group discussions offer invaluable insights because people respond to one another's ideas. They can be organized around broad topics with a very diverse group of participants ("How do changes in our community make life here safer or less safe?") or narrower themes involving a smaller range of participants ("How would working in the export processing zone affect your family in a crisis?" "How does the polluted water here impact your life?"). A useful approach might be to organize a preliminary group discussion about women's and men's experiences in the last disaster here.

At least one person facilitating should take careful notes as tape-recording will be difficult and may not be welcome. These notes should be summarized promptly in a written report highlighting the hazards, vulnerabilities, and capacities of the group. The group will work together with the field coordinator to propose and organize one or more group discussions.

### **Risk mapping and photo essays**

Maps are an important part of any vulnerability assessment. Encourage the group to work together during the training workshop, perhaps at the end of Day One, on a preliminary map.

Brainstorm known hazards: women will know about dangerous roads, electrical shortages, health problems, eroding beaches, soil erosion, etc. Physical or structural hazards can be mapped easily. Others will be more difficult to depict visually, such as the HIV/AIDS epidemic, slow erosion of the economic base, political repression, or family stress.

Don't forget to include community centers, shelters, or other facilities which are resources for people in danger. These should also be mapped when possible.

If time is short and the researchers are uncertain about mapping the field coordinator and project coordinator can sketch a basic map and then ask for feedback. Deliberately leaving out the oil tanks lining the harbor (or other evident hazards) may encourage lively discussion and corrections and additions from the researchers.

The researchers will certainly want to revisit the risk map based on their interviews. The final maps should be included in the CVP.

Note: This map is for the women's group itself and the community profile to be written. Others can develop more technical maps.

A picture tells a thousand words! Like a map, a photo essay provides a quick overview of the problem. Where should the camera be pointed? Who should be in the picture and why? During the workshop, discuss how to narrow ideas (for example, from "no work here" to photos showing "what things women and men do around here to make money"). Emphasize pictures that tell a story or show people in action.

Remember, film developing is expensive! Plan photos carefully to avoid wasting film. Disposable cameras are recommended. Be sure to reserve time to practice using them.

## 6. Reviewing research tasks

Everyone needs a clear understanding of what is expected of them when taking on a new role or project. This is a critical part of Day Two.

### Data collection

We assume that, working together, the community researchers will:

- Conduct a number of intensive interviews with key informants

- Complete a smaller number of life histories
- Conduct at least one group discussion
- Collaboratively develop a photo essay
- Collaboratively develop a risk map

There is no one best way of collecting the data. One team of researchers may want to begin with a group interview, perhaps of all key informants or of informants knowledgeable about a particular event or hazard. Another may begin instead with intensive interviews and follow-up with life histories of some of the women. Risk mapping and photography can help a group begin or close the project.

The project coordinator, field coordinator, and community researchers should make these decisions together and early on. We urge that intensive interviews be at the core of every study, even if mapping or group interviews, for example, cannot be completed.

A reasonable expectation of each community researcher is that she personally:

- conduct 5 interviews with key informants
- complete at least one life history [optional]
- help construct a photo essay, for example of workplace hazards or living conditions
- help draw a risk map relating natural features (steep hillsides, ports) and social landmarks (places of refuge, schools, clinics) and natural and human-caused hazards

### Scheduling

Naturally, each researcher will participate as the study team identifies which key informants to select. She will also

help determine bounded areas for the research and agree to work only in her assigned area.

Researchers will make all necessary arrangements to meet the key informant, perhaps more than once, and complete the interview to the best of their ability. The forms provided will help track appointments and interviews. [See Appendix P, Interview Scheduling.]

### **Securing cooperation**

Introducing the study [see Appendix J] is the first step. In some cases it may be possible to offer a small stipend to potential respondents to compensate for their time and lost earning opportunity. More often, this will not be possible.

Be sure researchers explain the potential community benefits of this self-study to respondents, and that they begin and end each interview by thanking informants for their time and ideas. They may also want to offer the brochure on Women and Disaster and any handouts on preparedness and response available from local emergency management authorities.

The workshop facilitator should emphasize the importance of answering all questions from potential respondents as fully as possible. Respecting women's right not to participate or not to answer any particular question is essential. The facilitator may wish to role play interaction with hesitant respondents or those who change their minds.

### **Background information**

Gathering background information about each person contacted [see Appendix O, Interview Face Sheet] is the next vital step as the researcher meets each new informant.

It is important to document the ways the women interviewed are different and

alike. Are they all of the same generation? All married? All equally educated? Personal circumstances matter. The researchers can work in pairs to practice using the Face Sheet, which includes basic questions on age, education, livelihood, family size, and so forth.

In some cases, researchers may choose not to ask for all of this information if they feel it will seem too intrusive. This is also important information to record.

### **Recording the conversation**

Using tape recorders and/or pen and paper, researchers must record the interview and help the field coordinator make sense of it. This may mean helping with translation, if the interview was not conducted in the dominant language, or ensuring that handwritten notes are legible.

Urge every interviewer using a tape recorder to work in a place providing as much privacy and quiet as possible. Researchers could work in pairs with one person asking questions and the other taking careful notes, if tape-recording isn't appropriate or welcome.

Though this may be hard to arrange, researchers should try to speak with key informants alone, or without other adults present. There is another time and place for group discussion.

Encourage researchers to record their own thoughts about the interview immediately after conducting it. What were the highlights? Were any questions just not answered, and why? What special words or concepts were used and what did they mean? These personal reminders will help later when the responses are summarized and analyzed.

Note: Community researchers themselves are very knowledgeable about risk and vulnerability. They can be consulted individually by the project coordinator or field coordinator for background infor-

mation and insight, or interviewed themselves at a later date to evaluate other information. It is important that their ideas not be confused with those of their informants, however.

## **COORDINATING THE RESEARCH**

Coordination is essential during the data gathering period. This is primarily the job of the field coordinator, with the help of the project coordinator where feasible.

The field coordinator will need to:

- Reserve time for a minimum of two field visits to the research sites
- Reserve time for inquiries from the researchers
- Accompany the researchers periodically, e.g. to help with group interviewing
- Ensure that each researcher is completing the necessary forms regularly
- Ensure that each researcher is regularly making interview appointments, working in her assigned neighborhood, and following the guiding questions
- Provide technical assistance as needed to the researchers such as help with transportation and supplies
- Consider arranging a meeting with community researchers to discuss issues arising during the data collection period
- Review the key informant interviews as they are completed to identify problems or gaps

## **A. Documentation**

We have strongly urged seeking funds to compensate the community researchers. Regardless, it is important that researchers be encouraged to document their time and activities. The Interview Scheduling handout will help with this. Other forms may be needed, for example to document out-of-pocket expenses which can be reimbursed.

Where funding cannot be provided, the project coordinator should arrange for a certificate to be printed and distributed as a permanent "record of achievement" in an important community project. You may want to offer certificates to all, regardless of funding.

Note: The emergency management or local government authorities, women's bureau, or secondary school may be able to print the certificate or provide funds for it.

## **B. Follow-up Meetings?**

You will know when a follow-up meeting is necessary to practice research methods or review tasks and timelines or to discuss technical questions about the administration of the project.

You might also want to consider other kinds of follow-up meetings in the week or two after the training workshop. For example, local emergency managers might be invited to meet with the women to answer questions about hazardous conditions and emergency preparedness, helping them as interviewers.

Remember that these are busy women who have already made a major commitment to this project.

## **C. Evaluate the Workshop**

A positive way to end two busy days is to ask all participants for feedback on the training workshop. Appendix R is just one model. You'll find very useful ideas for future workshops.

## TROUBLESHOOTING

- Tardiness can delay the workshop and cut into needed time. Ask for consensus about being on time.
- Family emergencies or unexpected events can keep women away. The field coordinator should meet with women individually to brief them on what they may have missed. Set limits on how much absence is too much.
- Conflicts can arise over the division of labor within the group, for example if more than one person prefers to study a particular neighborhood. Let the field coordinator mediate these conflicts.
- Workshop materials or topics may seem overwhelming. The facilitator should acknowledge the challenges of this project but stress women's past experience, community knowledge, social networks, and communication skills. Be prepared to make substitutions if some women drop out.
- Not all respondents who agree to be interviewed will make themselves available on the day and time agreed. Caution researchers to reconfirm appointments and help them make substitutions with other selected key informants when necessary.
- Don't close the training workshop until all women present are clear about roles and responsibilities. Make a written record of decisions made, for instance about who will work where and what the date of the next meeting is.
- "Check in" frequently with participants to encourage the expression of everyone's ideas and feelings. Be flexible!

**SECTION FOUR:**

**ANALYZING**

**VULNERABILITY DATA**

## SECTION FOUR: ANALYZING VULNERABILITY DATA

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Following these Guidelines will result in many hours of taped conversation and rich impressions of women's feelings and ideas about risk. But, as in any research project, gathering this information is just a first step. We turn now to how you can analyze and present the data.

### SUMMARIZING THE FINDINGS

First, each researcher has an important task to complete after every interview. In order to share this information with others, she has taped the conversation and/or taken legible notes. Now, at home, she will use these to write a short summary, one-page or longer. Alternatively, she may choose to work with her interview partner or with other researchers to "think aloud" about the meaning of the answers she recorded.

#### A. Organizing Data

Appendix N [Analyzing Qualitative Data] includes hints for researchers such as using highlighting pens when reading over notes or taking notes on the tape when it is reviewed at home. Marking words or expressions or ideas that seem important is the first step. Making lists can help, for example, when an informant cites many examples of problems women had in the last disaster or many examples of women's and men's community organizations in town. These may not appear in the same place on the tape, but in the summary they can be grouped together.

Think of how a kitchen might be organized (pots and pans together, spices and staples, cleaning supplies, fresh foods) and apply this same way of thinking to what you have heard. Or you might think of categories of tools or clothing or plants and animals.

Every interview is different. A long conversation will yield an abundance of information, anecdote, opinion, and observation. A short one can include brief answers to every question, but may also have lots of gaps and silences if questions were not understood or people declined to answer them.

Long or short, the answers can be organized into four general categories:

- **hazards** cited by this person (list the environmental or technological risks mentioned)
- **vulnerabilities** cited by this person (list the social conditions that this person mentioned as problems in dealing with hazards and disasters)
- **resources or capacities** (list the things mentioned that help people prepare for and cope with dangers, including personal, group and community resources)
- **changes needed** (list what the person said most needed to be done to make life safer)

#### B. Writing an Interview Summary

Why summarize the interviews? The summaries will help the writer or project coordinator draw everything together into the Community Vulnerability Profile. They give others a short-hand account of your major findings in four key areas: hazards, vulnerabilities, resources, and needed changes.

What does an Interview Summary look like? It is a short overview of the highlights from the interview, beginning with a brief description of the key informant herself.



The Interview Summary should not repeat everything on the tape or in the researcher's notes, but highlight answers to the key questions the researchers have asked in these four areas. The field coordinator and project coordinator should review the first summaries done by each researcher very carefully.

Summaries of all group discussions conducted should be prepared by the field coordinator. We recommend writing the summaries as soon as possible after the individual or group interviews.

### C. Presenting Your findings

Knowing who will use the CVP will help you decide how best to organize and present your findings. Using tables (for example, of literacy rates by gender) can help you make present an idea graphically. Like first-person statements, statistics can also be interwoven in the text effectively or may not be needed.

Ideally, the Profile informs community members at large as well as "disaster people" (local or regional emergency managers), local authorities, and other relevant organizations. These different readers can be difficult to reach with one report. We offer a template for one kind of CVP but emphasize that interesting and useful vulnerability profiles can take many forms.

### WRITING THE VULNERABILITY PROFILE

A written Community Vulnerability Profile is one of the major outcomes of this research. It conveys the major findings of the research to outsiders and includes some background data about the people and place studied. Doing the research taught women a lot about their own safety, but taking this knowledge one step further to write a Community Vulnerability Profile can be an important tool for change.

One or more people will take responsibility for writing the Community

Vulnerability Profile. [See Appendix Q, Community Vulnerability Profile Template.] The writer and coordinators should regularly review the researchers' notes, tapes, and interview summaries to identify gaps which need to be filled or consistent bias or errors. They will want to be in close contact with researchers now through telephone or personal visits.

### A. Locating and Using Secondary Data

Information collected by others can be very useful secondary data. It can suggest areas to be examined more closely and help put the findings of your study in context. How does the risk of disaster risk reflect social changes underway in this culture? In this society? In this particular community?

While data from all studies must be used cautiously (pay attention to who collected it, how, and why), using information from

#### SECONDARY DATA SOURCES

Locate statistical reports, analytic summaries, personal narratives and other kinds of data collected by others by consulting:

- The national census bureau, which may also report regional statistics
- International UN-affiliated organizations
- Regional and national economic development agencies
- Environmental and social planning bodies
- College and university libraries and research centers
- Nongovernmental organizations involved with women, community development, disaster mitigation, and humanitarian relief
- Emergency management agencies
- Women's organizations
- Newspapers and other news media

other researchers to sketch the "big picture" before you present your own findings is very effective.

You might want to point out unemployment rates and migration patterns in this region, for example, or recent trends in public health, family size, or land ownership; refer to local indicators of women's status and local indicators of climate change; or summarize data about past disaster experiences in the area. There are many kinds of secondary data which can help you tell your story.

## **B. Vulnerability Profile Outline**

Analyzing data and presenting it in a meaningful way is always the most challenging part of research.

The template we offer in Appendix Q is just one way of organizing and presenting the findings of your study. Naturally, the structure and content of the Profile should be adapted to your data and the uses you want to make of your results.

The Community Vulnerability Profile will reflect the degree to which good questions are asked and answered—and also how the answers are analyzed.

The writer should organize and present the data to make effective use of the information and insights gained from respondents. We caution against reporting the data numerically though there may be useful statistics to include from secondary data sources.

Reporting findings anonymously is important. Readers do not need to know a woman's name and it should never be used. But simply leaving names out may not really protect somebody's identity, especially in a small community. Remember, even general descriptions ("mother of twins," "widowed by the landslide," "active church leader") can easily bring a name to mind.

With this in mind, we strongly encourage the writer of the Profile to make generous use of all (anonymous) first-person quotations, photographs, songs or stories, unique words or phrases, and the photos and maps drawn by researchers. This is what your readers will find most memorable.

When the community researcher is analyzing the interviews, don't second-guess the respondent if questions of interpretation arise (the use of a phrase or word, tone of voice, body language, the meaning of a photo). Go back and ask the respondent what she meant.

Later, when the writer is using the data summaries to draft the Profile, don't second-guess the researchers: go back and ask them for more information. Remember, these are women who are partners in every step of the research process, from collecting to analyzing and presenting the data. Consult them frequently.

The Community Vulnerability Profile that results from this process will be an accomplishment in which your organization and all the women involved can take pride. It is also a tool for advocacy and social change.

## **A WORKSHOP FOR ACTION PLANNING**

We strongly suggest a half-day Action Planning workshop at the end of the data collecting period. A full day is better, if possible. [See Appendix D, Action Planning Workshop Agenda.]

Ask all researchers, as well as the field coordinator and project coordinator, to attend. Again, plan the meeting for a time and place convenient for the community researchers, and plan on sharing a meal if possible.

## TROUBLESHOOTING THE RESEARCH PROCESS

The key informant is consistently late or unavailable or seems disinterested.

Thank her for her time and offer to make a substitution with another informant. If problems continue, set a deadline for conducting the interview and make a change if it isn't possible to conduct it then. Consult with the field coordinator about selecting another respondent.

The field coordinator can't answer questions about which women are being interviewed and why.

Compile the background data form completed by researchers for every respondent.

The field coordinator seems out of touch or is difficult to reach.

The researchers have contact information for the project coordinator and can reach her directly. The field coordinator should agree to visit the study site at least twice during the data gathering phase, and as often as feasible.

The interviews seem static and repetitive—no "life," few details, no personality coming through.

The field coordinator can accompany the researcher for a return interview, modeling how to ask probing questions to get more detail. The group can meet and decide to ask different questions.

The interview summaries aren't completed at all, or are very late.

The coordinators can call a group meeting and work on a few sample interview summaries collectively. Distribute one good example for all to see. Pair researchers with stronger and weaker writing skills to work in pairs.

The photos being taken do not clearly relate to environmental or technological hazards, or to disasters.

Pick an example and ask the researcher to say what she sees in the photo. Then suggest other photographs that might better "tell a story." For example, photographs of women with children crossing the river to get to school are better than photographs of the river itself. Aim for "action shots" involving people. Ask the photographer to identify the scene and its significance on the back of the photo.

Researchers don't enjoy working alone.

Suggest working in pairs.

The interview takes too long

Call a meeting of all community researchers and fine-tune the research guide. Be sure there is consensus on the changes made.

In our field tests, many women were eager for follow-through as the research phase ended, asking for "tools and materials" to implement changes. Project organizers can bring information to this meeting about resources that may be available for follow-up work. They might research funding prospects through government agencies and NGOs active in community development projects or other kinds of support from community based groups working in the region.

Use the action planning meeting to draw up a list of the most important social changes the women of this community think are needed to make life safer.

What specific action steps are needed?

The more specific, the better. Ask the group to brainstorm two or three goals. Then ask them to break these into specific steps. For example, a general goal might be "get more help from local authorities" and specific steps might include "meet with mayor to request re-activation of the emergency committee."

Which action steps take priority?

Setting priorities helps people move from plans to action. Ask each person which step seems most important to them and why. Organize these into groups or kinds of steps, and discuss this with the

<b>FACTORS DECREASING RISK</b>
<p>In El Coco, El Salvador</p> <ul style="list-style-type: none"> <li>• There exists a community board</li> <li>• There is a communal house</li> <li>• The community has a radio communicator</li> <li>• The community has a boat to evacuate the residents in case of flooding</li> <li>• The majority of the women are organized in a committee with [the local women's group]</li> <li>• An emergencies committee, which is not currently active</li> </ul> <p>In Carib, Dominica</p> <p>" [Their post-hurricane] rebuilding efforts were rooted in their own notion of equality between women and men and therefore were carried out in the context of koudmein where all community members (women and men) helped each other to rebuild houses, gardens, etc. and by extension, the community. In this process, women performed "non-traditional" tasks such as repairing houses. As one woman put it, "Like the men, I took my hammer and went on the roof to put back the galvanise." Here, there is no differentiation of gender roles, particularly in agriculture, craft and art and fishing."</p> <p><i>These are examples from community vulnerability studies conducted by women in 2001-2003 using these guidelines. Please post your Community Vulnerability Profile on the project website, too. You'll find it at <a href="http://www.fiu.edu/~lsbr/women">http://www.fiu.edu/~lsbr/women</a>.</i></p>

group as a whole. Be sure all views are heard.

Who can do this and how?

Avoid wishful thinking! But do record readily identifiable people, assets, capacities, and other resources that can help make change.

When can this be done?

Draw a timeline with the most important deadlines or benchmarks identified. What time during the year should this activity be promoted? Is there seasonal work, a cultural event or an upcoming election to

consider? What is likely to slow your work down?

This discussion leads naturally into planning for the final community workshop. We sketch out the entire research process below.

Hint: Monitor the discussion closely to ensure that the action steps reflect the views of all those interviewed, taken as a whole, and do not follow from only a handful of the interview summaries or particularly articulate researchers or informants.

### SUMMARY OF THE RESEARCH PROCESS

Complete the training workshop

    Select your sample

        Contact all respondents and secure their voluntary participation

            Schedule and record all appointments

                Complete the background sheet

                    Tape record or take detailed notes on your conversations with respondents

Analyze the interviews, group interviews, or life histories you did and write a summary

    Return to informants for more information, if necessary

        Attend action planning meeting to brainstorm common problems and possible solutions

            Share the Community Vulnerability Profile with others

And..... you may find yourself wanting to do more!

    Seek outside funding to publicize and distribute your findings

        Volunteer to help another community group conduct a research workshop and study risk

            Study your community again in five years to track changes

                Study community vulnerability "through the eyes of men"

                    Be a community vulnerability educator every day!

**SECTION FIVE:**

**MOVING FROM  
KNOWLEDGE TO  
ACTION**

## SECTION FIVE: MOVING FROM KNOWLEDGE TO ACTION

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A community able to minimize the impacts of a disaster and "bounce back" afterwards is a "disaster-resilient community." Knowing more about hazards, vulnerabilities and capacities is a powerful tool, but places are made more (or less) resilient by people's actions.

Around the world, women have demonstrated their will to help make people safer. These are just a few examples other researchers have documented:

- In India, women have organized ways of conserving rain water against drought
- In Peru, women helped build earthquake resistant homes using indigenous materials and ancient methods
- In Egypt, women have trained their neighbors in sound environmental management techniques

And, through this action research project, you and your women's group are taking a huge step forward by educating yourselves and others about risk and developing strategies for reducing it.

### USING THE COMMUNITY PROFILE

You will find that this project has many positive results—for the community researchers who learned new social research skills and a lot about risk, for women whose ideas were taken seriously by the interviewers, and for the community at large when the findings are shared.

Knowing more about risky conditions is the first step to reducing risk—but only the first step. In this last section, we suggest ways the Guidelines can be used to increase awareness about risk and community development, promote community organization to reduce risk, and make women's potential as risk managers more visible.

### Share Your Vulnerability Profile with Emergency Managers and Local Authorities

Arrange a face-to-face meeting, if possible, for the women who did this research to share the Profile with emergency managers and disaster responders responsible for their region. Governmental policy makers and elected officials need to know about women's perspectives on risk, too. This not only informs professional risk managers about community needs but lets them know what women and women's groups can do.

Many of these individuals will be men who may not have had much contact with your women's group or understand why women and men in hazardous environments face many different issues. You can help them recognize women's ability to mitigate hazards and prepare for disasters and also help them see what women and men alike can contribute—and may need help with—during and after natural disasters.

Plan a follow-up meeting to identify specific opportunities to work together. How can women's groups and disaster planners and responders work more closely? What opportunities are there for joint activities?

At a minimum, exchange contact information and stay in touch. Let them know what knowledge, skills, and abilities women in their own community can bring to the table—and what you need, in turn, from emergency managers.

### Share Your Findings With Local Media

Local radio and community publications (like popular events or open meetings) can be excellent ways to reach people. Media people are often looking for contacts and story ideas and may well share your interest in disasters.

But let them know you and your organization want to help tell the story. Remember all those pictures of crying women and hard-working men in disasters? The media often repeat stereotypes about people in the face of danger and don't really represent how households, neighborhoods, governments, and helping agencies operate. You can help change this by sharing the story of your research.

Is there a community radio station in your area, or a women's radio station? Ask for time and bring along some of the women you interviewed. The photo essays you did can be used, with your permission, to illustrate articles about your action research project.

Sharing your work with the media is an excellent way to bring to others' attention the problems and solutions you explored.

### **Share Your Work With Other Women**

Use your networks to let other women's groups know what you learned about women and risk. Why is women's perspective so important in vulnerability research? How can women help?

Make a flyer, write a short article, or dictate a radio story describing the research and Community Vulnerability Profile and circulate it as widely as possible.

Find a time when some of the community researchers and some of the key informants can visit women in nearby communities. You may have common needs and ways of working together to reduce shared risks.

Organize another meeting or workshop for the community researchers to present the Profile to women in a very different context. For example, findings from a rural community can be shared with urban women for discussion of differences and similarities. Include different kinds of women's groups.

If a community development group conducted the research in your project, ask to meet with women from a crisis center or women's bureau. They will learn from you and your work may inspire their own.

Consider taking the completed Profile directly to other women, such as friends working together through a church group, mothers in a food collective, or an informal group of health workers or teachers.

Explain why you did this research and how, and share the highlights of your findings. Just talking about risk and about action steps to reduce it is important, even when others are unlikely to follow up with their own vulnerability study.

This can initiate a long-lasting dialogue and may open the door to future collaboration on action projects to reduce risk. It also may be just what's needed to encourage others to do their own assessment.

### **Share the Guidelines With Other Groups**

Women who have conducted vulnerability research have invaluable knowledge and experience helpful to other organizations and agencies.

Work through other women's organizations, nongovernmental organizations and community-based organizations to explain the Guidelines and share your experience using them.

What went well, and not so well? What different strategies or different informants or different questions would work better here?

Be sure to let all the regional and national women's groups know about your work. Planning agencies, local government authorities, academic disaster researchers, community development groups, faith-based organizations and many other groups will be interested.



If possible, arrange face-to-face meetings to discuss the Guidelines and the outcomes of action research.

These groups or organizations may want to use these Guidelines to conduct their own vulnerability assessment—and you can help. Your new insight and skills make you invaluable community vulnerability educators. Let others know what you know.

Share your experiences through the Internet if you can. Post the Community Vulnerability Profiles you write on the website for this project [<http://www.fiu.edu/~lsbr/women>]. Scan in some photos or risk maps, introduce yourselves and your community to others, and share your ideas for improving this research model.

We encourage you to evaluate the overall project to learn from all those involved. An evaluation form can be used [see Appendix T, Final Project Evaluation] or arrange an informal meeting for feedback instead. The community researchers' views are especially important as their ideas can help future researchers. They will also appreciate the chance to share their experiences.

### **Share Your New Knowledge**

The community researchers and the women who participated in the study have a lot to share:

- New concepts that point out problems in the community and possible solutions
- New ideas about what needs to be changed in their area
- New research skills
- New tools for community development
- New information about existing emergency preparedness systems
- New contacts with local emergency managers

- New information about how to minimize damage to households and workplaces

Sharing this knowledge with others is essential. Bring it into the union or workplace (what can be done here to reduce risk?) and bring it to your neighbors (how can we work together to make our lives safer?). Bring it into all your activities. The community theater group could use the words of women interviewed in skits or plays about risk, for instance. The preschool could organize parents to retrofit the facility and draw up an emergency plan. In many communities, health providers and teachers are very interested in emergency preparedness and will want to share ideas with you.

Use this knowledge to make some changes. Can teachers be asked to use material from the study in their classes? Can the river level be monitored by women who are employed nearby? Can women charged with organizing emergency shelters be provided resources well in advance? Can crisis centers be equipped in advance to meet any increased violence against women after a disaster?

### **Share Your Ideas With the Community**

The Community Vulnerability Profile is a concise summary of your major findings. It describes hazards everyone faces and the particular living conditions of those most vulnerable to these hazards. It describes personal, group, and institutional resources and how people here have tried to mitigate hazards and cope with disasters in the past. Most importantly, it includes specific action steps that would make the community a safer place to live.

We strongly recommend presenting these findings to the community at large as the final step in this action research.

Plan a community meeting at a place and time convenient and safe for women as well as men. You will need at least two hours to:

- Explain the project's goals and objectives
- Present and discuss the most important findings
- Explain the action planning meeting and present the action recommendations
- Discuss the recommendations for individuals, groups, and institutions in the area
- Make plans for change!

The meeting should be planned primarily by the community researchers and the project coordinators during the Action Planning meeting, but a sample agenda is provided. [See Appendix E, Community Meeting Agenda.]

Be sure to invite representatives of employers and unions, political groups, educational and faith-based institutions, health organizations, cultural and advocacy groups, and all women's groups, as

well as community-based groups. Make a special effort to encourage the attendance of local environmentalists, emergency managers and disaster relief workers, political leaders and community development agencies.

This meeting can provide a platform for future work on collaborative projects. Of course, one meeting is never a solution to a problem. But this final community meeting can certainly be a jumping-off point for more discussion and action at the grassroots level.

### **Share Your New Feelings, Too**

Women using these Guidelines to study vulnerability learn a great deal about the things that make them unsafe in their own neighborhoods, and how to reduce their vulnerability to hazards and disasters.

Sometimes people feel helpless, accept disasters as "meant to be" and out of their control, or fear that discussing danger or fear brings bad luck.

## **NEXT STEPS FOR DISASTER RISK REDUCTION**

In the Santo Domingo municipal area of the Dominican Republic, community researchers were invited to a videotaped discussion of the project requested by ADMD (Asociación Dominicana de Mitigación de Desastres), a regional disaster organization. They enjoyed sharing their experiences and discussing their findings. You can view their videotaped conversation through the ADMD website at [www.desastre.org](http://www.desastre.org).

Also in the Dominican Republic, community researchers who studied vulnerability in Haina in fall, 2001 later contacted a group further up the Haina river watershed to discuss helping them conduct a similar research project. Funding from a related disaster reduction project made this possible.

These are just a few examples of how you can follow up after completing your research. What will your community do next?

The approach we adopt to studying vulnerability research counteracts this. Community research working from the "bottom up" or "inside out" with highly vulnerable residents teaches people more about danger but also more about their

own resources. Women feel proud and capable as they work with others to better understand the vulnerability and resilience of their own community.

**You have played an important role in helping to develop a new approach with great potential for grassroots empowerment and disaster reduction. This new model is:**

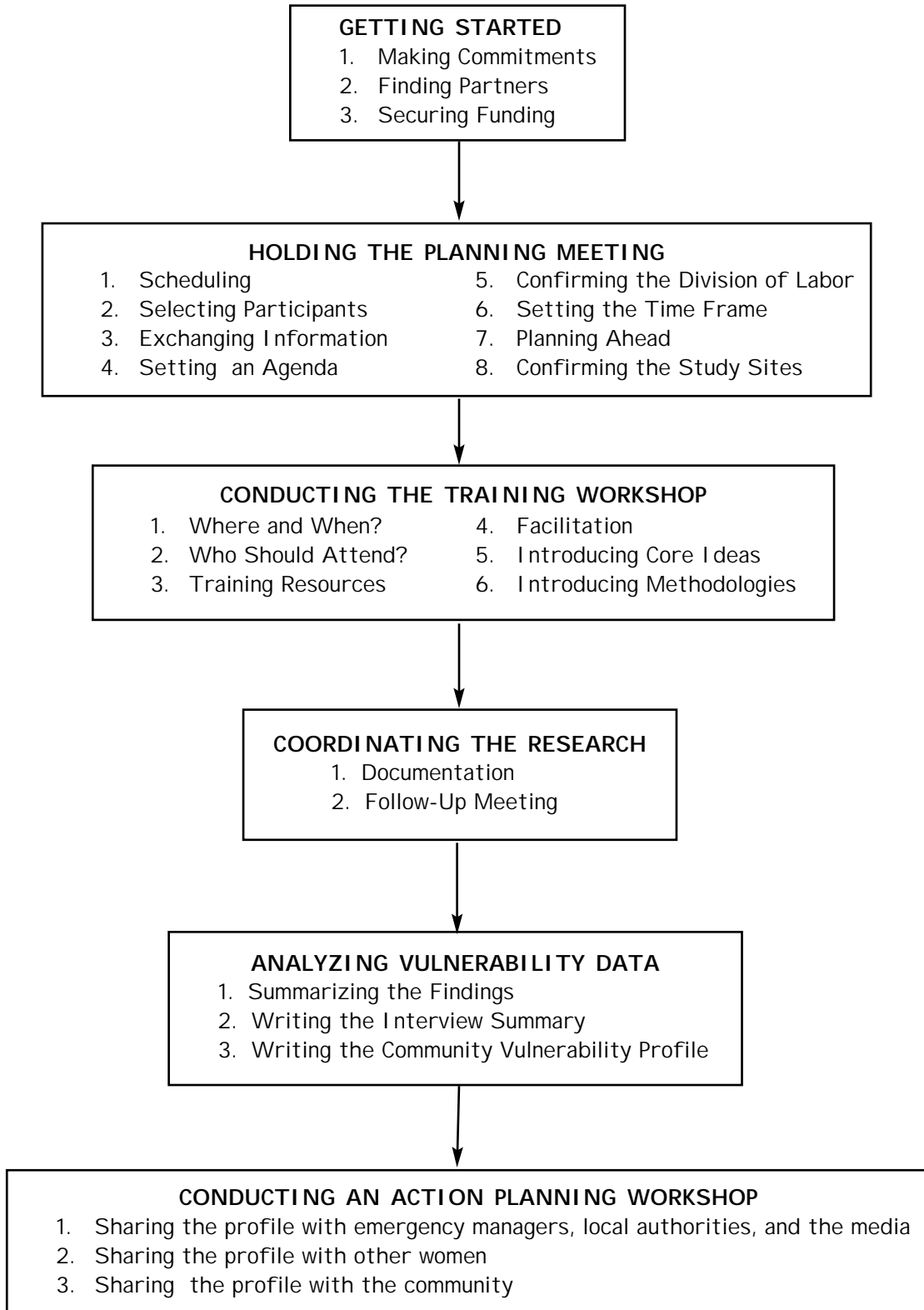
- Holistic, linking everyday problems to disaster resilience
- Action-oriented, with the promise of benefit to the community at large
- Prevention-oriented, focusing on how risk can be reduced and managed
- Inclusive, as women who are easily overlooked or marginalized are key informants on the community at large
- Grounded in women's experiences, capacities, knowledge, and action as well as factors increasing their vulnerability
- Empowering, providing those in particularly unsafe conditions the skills to identify specific hazards and local community resources
- Useful, because comprehensive, grassroots, and gender-sensitive documentation helps community members as well as disaster planners and responders

**ENJOY THIS COMMUNITY PROJECT AND KNOW THAT  
YOUR WORK WILL HELP MAKE PEOPLE SAFER.**

# APPENDIX

## RESEARCH PROCESS OVERVIEW

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## **PLANNING MEETING AGENDA**

---

### **INTRODUCTIONS**

Personal introductions  
[self-introductions]

Overall introduction  
[Who initiated the project? Who coordinated the planning meeting?]

Ground rules  
[Who will facilitate and how?]

### **REVIEW AND REVISION OF THE AGENDA**

Changes to the discussion topics?  
Changes to the structure of the meeting?

### **INFORMATION EXCHANGE**

Which community groups or agencies are involved  
[What work do they do? How are they organized?]

Which local authorities could or should be involved, and how?

Why is disaster vulnerability a concern?

### **DISCUSSION AND CONSENSUS**

Project goals and objectives

Project tasks and the division of labor

Timeframe

Future planning meetings?

### **OTHER?**

### **FEEDBACK/CLOSURE**

## TRAINING WORKSHOP AGENDA

---

### DAY ONE: MORNING

#### Orientation

- Round-robin self-introductions
- Confirm or revise the agenda
- Review the contents of the training folder

#### Project goals

- To assess and document vulnerabilities and capacities in the local area
- To increase community awareness about risk and risk reduction
- To develop and strengthen networks between women's groups and emergency management authorities
- To empower women as change agents

#### Specific project objectives

- To train local women in vulnerability research techniques
- To use the data collected to write a Community Vulnerability Profile
- To use the findings to educate the community about risk and risk reduction
- To use the findings to inform local and regional emergency managers about local capacities and vulnerabilities

#### What makes life risky here?

- Brainstorm daily hazards
- Brainstorm daily coping strategies
- Discuss local experience (emergencies, accidents, disasters of all kinds)
- Who here is most at risk?

#### Why do disasters happen?

- What is a disaster? Review handout on key concepts

- Discuss the causes and effects of recent disasters
- How are disasters and development related? Is the community changing in ways that increase or decrease risk?

#### Identify local resources

- How emergency management systems work here (national, regional, local)-in practice and theory
- Contact information
- Other resources (who helps in a fire? how is the community organized?)

### DAY ONE: AFTERNOON

#### Women in disasters around the world

- Brainstorm stereotypes about women, men, danger, and risk
- Discuss pictures and stories from women caught up in disasters (mitigation, preparation, response, recovery)
- Share stories of what women do here to solve problems in the home and community
- Discuss last major disaster here: What did women and men do before, during and after?

#### Women as community researchers

- Why women's perspectives matter
- What being a community researcher involves
- Preview tomorrow's training activities

#### Asking the right questions

- Discuss guiding research questions
- Practice interviewing in pairs: answering the questions

#### Feedback/Closure/Preview of Day 2

## **DAY TWO: MORNING**

### **Using the guiding research questions**

- Probing techniques
- Changes to guiding questions?

### **Defining the job**

- Discuss overall research strategy (qualitative, community-based, gender-focused)
- Review project tasks, timelines and coordination (who does what, when)
- Review specific community researcher tasks (training, data collection, research summaries, action step meeting, community meeting)
- Discuss realistic expectations of community researchers
- What the field coordinator will do

### **Selecting a sample: Who to talk with and why?**

- Review and discussion of sampling: What is a "key informant"? Which one to contact?
- Setting geographic boundaries: who works where?

### **Gathering the data**

- Extended discussion of methodology handout
- Specific discussion of writing the interview summary ("data analysis" )

### **Practice Session**

- Work in pairs or small groups to use each method and ask all questions (skits and role plays can help)

## **DAY TWO: AFTERNOON**

### **Continued practice**

- Using guiding questions
- Conducting extended interviews, life stories, group discussions
- Drawing risk maps
- Writing an interview summary
- Collaborating to compile a photo essay on community vulnerability and capacity
- Completing the background face sheet
- Completing the interview calendar sheet

### **Getting started**

- Confirming assignments (where each person will work, what the deadlines are, and what data are to be collected)
- How to contact the field coordinator and project coordinator
- Hands-on detailed instruction on operating cameras and tape recorders

### **Getting help**

- What help the field coordinator and project coordinator will provide
- Who else can help?

### **Planning**

- Set time and place of next meeting or any follow-up workshop desired

### **Evaluation**

- Complete evaluation form (Appendix R)
- Informal feedback

### **Review /Closure**



## **ACTION PLANNING WORKSHOP AGENDA**

---

### **ORIENTATION**

Review and revise agenda

### **GOALS AND OBJECTIVES**

To synthesize knowledge gained  
To identify specific action steps needed  
To plan final community meeting

### **REPORTS FROM RESEARCHERS**

Presentation and discussion of interview summaries  
Discussion of what was learned from maps and photos

### **ANALYTIC SUMMARY OF FINDINGS**

Primary hazards reported  
Primary vulnerabilities reported  
Primary resources and capacities reported

### **ACTION PLANNING**

Work in pairs to list and prioritize changes needed  
Group work to consolidate lists  
Discuss areas of responsibility. Consider women, community members, women's groups, emergency managers, government authorities at all levels, NGOs, relief agencies, etc.

Who can do what?  
Who should do what?  
What would help get change started?

### **COMMUNITY MEETING PLANNING**

Where and when?  
Who should be invited and encouraged to come?  
Who will introduce the project and researchers?  
How will the findings and action steps be presented?  
What outcomes are desired?

## COMMUNITY MEETING AGENDA

---

### ORIENTATION

Introduction to the study [by CBO project coordinator and partner groups]

Who did what, why, how, where, when?

Describe all training and workshops

Overview of goals and objectives

Why a grassroots approach is best

Why women take the lead

Introduction to the community researchers and other participants

### PRESENTATION OF FINDINGS AND RECOMMENDATIONS

Community researchers present most important findings about

Local hazards

Local vulnerabilities

Local resources and capacities

Local experience with past disasters

Women's experience in past disasters

Circulate risk maps and photo essay and copies of Community Profile

Community researchers present action steps ranked most critical by informants

At the level of the individual/household

Groups and organizations

Institutions

### OPEN DISCUSSION

### PLANS FOR NEXT MEETING

## IDEAS ABOUT DISASTERS

---

### What is a disaster?

There is no one definition of a "disaster." Many disasters are extreme consequences of routine events like storms and earthquakes, but a disaster like a nuclear power accident or poisonous gas explosion is an event resulting from decisions made by people. A disaster like a war or drought can come on slowly, and a flash flood in just a moment or two.

**Natural disasters** result from "the impact of a natural hazard on a socio-economic system with a given level of vulnerability, which prevents the affected society from coping adequately. Natural hazards themselves do not necessarily lead to disasters. It is only their interaction with people and their environment that generates impacts, which may reach disastrous proportions."

**Technological disasters** result from vulnerability to human-created hazards. These generally relate to industrial development, such as pollution of natural resources from manufacturing plants or transportation accidents involving toxic materials. Military and industrial installations often produce substances hazardous to human health. People are also exposed to biological hazards such as epidemics that are disastrous in their effects if large numbers of people are affected, as in the HIV/AIDS epidemic.

Technological disasters often interact with natural disasters, for example when a major flood exposes people to polluted water or an earthquake destroys structures in which hazardous materials are stored.

### What is a hazard?

A hazard can be seen as "an event or occurrence that has the potential for causing injury, loss of life, or damage to property and the environment. **Hazards** are a part of life, though they may threaten our lives and livelihoods and disrupt normal activities.

Extreme storms, earthquakes, wildfires and volcanic eruptions are examples of **natural hazards**. In contrast, **technological hazards** are created by people, for instance unsafe storage of toxic substances. Unlike volcanic eruptions or landslides (natural hazards with which people have always lived), the oil tanker in the bay or the train transporting nuclear waste near a school reflect decisions made by people.

Whether "natural" or technological, hazards do not necessarily produce "disasters" if they result in events that occur where and when people are prepared for them and can take protective action to minimize damage.

### How do people deal with hazards?

**Mitigating hazards** is how people make life safer. They inform themselves about local hazards, both those well-known to residents and those more "hidden" or rare. They seek ways of organizing communities to lower the exposure of vulnerable people to potential harm and, when possible, reduce the hazard itself. Naturally occurring events like storms or volcanic eruptions cannot, of course, be eliminated.

For example, people may use rainwater harvesting systems to conserve water in a

drought while others search for non-wood fuels to reduce deforestation and the risk of landslides. We seek safety standards to reduce industrial pollution and try to keep hazardous materials away from population centers. We build cyclone shelters, strive to construct hospitals and schools resistant to earthquakes, and learn how to help ourselves and others in emergencies.

We use all our social, economic and political resources, skills, and knowledge to make life safer but catastrophic storms and volcanic eruptions will still occur, as they have throughout history. Accidental explosions or toxic spills are also part of life these days.

As ever, people use their coping capacities to anticipate harm, try to minimize it, survive during an emergency, and rebuild in smarter ways following a disaster.

### **What are coping capacities?**

This involves "managing resources, both in normal times, as well as during unusual, abnormal and adverse conditions of a disaster event or process. . . Capabilities are a combination of all the strengths and resources available in a particular location that are useful in reducing the effects of disasters."

People have different kinds of resources (like a secure income, good health, strong social networks, a proactive government, effective disaster management plans) and different ways of coping. People with technical or scientific skills can suggest ways to build houses that stand up in an earthquake. Other people have communication and organizing skills needed to inform residents of danger, for example in neighborhoods near petrochemical plants, and help them mobilize to pressure those responsible to reduce the risks of an explosion.

Communities resilient to human-created technological hazards and to hazardous features of the local environment work together to assess the danger and assess people's ability to cope, take steps to protect highly vulnerable people, and learn how to work together in an emergency.

In **disaster-resilient communities** people are still at risk of harm in an earthquake or a huge gas explosion but able to "bounce back" if such an event occurs because the hazard has been mitigated to the extent possible and people's social vulnerability reduced.

### **What is disaster vulnerability?**

**Disaster vulnerability** means "characteristics of a person or group in terms of their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard." Vulnerabilities can be physical, economic, social, cultural, and attitudinal, and directly or indirectly increase or decrease risk in a disaster.

Disaster vulnerability is how likely you or your family or neighborhood are to be hurt by the effects of natural or technological hazards. If you live far from the ocean, you are not as vulnerable to a cyclone as others, for example, and if you have some savings, good health, and reliable transportation, you can more easily relocate and start over should an oil spill destroy the local fishing industry.

Even in the same area, people are generally not all equally vulnerable to disasters. If your baby is hurt by an explosion or landslide, can you travel to a clinic and afford the fees? Many people can't. People living with disabilities like blindness, and others whose

age or health make movement difficult have difficulty relocating if need be. The wealthy will more easily replace destroyed livestock, housing, or tools. Women who care for children, the sick, the aged, and the disabled tend to look after their needs first, and may put themselves at risk by caring for others first.

Cultures that emphasize human equality and promote solidarity among neighbors are less likely to tolerate unequal levels of vulnerability.

### What is disaster risk? How can we reduce it?

Risk is part of daily life around the world and throughout history. **Disaster risk** is the "probability of injury, loss of life, damage to property, disruption of services and activities, and negative environmental effects." Risk can be increased or decreased depending on exposure to danger, on the one hand, and what is done to reduce this danger and people's exposure to it, on the other hand. A high degree of risk exists when people are highly vulnerable to hazards that have not been mitigated or reduced.

The **risk of disaster** decreases when people are not likely to be affected by a hazard like a volcano or a major manufacturing plant even though they live nearby. This is because reliable warning systems are in place that reach all people, including those who do not speak the dominant language or do not have radio, and community members are educated about what to do and prepared to respond to a sudden eruption or industrial accident.

The hazard will always be there, but everyone's lives can be made safer by identifying hazards and learning how to reduce them and their impacts on all members of the community. Whatever people do to mitigate hazards and reduce vulnerability will lower the risk of disaster.

**Risk awareness** begins at home, in your own neighborhood, and community, because local people always know best what makes their way of life safe and unsafe. Of course governments, employers, and scientists have important roles to play. But people generally rely more on what they know best—their own skills and resources, friendships and local organizations. Strong families and communities are strong in the face of disaster, too.

### How about you?

What are the natural or technological hazards in your community? What causes them? How can this be changed? Who in your community would be most hard-hit in a disaster? What causes this? What changes are needed to help people in your neighborhood anticipate danger, prepare for it, survive in an emergency, and recover from their losses?

People around the world are working together to build more disaster-resilient communities. What can be done here, by you and others, to mitigate environmental and technological hazards? What can be done to reduce your social vulnerability to these hazards and make others safer, too? Where would you start?

Adapted from Sanny Jegillos, Fundamentals of disaster risk management, in *Risk, Sustainable Development and Disasters: Southern Perspectives*, edited by Ailsa Holloway, Capetown, South Africa: Periperi Publications, 1999; Piers Blaikie, Terry Cannon, Ian Davis, and Ben Wisner (eds.), *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. New York: Routledge, 1994; and I DSR Information Kit, 2001, *Countering Disasters, Targeting Vulnerability*.

## **DOES THIS LOOK FAMILIAR? WOMEN AROUND THE WORLD LEARN TO LIVE WITH DISASTERS**

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The following four-page collage can be used to stimulate discussion during the workshop. It includes photos featuring:

1. Military woman sandbagging the Red River of the North [US]
2. Hutterite women in Manitoba sandbagging a home [Canada]
3. Mother and child evacuating [Africa]
4. Self-Employed Women's Association members distributing relief goods after the Gujarat earthquake [India]
5. Women clearing earthquake rubble [Turkey]
6. Sorting through donated medical supplies [Latin America]
7. Interior clean-up following a flood [US]
8. Searching for replacement clothing [US]
9. Comforting one another after a tornado [Canada]
10. Red Cross volunteer [Cuba]
11. Drawing risk maps [El Salvador]
12. Interior clean-up with a smile [US]
13. Woman relaxing in bathtub in hurricane rubble [US]

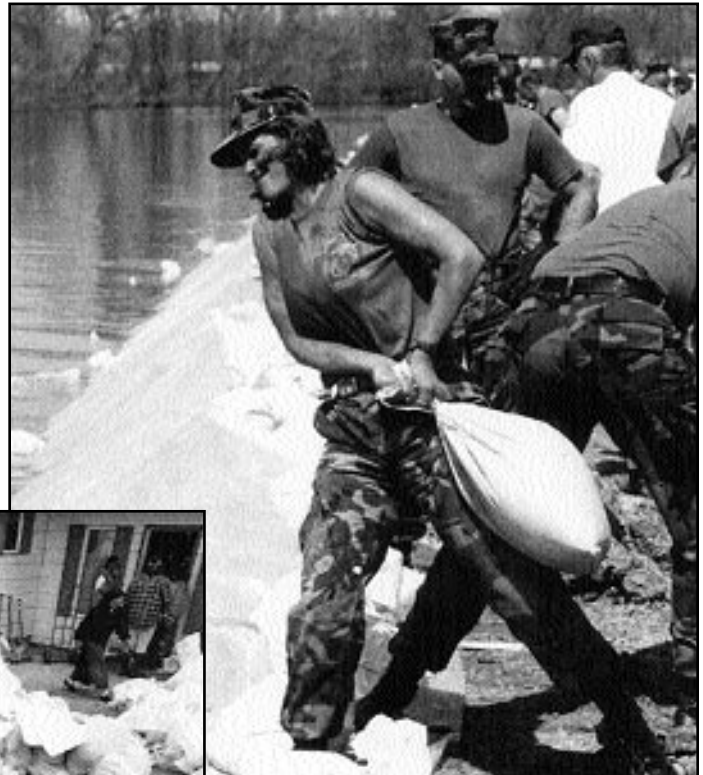
**These photos can be downloaded from the Working With Women at Risk page on the website of the International Hurricane Center at Florida International University ([www.fiu.edu/~lsbr/women](http://www.fiu.edu/~lsbr/women)) and from the website of the Gender and Disaster Network ([www.anglia.ac.uk/geography/gdn](http://www.anglia.ac.uk/geography/gdn)).**

**The photographs are intended for educational purposes only and cannot be reproduced for any commercial purpose.** We gratefully acknowledge: 1. Andy Blenkush, *Under the Whelming Tide: The 1997 Flood of the Red River of the North*, North Dakota Museum of Art 2. Wayne Glowacki, *A Red Sea Rising: The Flood of the Century*. Winnipeg Free Press 3. UNDP Department of Humanitarian Affairs 4. Self-Employed Women's Association 5. UNDP Department of Humanitarian Affairs 6. PAHO, *A World Safe from Natural Disasters* 7. Carolyn Kaster, *Come Hell or High Water: The Incredible Story of the 1997 Red River Flood*, Grand Forks Herald and Knight-Ridder Newspapers 8. Rick McCawley, *Hurricane Andrew: The Big One*, The Miami Herald and El Nuevo Herald 9. *Globe and Mail* Newspaper photography 10. IFRC website (6.18.2003) 11. Project photographers in Bella Vista, El Salvador 11. Erik Hylden, *Come Hell or High Water: The Incredible Story of the 1997 Red River Flood*, Grand Forks Herald and Knight-Ridder Newspapers 13. C. W. Griffin, *Hurricane Andrew: The Big One*, The Miami Herald and El Nuevo Herald.

## DOES THIS LOOK FAMILIAR?

### WOMEN AROUND THE WORLD LEARN TO LIVE WITH DISASTERS

MILITARY WOMEN WORKED  
ALONGSIDE MEN TO PREVENT  
FLOODING



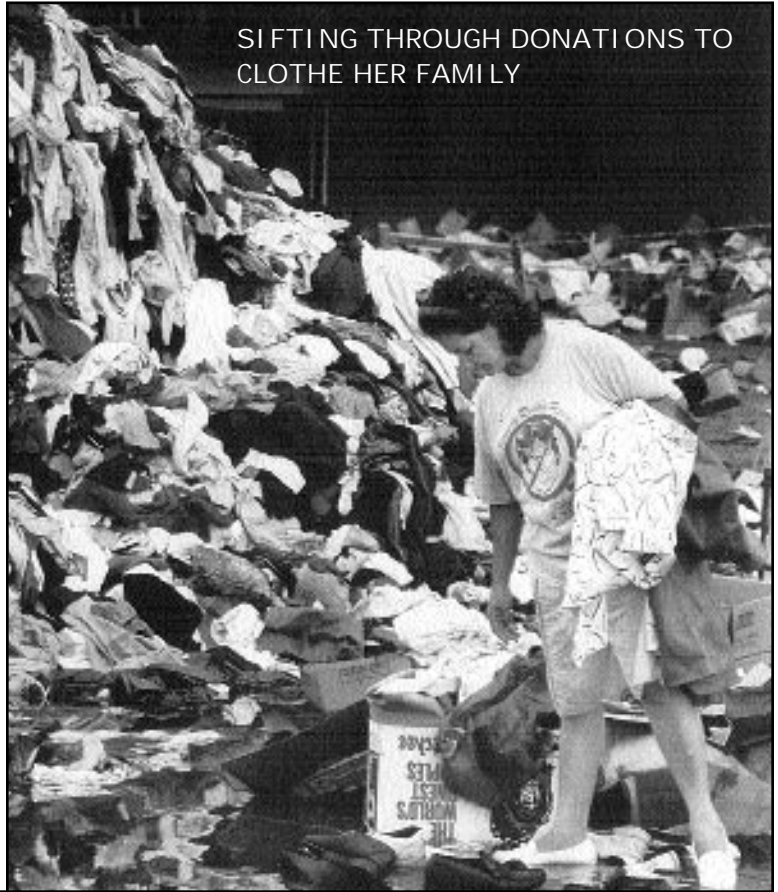
TRADITIONAL HUTTERITE  
WOMEN IN RURAL CANADA  
HELPED SANDBAG THEIR  
NEIGHBORS' HOMES



SOMETIMES WOMEN MUST TAKE  
THEIR CHILDREN AND LEAVE  
DANGEROUS SITUATIONS



FOOD MUST STILL BE COOKED!  
WOMEN HAVE A LOT TO DO AFTER  
A FLOOD



SIFTING THROUGH DONATIONS TO  
CLOTHE HER FAMILY



HELPING EACH OTHER  
THROUGH A DIFFICULT  
TIME



INDIAN WOMEN WORKED THROUGH THEIR LABOR UNION TO HELP EARTHQUAKE SURVIVORS



TURKISH WOMEN SEARCH FOR SURVIVORS



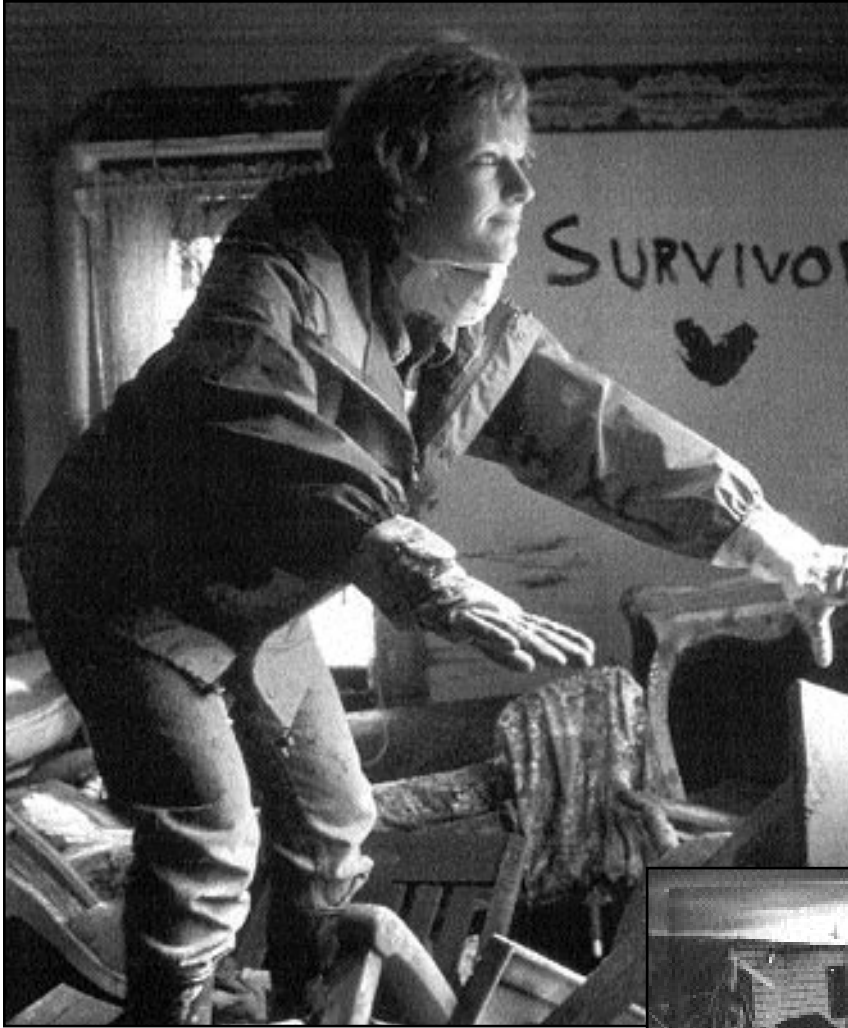
SORTING THROUGH DONATED MEDICAL SUPPLIES



VOLUNTEERING HER TIME IN CUBA AFTER HURRICANE MICHELLE



MAPPING LOCAL HAZARDS IN EL SALVADOR, BUILDING STRONG CONNECTIONS



MAKING THE  
BEST OF IT . . .

WITH A SMILE!



## SOME OF WOMEN'S DISASTER STORIES: WHAT ABOUT YOURS?

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Women have a lot to lose:

*When the tide came, it covered the sky and my children slipped away from me in the strong current. A man is a man, but what am I without my children? <sup>1</sup>*



*It's mainly us women who suffer the most when the river is full. We get wet, even when we are ill, we must cross the river because we don't have a bridge. We also run the risk of drowning.<sup>2</sup>*



*I experienced Storm Debby in 1994 [in St. Lucia]. The wind blew four sheets of galvanized off my house and I lose my rug and my wardrobe, the water entered by house causing me to lose my sewing machine as well. . . Well there is a disaster group in the community, they did not really assist me, because I never went to them. And in the countryside, where I have my bananas I lost everything through landslides. After the storm I had to move to the [shelter in the school] where I stayed there for one week. I believe the house got damaged because of the location it was. When the water entered by house, it reached my waist. . . I never got assistance for my bananas that were destroyed. And up to now things hard in the country, I never got my sewing machine back and many other things that I lost. <sup>3</sup>*



*I had just experienced a vehicular accident when Debbie visited us. I had twenty lines of sea moss in the water, all of which got white [ruined] cause the chemical it was treated with created a distaste for the sea moss. The banana farm all of which was destroyed by the devastating storm. Even our water was polluted with debris and other chemicals as well as toxic waste. We were prepared at home because we were really secure.<sup>4</sup>*



*The tremor has affected us a lot. There is less movement, tourists go to other places. My salary depends on commission according to the number of [bus] tickets sold. Lately, I've sold very few. <sup>5</sup>*

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<sup>1</sup> Sona Bari, 1992. Women in the aftermath. In H. Hossain, et al. (eds.), *From Crisis to Development: Coping with Disasters in Bangladesh*. Dhaka: University Press Limited.

<sup>2</sup> Interview conducted by community researchers in El Coco, El Salvador, fall 2002.

<sup>3</sup> La Point Development Committee community research project, St. Lucia, 2001.

<sup>4</sup> La Point Development Committee community research project, St. Lucia, 2001.

<sup>5</sup> Carolina Serrat Vinas, 1998. Women's disaster vulnerability and response to the Colima earthquake. In E. Enarson and B. H. Morrow (eds.), *The Gendered Terrain of Disaster: Through Women's Eyes*. Westport, CT: Greenwood Publishing. Available in paperback from the International Hurricane Center of Florida International University [[www.fiu.edu/~lsbr](http://www.fiu.edu/~lsbr)].

*[Following the Berkeley/Oakland firestorm] I had no thread. By this I mean I had no thread to stitch my daughter's hem, and also I lost the thread of my life. The pattern of my days, my plans, my routines were irrevocably ruptured. The warp of my past was torn from the weave of my future. Who I am, what I was, what I intended to do, the fabric of my life, utterly unraveled.<sup>6</sup>*



*He is a new kind of mad. He has this anger in him that I have never seen before.<sup>7</sup>*



*My husband went crazy. He couldn't take the pressure-being used to everything, and then coming down to no eating, because we could not find food . . . And then he was beating me up, taking my money-there was just so much going on that I just couldn't-he was really going berserk. I was getting beat up pretty bad. I didn't have a job, I didn't have any clothes, because I was fleeing for my life. I came here with one shoe, ended up going to the hospital, the emergency room...He really went crazy. Before, I would get beat up maybe once a month if I was lucky. . . . But then, after the hurricane it all got worse. . . . It was really rough for a female. I ran across a lot of women suffering too with their children-husbands beating them up and leaving them. It was pretty bad.<sup>8</sup>*



*[Migrant] women are still expected to do their normal job. . . and to come home at night and take care of the kids. . . and to help their husband with the disaster-related clean-up or whatever else is going on. And I've seen a lot of stress issues, where women are taking it on-they've done it and done it and done it.<sup>9</sup>*



*He likes things ordered and when things are out of order he doesn't like it. So the flood was a nightmare for him. I t's not like his temperament completely changed with the flood but I definitely do consider us to be a flood casualty. The flood did bring on his anger.<sup>10</sup>*



*I used an oil lamp to see, and all of a sudden all the little animals had drowned and I found my daughter hanging on to a hammock. I was so nervous because I couldn't find my daughter. Later during the earthquake, we had not recovered from one when the other came, I was just arriving at home when I felt like I was dizzy, and I had three children inside. . . .And for a long time I put containers with water on all sides of the house until I felt sure that the earth would [not] shake again. It took a lot to rebuild our kitchen and to recover other things that were lost. Some were given tents but not us. We cooked outdoors on the ground. I have managed to reconstruct my kitchen with pieces of brick.<sup>11</sup>*

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<sup>6</sup> Susanna Hoffman, 1998. Eve and Adam among the embers: gender patterns after the Oakland/Berkeley firestorm. In E. Enarson and B. H. Morrow, 1998, op.cit.

<sup>7</sup> K. Davis and M. Ender, 1999. The 1997 Red River Valley flood: impact on marital relationships. *Applied Behavioral Science Review* 7 (2)

<sup>8</sup> B. Morrow and E. Enarson, 1996, Hurricane Andrew through women's eyes: issues and recommendations. *International Journal of Mass Emergencies and Disasters* 14 (1);

<sup>9</sup> Interview conducted with Migrant Outreach professional in Grand Forks, N. Dakota. See Enarson 2001, What women do: gendered disaster work in the Red River Valley flood. *Environmental Hazards* 3 (1).

<sup>10</sup> Alice Fothergill, 1999. An exploratory study of woman battering in the Grand Forks flood disaster: implications for community responses and policies. *International Journal of Mass Emergencies and Disasters* 17 (1).

<sup>11</sup> Interview with survivor of 2001 earthquakes conducted by community researchers in El Coco, El Salvador, fall 2002.

### Women listen to hazard warnings:

*After about one and a half hours of sleep Friday night, I turned the radio back on and they were saying that the whole town should evacuate-our area was specifically named. I woke [my husband and grown son] about 5 am. Both said they would not go . . . I took me until the afternoon on Saturday to convince [him] that we should leave. All medical services were down, and I didn't want to have to worry about getting him to medical help if he should need it in an area where none was available. [My son] refused to go.<sup>12</sup>*



*In 1980 I experienced hurricane Allen. . . It was a Sunday night about six o'clock p.m. when the wind began to blow with such force and the sound of breaking branches could be heard a far distance away. We were advised by the radio announcers to stay tuned to our radio because hurricane advisory would be issued, and so we did just that. We were tuned and were prepared.<sup>13</sup>*



*He didn't want to evacuate. He wanted to stay here and protect the place. . . I was scared. I wanted to leave. . . He wanted to come back here sooner also. . . He did come back a week earlier. . . I felt the safety issue was too much. He should have stayed away.<sup>14</sup>*



*[W]hen we heard that Lincoln dike had broke, we all called my sister to say we'd come over and get trucks and we would move everything out of their home. And [my brother-in-law] just refused. He said "It's not going to flood. We're all right." He just absolutely-and she had a business down in her basement and she wanted to get all that stuff and he just, he refused. . . And I think when it hit, [he] was very closed. You couldn't get him to talk. He would go off and walk by himself a lot, just not talk to anyone and I think he felt really guilty that-'What if I would have done this, we wouldn't have lost all of our furniture, [her] business.'<sup>15</sup>*

### Women show leadership:

*People came with no clothes. We set up a clothing drive, a food bank. We put all of those rural women-used all of their energy, even though they were housing people, to do things for others. They were the ones that held it together.<sup>16</sup>*



*[During the volcanic eruption in Montserrat] women were quick at becoming enterprising. They filled the gaps. They moved their hairdressing shops, seamstresses continued to sew school uniforms. They tried to keep the community together even when they were in shelters-cooking, feeding people in shelters. Food was a big thing because it was difficult to cook in the early days.<sup>17</sup>*

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<sup>12</sup> E. Enarson and J. Scanlon, 1999. Gender patterns in a flood evacuation: a case study of couples in Canada's Red River Valley flood. *Applied Behavioral Science Review* 7 (2).

<sup>13</sup> La Point Development Committee community research project, St. Lucia, 2001.

<sup>14</sup> Karen Davis and Morten Ender, 1999, op.cit.

<sup>15</sup> E. Enarson, 2001, op.cit.

<sup>16</sup> I bid.

<sup>17</sup> Judith Soares and Audrey Mullings. 2003. 'A we run tings:' women rebuilding Montserrat. In G.D. Howe and H. Fergus (eds.), *A Will to Survive: Volcanic Impact and Crisis Mitigation in Montserrat*. Jamaica: The University of the West Indies Press.

*As a woman, I faced a shock along with my female colleagues when we were told that we could not accompany the relief mission with the visiting team because there was no guarantee of any 'secure' place to stay. . . [I t] was important for women workers to help women survivors. We learned from other NGOs that they sent mainly male relief teams. This may have been unintentional but indicated that women were seen more as victims and not as providers of services during and after disasters.<sup>18</sup>*



*He was not the strong one any more because he had such a difficult time, thinking, not only did he lose his home but his parents' home. And so I had to be the strong one. I still had to take care of my daughter. He did come up [where we evacuated] for a week. . . The first three or four months he was, he stayed away. He was real distant and kind of did his own thing. . . He said the most difficult thing for him was the fact that he is supposed to take care of his family and he had nowhere to bring that family.<sup>19</sup>*



*If there is one member of the community through hurricane they help each other. We join our hands together and do what is necessary. In Praslin [St. Lucia] we do not have an established group for disaster preparedness. But there that tendency that exist in the community. That where they need a ride too. Especially in disasters people come together and they lend a helping hand and we make things happen.<sup>20</sup>*



*When exposed to a dangerous situation, I have an overwhelming desire to put myself where I can physically help others. . . I still look forward to the excitement disaster work provides, but now [after going back to college] I am getting paid for my disaster preparedness work and part of my motivation is an increased sense of duty to my city. I have a greater degree of identification with the community, and the better I come to know it, the more I am motivated to get this city prepared for disaster!<sup>21</sup>*

#### **Women help themselves and others:**

*Women in times of disaster are stronger than men are. Women are the ones who hold the family together emotionally while men do it physically. Furthermore women are more capable of doing domestic chores. . . Yes, it is different for some men I know because they are capable of doing the things women can but they just do not do it.<sup>22</sup>*



*I did the cleaning while the others sandbagged. I kind of thought to myself 'Who's going to' help me while you help the neighbors?'<sup>23</sup>*

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<sup>18</sup> Farida Akhter, 1992. Women are not only victims. In H. Hossain, et al. (eds.), *From Crisis to Development: Coping with Disasters in Bangladesh*. Dhaka: University Press Limited.<sup>19</sup> bid

<sup>20</sup> La Point Development Committee community research project, St. Lucia, 2001

<sup>21</sup> Carrie Barnecut, 1998. Disaster prone: reflections of a female permanent disaster volunteer. In E. Enarson and B. H. Morrow, 1998, op.cit.

<sup>22</sup> Interview with Hurricane David survivor conducted by community researchers in Canefield, Dominica, fall 2002.

<sup>23</sup> Interview conducted in Manitoba during the 1997 Red River Valley flood. See E. Enarson and J. Scanlon, 1999, op.cit.

*Not only my husband, but my 12- and 14-year old sons were swiftly recruited. However when with my daughter and a female friend, I offered my services in the [fire fighting], they were declined. We worked instead where it was deemed appropriate for us- preparing food in our kitchen, which was already stacked high with [food] made by district women for the firefighters. <sup>24</sup>*



*One lady on 10th Street, I 'll never forget her, I don't know why. Her mother was dying of cancer, her sister was dying of cancer, and she had kids, she had a house, they had a flooded basement. Her husband wasn't living there because he had to work someplace else. . . Massive craziness. And she was just strong, and going here at 2, going there at 4, got to be here at 6, got to be home at this time because the kids are going to be home, gotta cook dinner. . . I mean, she had everything going. <sup>25</sup>*



*I had a hard time going to, like, Red Cross or anything like that. I had a very difficult time. And I don't know if it was a pride thing or what. My dad would not go [And your husband?] Oh, there's no way. No. And when we were [evacuated] out there, I had to go. I had nothing for my daughter.<sup>26</sup>*



*I did most of the going out and finding the resources that were available to us. Standing in line, waiting for this, waiting for that. I mean, all I remember is standing in line.<sup>27</sup>*



*There was fifty caravans and one washing-machine, so it was pandemonium trying to wash everything for the kids. . . You'd have to sit up 'til about five in the morning, and if you seen [the washing machine] was free, you'd run down and get your washing in.<sup>28</sup>*



*Their men may have lost the fishing equipment necessary to earn a living, their children may have died and their homes and belongings were washed away but at the end of each day it was the wife/mother who had to cook for whoever survived in her family. In all the relief lines I saw, women stood first. They were the ones collecting bits of wood and bamboo to rebuild the houses. As is customary, they dealt with the sick children and lack of food. <sup>29</sup>*



*I mean his whole total effort was shrugging his shoulders and sighing. I mean I was turning out my whole house, seeing to my kids, worrying myself sick. . . and I just felt he thought that where we were was very comfortable. . . I mean probably if we hadna' been flooded out I'd have just sauntered along with him. His life didn't change. His Monday to Friday job was the same but from Friday to Sunday he was still assuming he was going out to the pub. I was left in the caravan and that's the bit I couldnae cope with. . . I couldnae cope with my house and him and. . . a new baby and everything. <sup>30</sup>*

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<sup>24</sup> Gretchen Poiner, 1990. *The Good Old Rule: Gender and Other Power Relationships in a Rural Community*. Sydney: Sydney University Press.

<sup>25</sup> I bid.

<sup>26</sup> I bid.

<sup>27</sup> A. Fothergill, 1999, op.cit.

<sup>28</sup> Maureen Fordham, 1998. Making women visible in disasters: problematising the private domain. *Disasters* 22 (2).

<sup>29</sup> Sona Bari, 1992, op.cit.

<sup>30</sup>E. Enarson and Maureen Fordham, 2001. Lines that divide, ties that bind: race, class and gender in women's flood recovery in the US and UK. *Australian Journal of Emergency Management* 15 (4).



*I was forced to deal with my ex. He ended up evacuating, he came up to the apartment that we were in because he didn't have anywhere else to go. . . My ex-husband [was] just totally drinking every day. And then I relied on his help so I could try and get my kids back into the house and he was drinking so much it took him, like, ten times as long as he needed to try and clean the basement out.<sup>31</sup>*



*[We] three women spent 39 days without electricity-washing clothes in the bathtub, heating water on the campfire for the children's baths, washing dishes in a bucket. We cooked Mexican food over a makeshift kitchen in the yard, preparing corn tortillas on a cast iron griddle . . . Disaster or no disaster, the men demanded hearty meals of traditional foods and refused to eat at the military kitchens . . . The men began to hire themselves out, repairing others' homes as the job market for workers boomed, but our home lay in disarray.<sup>32</sup>*

#### **Women can change their lives:**

*I can do wire now! Changed all my outlets and I can put up lights. I'm real scared of wiring even though I've done that. And I really got to be a good plasterer because I didn't like the way they did it so I redid it at nights myself.<sup>33</sup>*



*There were more decisions to be made . . . We're not agreeing on anything . . . He's not taking me seriously. You can't go your whole life with someone without having something to offer them . . . It's his way and that's it. It wasn't a big deal before the flood. Now it is.<sup>34</sup>*



*I gained a lot of respect from the city employees during that time because of course, they expected that I would be the person that they should all be taking care of, and instead, I was there helping them, organizing. We worked 16-hour days straight for over 5 weeks. But I enjoyed it. We have a good old boys' system here, so afterwards this one guy didn't want me to attend the meetings anymore. I told him, 'I have been here since day one, and I've had to make a lot of decisions, my signature is on everything, and you should back me.' The city council completely supported me. And now, well, they all definitely listen when I say something.<sup>35</sup>*



*Then came the drought of 1985. Both my husband and I started going to work on the relief sites-digging earth. . . we dug earth for four years-there was no other way. All my hair fell out and I went bald. But now I have guaranteed work. I am a member of SEWA [Self-Employed Women's Association, an Indian savings bank for low-income women] and our village group leader. From my year's savings, I have now bought a buffalo, so that gives me extra income. I am the sole breadwinner: my whole family lives on my income. I also assist the other village women to do high-quality embroidery so that they also get regular work and income. Now, all the men in the village also respect me.<sup>36</sup>*

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<sup>31</sup> E. Enarson, 2001, op.cit.

<sup>32</sup> D. Colina, 1998. Reflections from a teacher and survivor. In Enarson and Morrow, 1998, op.cit.

<sup>33</sup> I bid.

<sup>34</sup> E. Enarson and J. Scanlon, 1999, op.cit.

<sup>35</sup> Alice Fothergill, 1999, Women's roles in disaster. *Applied Behavioral Science Review* 7 (2).

*I thought I wouldn't be able to endure the hardship of being a victim of the volcano. But it was shown to me. . . that I can be empowered.* <sup>37</sup>



*It was just houses, you know? We've come through the depressions and wars and we are a tough generation. This was just a miserable little bushfire. When you have got kids, your order of what is important in the world is quite clear. If your kids are happy and safe and you are not injured, you can get on.* <sup>38</sup>



*In fact, I got together with another woman and we're thinking about forming a group. It's still in the making, but we want to get together-all Hispanic women-so we can have a voice. We still need to get some basics. . . We don't know who [the local political candidates] are. Do we know what they stand for? As Hispanic women, we're still not out there, letting our voices be heard.* <sup>39</sup>



*[Women Will Rebuild in Miami] brought together women who had never come together before. I think they did make an honest effort to represent all the groups in Miami. I give them credit for that.*<sup>40</sup>



*In the aftermath of the hurricane I found a source of strength and power of survival that I hold within myself and because of that I am a stronger person today.*<sup>41</sup>



*I'm starting a new life. So I'm going to take that flood and all that abuse, and when the flood waters left Grand Forks, well, that was my old life leaving. All the abuse left with the water. That's how I look at it.* <sup>42</sup>

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<sup>36</sup> Intermediate Technology, 1997. Women and drought. Disaster and Development Occasional Paper.

<sup>37</sup> Zenaida Delica, 1998. Balancing vulnerability and capacity: women and children in the Philippines. In Enarson and Morrow, 1998, op.cit.

<sup>38</sup> Helen Cox, 1998. Women in bushfire territory. In E. Enarson and B.H. Morrow, 1998, op.cit.

<sup>39</sup> E. Enarson, 1999. Women and housing issues in two US disasters: hurricane Andrew and the Red River Valley flood. *International Journal of Mass Emergencies and Disasters* 17 (1).

<sup>40</sup> E. Enarson and B. H. Morrow, 1998. Women will rebuild Miami: a case study of feminist response to disaster. In Enarson and Morrow, 1998, op.cit.

<sup>41</sup> D. Colina, 1998, op.cit.

<sup>42</sup> Alice Fothergill, 1999, op.cit.



## What can you do?

Women's lives are very different. But, around the world, many women's groups and individual women are taking steps to reduce the risk of disasters.

- Identify hazards and dangers affecting people in your own neighborhood.
- Identify your resources, skills, and capacities in dealing with hazards and potential disasters.
- Identify changes needed to make women like you less vulnerable to these hazards.
- Identify how groups and networks you know can help organize the community to reduce dangerous conditions and prepare to respond to disasters when they do occur.
- Identify ways women and men can work together to help minimize hazards and reduce the risk of disasters.

Working together, women and women's community organizations and networks have a vital role to play in building safer communities. It starts with you!



## Women and Disaster:

### What's the Connection?

Do disasters affect women and men equally? How does being a woman matter in a disaster?

Everyone is exposed to danger in life—but not everyone is equally exposed to the effects of hazardous conditions in their daily lives. Some people are very hard-hit in disasters and others pick up the pieces and go on. Why is this?

Don't most women and men face the risks and challenges of life together?

Yes and no. People living on land prone to flooding or subject to severe droughts share many of the same worries about how to make a living and raise their families in risky environments.

But think of the everyday lives of women and men you know. How do they spend their days—and where? What skills do they have? What resources do they control? Who makes important decisions in their homes and neighborhoods? What do they do when they need help?

These are differences that affect how people prepare for, survive, cope with, and recover from extreme events like landslides or earthquakes and from "man made" disasters like toxic spills, explosions, and war, too.

*For more information about disasters and emergency preparedness, contact your emergency management authorities.*

*For more information about working with other women to reduce the threat of disasters, see Working With Women: Practical Guidelines for Assessing Disaster Vulnerabilities and Capacities at the Local Level.*

*Write for a copy from the Lab for Social & Behavioral Research International Hurricane Center, Florida International University, Miami, Florida 33199.*

*Or you can download it from the*

*[www.fiu.edu/~lsbr/women](http://www.fiu.edu/~lsbr/women)*

*Also found on this web site are photos and other materials related to the topic.*

Many women and girls are at increased risk

Disasters can hit girls and women hard. Sometimes they are less likely than men in their neighborhood to live through an earthquake or eruption because they put others first and aren't always free to act in their own best interests. Often, women lack the information or spare time or extra income it takes to prepare their homes and workplaces for extreme events like cyclones. And afterwards, most women around the world have less money, land, political influence and other resources to help them fully recover from their losses.

Not all women are more vulnerable than the men around them but, in every culture and society a great many girls and women are at high risk. Why is this?

- Part of the answer is physical. Women may be less mobile than many men before and after childbirth and are more likely to have health problems related to old age than men, who tend not to live as long.
- Part of the answer is economic. Women are the poorest of the poor. In many parts of the world, they rely on the local water, animals, and land for their income so natural disasters hit them hard.
- Part of the answer is social. Women provide food, water, fuel wood and other necessities of life for others. Generally, they are also the ones who care for infants and children, older people, and others who live with disabilities or illness.

Also, more women than men live alone. Widows, women heading households alone, and women who have left their homes and moved their families to the city or another country are especially likely not to have secure incomes, savings, or credit. They may be newcomers without many friendships or isolated from others because of the language they speak.

- And part of the answer is political. Many women are made homeless by male violence, long before an earthquake or volcanic eruption. Generally, men make the key decisions about disasters—how and when to prepare, evacuate, rebuild, or relocate.

Women do not enjoy their full human rights in most societies and cultures today, and this too makes it more difficult for them to cope with the effects of disasters.

So vulnerability to disasters varies between women and men, just as it does between the old and young, rich and poor, urban and rural.



But women are also survivors who help make communities safer.

In a disaster, people are safer—less vulnerable—when they know what hazards they face and have the resources they need to prepare for emergencies and cope with the challenges of rebuilding. Women may be hit hard by contaminated water, violence, or a devastating fire or landslide, but they are not simply victims. Their everyday routines and skills give women strength in a crisis.

- Women often know more than men about how people in their community live—for example, those who are sick or disabled and may need help leaving their home in a cyclone, and those who can readily help. The newcomers in the neighborhood and people like prostitutes or widows who may be 'outsiders' to some, are often known to women in the neighborhood.

Women also tend to listen to warnings about danger and pay attention to hazards like flood-prone rivers that children must cross to reach their school. When asked to evacuate, many times women leave more readily than men.

- Because women so often use the land, water and animals to earn a living and feed their families, they try to conserve these resources for future use. To the best of their ability, they help keep water clean, soil fertile, forests sustainable, and livestock healthy—helping land, livestock, and people in a bad storm or earthquake.

- Older women especially will remember how people coped with past hazards and disasters and are more likely than men to still speak the native language. They can help others like them learn how to minimize risk.

Women are more likely than men to share information, ideas, and resources because they are more organized at the grassroots. They build lively networks of friends at work, in schools, in their neighborhood and through their religion. Often in a disaster, it is women's groups that take the lead in helping rebuild community solidarity after a disaster.

- Like men, women in a crisis do what needs to be done. They don't sit and wait for rescue but help themselves and their neighbors when they can.

When the crisis passes, it is women especially—as nurses, teachers, counselors, and caregivers—who help disaster survivors deal with the painful losses of disasters.

- In rising numbers, women are also employed as environmental scientists and policy makers, firefighters and police officers, health care providers and teachers. They have important roles in planning agencies, humanitarian relief operations, and emergency management organizations worldwide.

Long before any disaster, women in your area probably came together to provide for their families and organize stronger communities. They may be harvesting rainwater or experimenting with drought-resistant crops or ways to build sturdy houses, monitoring river levels, forming neighborhood self-help groups, working together to build a child care center or local clinics, and educating their children about self-protection.

When women plant backyard gardens, join community disaster preparedness groups, monitor environmental changes and pay attention to disaster warning systems, they are helping to prevent a natural event such as a forest fire or fierce storm from becoming a "natural" disaster.

## INTRODUCTION TO THE PROJECT

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### Thank you!

You have joined with other women who want to investigate what makes life here risky and what can help make it safer-especially when cyclones, floods, explosions, and other major events occur.

Too often, the experiences of women in disasters have been ignored. But women are highly involved in anything that affects their families, homes, workplaces, neighborhoods and communities. Other research has shown women are hard-hit by disasters but also work hard to try to prevent them and help people recover later.

Who better to study hazards the community faces and what can be done to make disasters less likely?

You'll be doing this by talking with other women in your community, following a step-by-step interview process. From this, we will write a Community Profile about strengths and weaknesses in disasters and how emergency management agencies and women's groups can work together to make families safer. You will also learn a lot about preparing for emergencies.

The women's group you belong to is doing this because the research and action plan can benefit the community as a whole and women in particular. The field coordinator knows your organization and is here to help you through every phase of the research. Call or visit her anytime:

Women's group contact information  
and field coordinator contact information

The other organization participating in the study is [insert name here]. Contact [insert project coordinator's name here] for more information. Call or visit them anytime.

Other sponsoring organization contact information  
and Project Coordinator contact information

## GUIDING RESEARCH QUESTIONS

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**Note to users:** This guide is a beginning point for your own work. Think ahead about what you most want to learn and the kind of Community Vulnerability Profile you want to write. Then select, adapt or design questions that are appropriate for your goals, your culture and your research community.

Before beginning the research, aim for consensus on some key questions all researchers will ask and on other optional questions. Remind interviewers to leave time for their key informants to speak their own minds as well.

Practice directing conversations away from general topics and toward natural and technological hazards and disasters.

Avoid "yes" or "no" questions. The most useful answers tell a story, report an incident, show feelings, name names.

Good follow-up questions to general answers are "Tell me more, please," "Can you give me an example,?" "Then what happened?" and "How did you feel about that?"

### **A. Background question about the context of disasters (social hazards)**

1. What makes you feel unsafe or in danger around here?

- How is this different for different people?
- How makes you as a woman feel unsafe or in danger around here?
- How is this different for other women?
- What makes men's lives risky here?

### **B. Questions about local hazards and social changes affecting them**

2. What can you tell me about the environment around here?

- What problems for your work and livelihood do you see (if any) relating to natural resources? [Use relevant local examples: Is soil erosion a problem? How about the crops, fish, or animals? Drought?]
- How would you and your neighbors be impacted by . . . ? [Use relevant local examples: a landslide, hurricane, earthquake, volcanic eruption, major flood, severe drought, wildfire, etc.]

3. What can you tell me about "man-made" dangers nearby?

- What problems for your work and livelihood do you see (if any) relating to "man made" hazards? [Follow up with relevant local examples: How clean is the water and the air? What about spills of dangerous materials or industrial explosions? Are you exposed to contamination on your job?]
- How would you and your neighbors be impacted by . . . ? [Use relevant local examples: pipeline leak, oil tanker spill, gas explosion, hazardous material collision/toxic contamination]

4. Thinking of all of this, do you think life here is becoming safer or less safe?

- How different was it for your grandmother?
- What do you think it will be like for your children as they grow up?
- What do you think causes these problems, for you and for others?

**Questions to highlight gender** [and see Question 1]

5. How are you personally affected by these hazards? [Use examples: How about your family life, your livelihood, your health, your responsibilities, etc.]

- What problems do you have that the men you know don't? Would this matter during a disaster? Why? Why not?
- What things do you know how to do that most of the men you know do not? Would this matter in a disaster? Why? Why not?
- How is this different for different women?

**Questions about social vulnerability**

6. Please tell me more about your everyday life here.

- Tell me about the people in your family and in your neighborhood.
- Who do you take care of, and who takes care of you?
- How about your health? Your education?
- Tell me how you earn a living and the natural resources you use.
- Tell me about your living area or house. How secure is it?
- Who makes political decisions around here? Do you?

7. Who in your community do you think would be most affected in a disaster? Why do you say that?

- Tell me more about these people, please. [Follow-up with examples: their livelihood, their health and physical abilities, their family life, their education and language, their citizenship status, their mobility, their age, etc.]
- Who around here would be best off in a disaster? Why do you say that?

### Questions about social capacities

8. What do people do around here to improve their lives? How do they try to reduce local dangers?
  - What do you think they would do to help themselves in a crisis like an explosion or an earthquake?
9. How do people here try to reduce the damage a hurricane can cause or keep water from being polluted by industry? [Use relevant local examples]
10. Tell me about local authorities. What do they do (if anything) to protect this community from unsafe conditions? If there are people here with special expertise in these areas, tell me about them.
11. How do your relationships or networks with others help you solve problems in emergencies? How do you think this would help in. . . [Use relevant local examples: a landslide? after a chemical explosion? a drought?]
12. What do women do together around here to improve their lives or to make themselves safer?
  - How are you involved, if at all, with local women's groups or networks around here? Tell me about these groups and what they do.
  - What else do you do with other women? [Follow up with specific examples: around the school? your church? at work? during cultural events? for political change?]
  - How have you worked, if you have, with other women to protect local environmental resources? To reduce your exposure to technological hazards?
13. What changes have you seen in your lifetime that help people prepare for disasters or deal with them?
  - How different was it for your grandmother? What do you think it will be like for your children as they grow up?

### Questions about action steps

14. What have you done to make life safer here? What have others here already done to prevent disasters from natural or "man-made" causes?
15. What else could be done to make your life safer?
  - How about in your neighborhood?
  - What would make the whole community safer?
  - If there were just one thing, what is it that should be done to make people safer?



16. Who should do these things? Who can make this happen? [Use specific follow-up questions: You? Local residents? Governments? Technical experts? Emergency managers? Men? Women?]
- Who else can help? Who else should?

**Questions for a disaster case study**

17. I'd like to learn more about any disasters you have lived through.
- Tell me about it—when was this? How old were you then?
  - How did you react? What problems did it cause you ?
  - What did you do to get ready if you had time or warning?
  - What were you doing during all this? What did you want to do?
  - What did others do? What did you want others to do?
  - Did you know who to ask for help? What happened when you did?
  - What did local women's groups do? How about other community groups?
  - What did local authorities do then?
  - What happened afterwards? Tell me about it.
  - How did this change your life? [Use specific follow-up examples: How did it change your family situation, housing, or livelihood? How about your relationships with men, and with your neighbors, and with other women? Did you change our plans for the future? ]

**Other questions: Add other questions specific to your community**

## GUIDE TO SELECTING A SAMPLE OF INFORMANTS

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When doing research, it is usually not possible to talk to everyone in the population being studied. Therefore, a sample of people is chosen to be contacted. There are many ways in which this sample can be chosen. For this research project we are interested in choosing a group of key women throughout the community who have special circumstances or knowledge related to risk and vulnerability. This type of non-random or non-probability sampling is called a purposive sample. Each person is chosen for a reason - she represents a type of woman that you believe can make an important or unique contribution to the research.

In order to pick your sample of five women, or key informants, to interview, you will use your expertise of the issues in your community and of the women living there. Under the direction of your field coordinator, the other researchers and you will choose samples to reflect a variety of types of women in your community who can be particularly vulnerable, who are apt to have special situations or problems that need to be considered when looking at community vulnerability, or who have special knowledge to share.

Some examples of women who are likely to have important points of view on this topic are listed below. All of these may not apply to your community and there may be others you can think of that are not on the list. Some women will cover more than one category. It is important that key informants are chosen to cover a diversity of types of at-risk women found in your community or women who have the most to contribute to the project.

Possible key informants are:

- Women living in hazardous areas or conditions
- Women who are inadequately housed
- Women who are sole household providers
- Elderly women or widows living alone
- Recent migrants or others new to the area
- Minority women (any excluded group)
- Women caring for disabled or ill family members
- The poorest women
- Disabled or ill women
- Young mothers
- Grandmothers raising children
- Abused women
- Women who are unemployed or underemployed
- Women working in a free zone
- Women working from their homes
- Women employed in hazardous occupations or in hazardous workplaces
- Women vendors
- Rural women or women living in isolated areas
- Urban women
- Renters
- Illiterate women
- Street women
- Prostitutes
- Women who are likely to be ignored or excluded for any reason
- Women who are respected by others
- Women leaders or authorities

## SOME RESEARCH METHODS FOR ASSESSING VULNERABILITY

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**Intensive Interviewing.** This will be the main method of data collection for this project. Each researcher will conduct intensive interviews with a sample of 5 key informants chosen for their particular knowledge or circumstances. While these interviews will be guided by a list of sample questions, they will be open-ended and informal. The researcher will guide the interview to gain the most information related to the subject, including the person's special circumstances, experiences and perceptions about the risks faced in her daily life, as well as when special events occur. Each interview will be tape-recorded and a written summary prepared by the researcher.

**After the interviews have been completed and discussed by the research team, other methods will be chosen to complete a picture of the community's vulnerability. These might include the following:**

**Life History.** This involves several interviews with a key informant to capture the main points of her life as it relates to the topic. Someone who has lived in the community for many years and been through numerous crises would be a good candidate for a life history, as would someone who lived through a major disaster in another community and remembers how they coped. Of special interest will be her memories of women's activities and experiences. Where possible, external evidence, such as newspaper clippings and photos, can be used to supplement the life history.

**Group Interview.** A group of women who share similar circumstances can be interviewed together. This allows the discussion to build on each other's experiences. For example, if your research group found elderly women were an important group of at-risk women in your community, you might bring 4 or 5 of them together to discuss their situations, how they cope, and how they might be helped. At least two researchers should conduct each group interview and they should be tape-recorded.

**Photo Essay.** Photos can tell the story of your community. The subject of each photo should be chosen to make a particular point about the community related to risk, vulnerability and response. A short essay should be written for each, explaining what it expresses about the topic. An alternative, and more complex method, is the making of a video about your community.

**Surveys.** In order to get input from a larger number of people, your research team may decide to conduct a survey that further develops topics emerging from your interviews. This will involve developing a questionnaire (with your field coordinator and senior researcher), administering it to a sample of people, and analyzing the results. The type of sample will depend on the purpose of the survey. It might be given to a women's group, to every household in a particular neighborhood or region, or to a sample of women with special needs, as examples.

## ANALYZING QUALITATIVE DATA

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In this type of research **words**, not numbers, are the data. Analysis involves studying words or themes that are repeated, looking for what is consistent and for what is unusual. You are trying to get at the **meanings** of words, and these can vary from one person to another. Let the person talk to you in her own words, explaining what she means when she talks about dangers, risks, fears, capacities and vulnerabilities. We are looking for community **patterns**, but also trying to understand the **variety** of individual experiences and conditions present in any given community. Therefore, do not neglect the person whose situation is unique, if it is something that the community should be aware of, or it can be addressed in some way.

For example, if you find that **most** women are concerned about the quality of water available to their households, say that, and use her own words to describe how this affects them, or matters to them. You will want to collect details about water sources, how it is collected, stored, used and discarded. If many are concerned about unsafe transportation, you will want to collect information about different kinds of transportation and their use, too. On the other hand, if just one woman talks about being abused, or one elderly woman expresses fear of being trapped by floods in her own home, it should be included in your report because of its seriousness.

Remember, you want to discover how people in this particular place are at risk and what resources can be used to address these dangers. You will present your final report to the community and to the appropriate authorities as part of a plan to make your community safer.

### Steps In Analysis

1. Without taking any notes, listen carefully to every tape (and read your interview notes several times before beginning to do any analysis. In other words **become very familiar with your data**).
2. Sit and think about what you have learned. What questions has the data answered?
3. Now listen to each tape very slowly, looking for **themes and common topics**. Stop and take notes on small pieces of paper so you can sort them later. For example, if Interview #1 talks about children's fears, write this on a piece of paper, noting that it came from Interview #1. Later you can put all of the papers having to do with children in one pile and write about them together.
4. Sort your notes around either common **topics** (such as children) or **themes** (such as ways women try to reduce their risks). Think of categories of things you might find in a kitchen, or how you sort clothing or tools into categories.
5. Look for gaps where you need more information and go back and ask for it. You might return to a particular woman with more questions about a topic or question that arose as you analyzed the data. Or you might complete the puzzle in other ways, like calling authorities to find out more about a water source, for example, or photographing the water source yourself. **Secondary data** (not collected by you but available from the newspaper, local experts, and other sources) can be helpful.
6. Outline your results, looking for things that should be discussed together.
7. Write up your findings.

## INTERVIEW FACE SHEET

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Date of interview: \_\_\_\_\_ Name of interviewer: \_\_\_\_\_

Place of interview (home? community center? other?)

**Note:** Background information lets readers know whose views were consulted. You may want to gather and record the information on this form as you and your key informant are getting settled for the interview or, just before leaving, double-check to see if you have all the background information you need. You may have heard the answers to many of these questions in your conversation but don't forget to record them now.

How old is this person? \_\_\_\_\_ What was her place of birth? \_\_\_\_\_

How does she earn money? What is her occupation?

What do you think is her general socio-economic status?

What is her family situation? Who lives with her?

What is her primary language?

How many years of school did she complete?

What were your general impressions of her neighborhood?

## INTERVIEW SCHEDULING

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### OVERVIEW:

Selection of Key Informants completed by [name of researcher]

Data collection to take place between \_\_\_\_\_ and \_\_\_\_\_

Number of interviews to be completed:

Number of oral histories to be completed:

Number of group discussions to be completed:

Names of Interviewers and their neighborhood assignments:

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**RESULTS:** For each interview, record the following information.

**Informant #1 [use initials or numbers]**

1. Which researcher made the first contact? [If she was not the only researcher to speak with the respondent, explain.]
2. When was the interview completed?
3. Where did it take place?
4. If not completed, explain [e.g., when were follow-up meetings scheduled?]
5. Comments/problems

## COMMUNITY VULNERABILITY PROFILE TEMPLATE

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**Note to users:** This is one way among many to present your research findings. We suggest that your CVP include background material about the community, identify specific vulnerabilities and capacities, and conclude with action plans for change.

However you chose to organize your findings, we suggest a profile no longer than 10 pages in length. Attachments such as photos, maps, and information about the sample and researchers can be added to this.

As much as possible, use the words of your key informants to explain important points. This will make the community profile much more powerful.

### **A. First, provide some context for your findings**

**Background material** will help frame your findings. Tell your readers who lives here and how they live. What is the cultural and political-economic setting? What has shaped this region historically?

Also, what major environmental and/or technological hazards are well-known in the region? Briefly describe any recent disasters.

Here you might integrate some basic statistics about the local population, preferably reported separately by gender. You may be able to use reports from environmental groups or agencies to sketch the "riskscape" as others have described it.

**Describe the project**, explaining when and where it was conducted and by whom. Provide contact information for at least one person involved in the project.

Here you should give readers basic information, such as a short description of the women's groups that conducted or facilitated the study, the number of community researchers involved, and the number of women interviewed.

### **B. Then, report your findings**

#### **What hazards did women here identify that make life risky?**

These can be discussed separately as technological hazards and/or environmental hazards. Or you may want to emphasize the way they interact, for example a flood-prone river which is contaminated by pollution from nearby factories.

Here, too, you may want to report on "social hazards" and living conditions that put women at increased risk such as landlessness, poverty, lack of political rights, unsafe housing or gender violence.

The women you interviewed were asked about the social changes they have seen in their lives. Some may have spoken of erosion of natural resources, labor migration, changes in

family structure, unplanned urban development, increasing economic pressures and other trends.

How do the changes they mention appear to affect women's vulnerability to hazards of different kinds? Are these trends likely to make hazards more common or severe, or to reduce natural or technological hazards?

### **What resources did women here identify that make life safer?**

You asked women how local people act to protect themselves. What personal or community resources did they identify? What was reported about the role of women's groups and other women's networks?

What cultural traditions did women here draw on before, during and after a community crisis?

This is also the place to discuss any outside agencies or disaster committees that women said were useful, or could potentially be useful.

Again, did women see any social changes underway in their community or culture that would affect these strengths and resources in a positive and/or negative way? For example, did they describe new women's organizations or other groups working at the local level, or increased interest by governments or other groups in organizing emergency preparedness groups? Are new areas of employment opening up that would help women afford to make their houses stronger, for example?

### **Women's disaster experiences: a case study**

Not all Community Vulnerability Profiles will include a case study if those interviewed did not personally experience a major environmental or technological disaster.

If this community did experience a disaster event in living memory, how women and men were impacted and coped is important information for thinking about the future. The profile can include reports from the case study, including:

Before the event: What did women do to mitigate or reduce hazardous conditions? And men? What did they do together?

Disaster impacts: What did women lose? What did they gain? How were their lives changed? How about men?

Responses: How did women respond, for example inside their homes, in their neighbourhoods, at work, in the community at large, in emergency organizations? How about others?

Recovery: What roles did women and men play in the aftermath? How were their lives changed?

Mitigation/reconstruction: What do these disaster survivors think can or should be done now to prevent such a disaster in the future?



### **C. Discuss the implications of your findings for building more disaster-resilient communities**

#### **Action planning**

Summarize the highlights of what key informants said could be done to make their lives safer, and tell readers about the conclusions of the action planning meeting. These might be grouped as personal changes needed, group or organizational changes needed, and community and governmental changes needed. Some of the changes needed may seem general (diversify income sources, reduce violence) but affect people's ability to anticipate, survive, cope with, and recovery from disasters of all kinds. Others will be specific, such as reactivating an emergency committee or building a bridge or educating children in school about preparedness.

If your study group came to conclusions about who should or could take responsibility for making changes, what were they? What is the time frame for these actions?

How can women be helped to help themselves, their families and their community? What is already underway and what resources are still needed inside and outside the community?

### **D. Finally, offer supplementary documentation to readers wanting to know more**

**Methodology:** Some readers may want details about your research, for example how many focus groups were conducted where and when and with whom; how many interviews were conducted and background details about these key informants. This is also an excellent place to describe who the key informants were, without using their names. What were their ages and living situations and livelihoods?

Readers may also wish to know if interviews were taped, or be interested in the interview question guide used, which could be attached.

**Acknowledgements:** The report should name (with their permission) or otherwise acknowledge the efforts of individual community researchers, the field coordinator, and others involved in the research.

**Evaluation:** Add comments here from participants about how the research project can be improved and what they learned from participating.

**Attachments:** Attach a copy of the risk maps your respondents drew. You may want to attach an area map for readers who may not be familiar with the study site. Include copies of strong photographs that tell a story at a glance. Consider attaching contact information for local and regional risk/emergency management organizations.

## WORKSHOP EVALUATION

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A. WHAT DID YOU LIKE MOST ABOUT THE WORKSHOP?

B. WHAT COULD HAVE MADE IT EASIER FOR YOU TO ATTEND?

C. HOW CLEAR WERE THE GOALS AND OBJECTIVES OF THE WORKSHOP?

D. WHAT TOPICS DID YOU ENJOY DISCUSSING MOST? WHICH NEEDED MORE TIME?

E. HOW CLEARLY WAS YOUR ROLE EXPLAINED? WHAT HELPED YOU FEEL COMFORTABLE WITH IT?

F. WERE ALL YOUR QUESTIONS ANSWERED?

G. WOULD YOU RECOMMEND THIS TO A FRIEND? WHY OR WHY NOT?

H. WHAT ADVICE DO YOU HAVE FOR THE WORKSHOP ORGANIZERS?

## FINAL PROJECT EVALUATION

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Please complete and return this evaluation form or send us your comments and thoughts in another way. Also, let us know if you would like to receive an electronic or paper copy of the final document. It is also available as a pdf file through the International Hurricane Center of Florida International University at <http://www.fiu.edu/~lsbr/women>. E-mail your thoughts or mail them to:

Elaine Enarson  
(eenarson @ earthlink.net)  
33174 Bergen Mt. Rd.  
Evergreen, CO US  
80439

Lourdes Meyreles  
(lourdesmeyreles@hotmail.com)  
FLACSO Apartado 332-9  
Santo Domingo  
Republica Dominicana

A. WHAT GENERAL COMMENTS DO YOU  
HAVE ON THE CONTENT OR STRUCTURE OF THE GUIDELINES?

B. HOW COULD THE GUIDE BE MORE USER-FRIENDLY?

C. HOW USEFUL WOULD THE GUIDELINES BE FOR YOUR ORGANIZATION? COULD  
THEY BE ADAPTED TO YOUR CULTURE?

D. WHAT WOULD IMPROVE THE GUIDELINES?

## GUIDELINES EVALUATION

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1. Date: \_\_\_\_\_
2. Study site/community: \_\_\_\_\_
3. What role did you play in this research project?
  - \_\_\_ I was a community researcher
  - \_\_\_ I was interviewed personally
  - \_\_\_ I was in a group discussion
  - \_\_\_ I participated in the planning meeting for the project
  - \_\_\_ I participated in a public meeting about the findings
  - \_\_\_ Community group sponsor
  - \_\_\_ Project coordinator
  - \_\_\_ Field coordinator
  - \_\_\_ Writer
  - \_\_\_ Other (please explain)
4. What did you learn from this project?
5. What part of the project did you like the best? Why?
6. What part of the project would you change? How?
7. Overall, how satisfied were you with this project? [Please use other side of paper to respond.]

## DISASTER RISK MANAGEMENT GLOSSARY

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### **Acceptable risk**

The level of loss a society or community considers acceptable given existing social, economic, political, cultural and technical conditions.

*In engineering terms, acceptable risk is also used to describe structural and non-structural measures undertaken to reduce possible damage at a level, which does not harm people and property, according to codes or "accepted practice" based, among other issues, on a known probability of hazard.*

### **Capacity**

A combination of all the strengths and resources available within a community or organisation that can reduce the level of risk, or the effects of a disaster.

*Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.*

### **Capacity building**

Efforts aimed to develop human skills within a community, organisation or institution needed to reduce the level of risk.

*In extended understanding, capacity building also includes development of institutional, financial and other resources, such as technology at different levels and sectors of the society.*

### **Coping capacity**

The manner in which people and organisations use existing resources to achieve various beneficial ends during unusual, abnormal, and adverse conditions of a disaster phenomenon or process.

*The strengthening of coping capacities usually builds resilience to withstand the effects of natural and other hazards.*

### **Counter measures**

All measures taken to counter and reduce disaster risk. They most commonly referred to engineering (structural) measures but can also include other non-structural measures and tools designed and employed to avoid or limit the adverse impact of natural hazards and related environmental and technological disasters.

### **Disaster**

A serious disruption of the functioning of a community or a society causing widespread

human, material, economic or environmental losses which exceed the ability of the affected community/society to cope using its own resources.

*A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.*

### **Disaster risk reduction (disaster reduction)**

The systematic development and application of policies, strategies and practices to minimise vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) adverse impact of hazards, within the broad context of sustainable development.

- *Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;*
- *Knowledge development including education, training, research and information;*
- *Public commitment and institutional frameworks, including organisational, policy, legislation and community action;*
- *Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;*
- *Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.*

### **Early warning**

The provision of timely and effective information, through identified institutions, that allow individuals at risk of a disaster, to take action to avoid or reduce their risk and prepare for effective response.

*Early warning systems consist of three elements (i) forecasting and prediction of impending events, (ii) processing and dissemination of warnings to political authorities and population, and (iii) undertaking appropriate reaction to warnings.*

### **Emergency management**

The organisation, management of resources and responsibilities for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation.

*Emergency management involves the plans, structures and arrangements which are established to bring together the normal endeavours of government, voluntary and private agencies in a comprehensive and coordinated way to deal with the whole spectrum of emergency needs. This is also known as disaster management.*

### **Environmental degradation**

Processes induced by human behaviour and activities (sometimes combined with natural hazards), that damage the natural resource base or adversely alter natural processes or

ecosystems. Potential effects are varied and may contribute to an increase in vulnerability and the frequency and intensity of natural hazards.

*Some examples: land degradation, deforestation, desertification, wildland fires, loss of biodiversity, land, water and air pollution, climate change, sea level rise, ozone depletion*

## **Hazard**

A potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

*Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometeorological and biological) and/or induced by human processes (environmental degradation and technological hazards). Hazards can be combined, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability.*

## **Hazard analysis**

Identification, studies and monitoring of any hazard to determine its potentiality, origin, characteristics and behaviour.

## **Land-use planning**

Branch of physical planning that determines the most desirable way land should be used. Involves land-use studies and mapping, analysis of data acquired, formulation of alternative land-use decisions and design of a long-range land-use plan for different geographical and administrative scales.

*Land-use planning can help to mitigate disasters and reduce risks by discouraging settlements and construction of key installations in hazard prone areas, control of population density and expansion, and the siting of service routes in transport, power, water, sewerage and other critical facilities.*

## **Mitigation**

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

## **Natural hazards**

Natural processes or phenomena occurring in the biosphere that may constitute a damaging event.

*Natural hazards can be classified by origin in: geological, hydrometeorological or biological.*

## **Preparedness**

Activities and measures taken in advance to ensure effective response to the impact of disaster, including the issuance of timely and effective early warnings and the temporary removal of people and property from a threatened location.

## **Prevention**

Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters.

*Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education, prevention refers to changing attitude and behaviour towards a "culture of prevention".*

## **Public awareness**

The processes of informing the general population, increasing their levels of consciousness about risks and how to take action to reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

*Public awareness activities support a change in behaviour leading towards a culture of prevention. This involves public information, dissemination, education, radio or television broadcasts and the use of printed media, as well as, the establishment of disaster information centres and networks.*

## **Recovery**

Decisions and actions taken after a disaster with a view to restoring the living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

*Recovery (rehabilitation and reconstruction) is an opportunity to develop and apply disaster risk reduction measures.*

## **Relief / response**

The provision of assistance and/or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

## **Resilience / resilient**

The capacity of a system, community or society to resist or to change in order that it may obtain an acceptable level in functioning and structure. This is determined by the degree to which the social system is capable of organising itself, and the ability to increase its capacity for learning and adaptation, including the capacity to recover from a disaster.

## **Risk**

The probability of harmful consequences, or expected loss (of lives, people injured, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable/capable conditions. Conventionally risk is expressed by the equation  $\text{Risk} = \text{Hazards} \times \text{Vulnerability} / \text{Capacity}$ .

*Beyond expressing a probability of physical harm, it is crucial to appreciate that risks are always created or exist within social systems. It is important to consider the social con-*



*texts in which risks occur and that people therefore do not necessarily share the same perceptions of risk and their underlying causes.*

### **Risk assessment/analysis**

A process to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability/capacity that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend.

*The process of conducting a risk assessment is based in a review of both technical features of hazards such as their location, intensity, frequency, and probability, and also the analysis of the physical, social and economic dimensions of vulnerability, while taking particular account of the coping capabilities pertinent to the risk scenarios.*

### **Risk reduction measures**

The development and application of policies, procedures and capacities of the society and communities to lessen the negative impacts of a possible impact of natural hazards and related environmental and technological disasters. This includes structural and non structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse impact of hazards, as well as the development of coping capabilities.

### **Risk management**

The systematic management of administrative decisions, organisation, operational skills and responsibilities to apply policies, strategies and practices for disaster risk reduction.

### **Structural measures**

Engineering measures and construction of hazard-resistant and protective structures and infrastructure

### **Sustainable development**

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and the future needs. (Brundtland Commission, 1987).

*Sustainable development is based on socio-cultural development, political stability and decorum, economic growth and ecosystem protection, which all relate to disaster risk reduction.*

### **Technological hazards**

Danger originating from technological or industrial accidents, dangerous procedures, infrastructure failures or certain human activities, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

*Some examples: industrial pollution, nuclear activities and radioactivity, toxic wastes, dam failures; transport, industrial or technological accidents (explosions, fires, spills).*

## **Vulnerability**

A set of conditions and processes resulting from physical, social, economical, and environmental factors, which increase the susceptibility of a community to the impact of hazards.

*Positive factors, that increase the ability of people and the society they live in, to cope effectively with hazards, that increase their resilience, or that otherwise reduce their susceptibility, are considered as capacities.*

Source: Adapted from *Living With Risk: A Global Review of Disaster Reduction Initiatives*, I SDR 2002.

## SELECTED RESOURCES ON WOMEN AND DISASTER

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### Selected English-language Readings

Anderson, Mary. 1994. "Understanding the Disaster-Development Continuum: Gender Analysis is the Essential Tool." *Focus on Gender* 2 (1): 7-10.

Bradshaw, Sarah. 2001. Reconstructing roles and relations: women's participation in reconstruction in post-Mitch Nicaragua. *Gender and Development* 9 (3): 79-87.

Buvinić, Mayra. 1999. *Hurricane Mitch: Women's Needs and Contributions*. Inter-American Development Bank, Sustainable Development Department.

Delaney, Patricia and Elizabeth Shrader, 2001. *Gender and post-disaster reconstruction: the case of Hurricane Mitch in Honduras and Nicaragua*. The World Bank LAC Gender Team  
[http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn).

Enarson, Elaine. 2000. *A Gender Analysis of Work and Employment Issues in Natural Disasters*. Final report prepared for the InFocus Programme on Crisis and Reconstruction, the International Labour Organization. Available on-line ([www.ilo.org](http://www.ilo.org) or [http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn)).

Enarson, Elaine and Betty Hearn Morrow (eds.). 1998. *The Gendered Terrain of Disaster: Through Women's Eyes*. Westport, CT: Greenwood (hardback). Available in paper through the International Hurricane Center of Florida International University [[www.fiu.edu/~lsbr](http://www.fiu.edu/~lsbr)].

Enarson, Elaine and Maureen Fordham. 2001. From women's needs to women's rights in disasters. *Environmental Hazards* 3: 133-136.

Fernando, Priyanty and Vijitha Fernando (eds.). 1997. *South Asian Women Facing Disasters, Securing Life*. Colombo: Intermediate Technology Publications for Duryog Nivaran.

Fothergill, Alice. 1996. *Gender, risk, and disaster*. *International Journal of Mass Emergencies and Disasters* 14 (1): 33-56.

Peacock, Walter Gillis, Betty Hearn Morrow, and Hugh Gladwin (eds.). 1997. *Hurricane Andrew: Race, Gender and the Sociology of Disaster*. London: Routledge. Available in paper through the International Hurricane Center of Florida International University [[www.fiu.edu/~lsbr](http://www.fiu.edu/~lsbr)].

Phillips, Brenda and Betty Hearn Morrow (eds.). 2003. *Women and Disasters*. Xlibris Publications: International Sociological Association, Research Committee on Disasters. Available from [www.xlibris.com](http://www.xlibris.com).

Soares Judith and A. Mullings. 2003. 'A we run tings': women rebuilding Montserrat.' In G.D. Howe and Howard Fergus (eds.), *A Will to Survive: Volcanic impact and Crisis Mitigation in Montserrat*. Jamaica: University of the West Indies Press.

United Nations. Division for the Advancement of Women. 2001. *Environmental Management and the Mitigation of Natural Disasters: A Gender Perspective*. Report of the Expert Group Meeting in Ankara, Turkey (November, 2001) including papers and action recommendations. All documentation available online from the Division for the Advancement of Women ([www.un.org/womenwatch/daw](http://www.un.org/womenwatch/daw)).

United Nations. Division for the Advancement of Women. 46th Session of the Commission on the Status of Women, *Panel Discussion on Environmental Management and the Mitigation of Natural Disasters: A Gender*

*Perspective*, New York UN Headquarters (March 6, 2002), including papers and action recommendations. All documentation available online from the Division for the Advancement of Women ([www.un.org/women-watch/daw](http://www.un.org/women-watch/daw)).

Walker, Bridget (ed.). 1994. *Women and Emergencies. Focus on Gender 2* (1). London: Oxfam.

Wiest, Raymond, Jane Mocellin, and D. Thandiwe Motsisi. 1994. *The Needs of Women in Disasters and Emergencies*. Report prepared for the UNDP. Winnipeg, Manitoba: The University of Manitoba Disaster Research Institute. Available on-line ([http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn)).

### Some General Readings

Blaikie, Piers, Terry Cannon, Ian Davis, and Ben Wisner. 1994. *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. London: Routledge. [2nd ed. Forthcoming 2003]

Gatenby, Bev and Maria Humphries. 2000. Feminist participatory action research: methodological and ethical issues. *Women's Studies International Forum* 23 (1): 89-105.

Holloway, Ailsa (ed.). 1999. *Risk, Sustainable Development and Disasters: Southern Perspectives*. 1999. Cape Town: Periperi Publications.

Maskrey, Andrew. 1989. *Disaster Mitigation: A Community Based Approach. Development Guidelines # 3*. Oxford: Oxfam.

Twigg, John and Mihir Bhatt (eds.). 1998. *Understanding Vulnerability: South Asian Perspectives*. Colombo: Intermediate Technology Publications for Duryog Nivaran.

United Nations International Strategy for Disaster Reduction (ISDR). 2002 Draft. *Living With Risk: A Global Review of Disaster Reduction Initiatives*. Available on-line through ISDR: <http://www.unisdr.org/unisdr/Globalreport.htm>.

Von Kotze, Astrid and Ailsa Holloway. 1996. *Reducing Risk: Participatory Learning Activities for Disaster Mitigation in Southern Africa*. Cape Town, South Africa: IFRC and the Department of Adult and Community Education, University of Natal.

United Nations Economic Commission for Latin America and the Caribbean. 2002. The impact of disasters on women. Pp. 315-326 in Section Five: Effects of Damages. *Manual for Estimating the Socio-Economic Effects of Natural Disasters*. Available on-line: <http://www.proventionconsortium.org/files/eclac/10women.pdf>.

### Selected Spanish-language Readings

Ibarra, Angel, Ulises Campos and David Pereira. 2000. Los desastres naturales no existen. In *Hacia Una Gestión Ecológica de los Riesgos. Unidad Ecológica Salvadoreña*, El Salvador: Federación Luterana Mundial.

La Red. 1995. ¿Los desastres afectan al hombre y a la mujer de igual manera? El Tema del Género en la Conferencia Internacional Sobre Desastres. Huaraz, Peru.

Moraga, Enrique Gomáriz. 1999. *Genero Y Desastres: Introducción Conceptual Y Criterios Operativos. La Crisis Del Huracán Mitch En CentroAmérica*. Fundación Género Y Sociedad. San José, Costa Rica.

Soto, Linda Zilbert. 1998. *Guía de La Red ara la Gestión Local Del Riesgo. Módulos Para la Capacitación*. Red de Estudios Sociales en Prevencion de Desastres en America Latina.

Wiest, Raymond, Jane Mocellin, D. Thandiwe Motsisi. Nd. *Reconstrucción Y Desarrollo: La Mujer en la Etapa Posterior a un Desastre*. DRI , University of Manitoba.

#### **Fact Sheets, Newsletters, and Bulletins [useful for background reading and workshop packet]**

*Gender and natural disasters* (Spanish/English), developed by PAHO ([www.paho.org](http://www.paho.org))

*Unsung heroines: women and natural disasters*, Bullentin 8 (January) of USAID's Gender Matters

*Engendering Disaster Preparedness and Management*, Asian Disaster Management News 3 (3), November, 1997

*Violence Against Women in Disasters*. Fact sheet compiled by E. Enarson, available through the Gender and Disaster Network. ([http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn)).

#### **Bibliography**

Gender and Disaster bibliography prepared for Reaching Women and Children in Disasters conference, Miami 2000. Revised June 2003. On-line: [http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn).

#### **Special journal issues (English)**

Gender and Development (formerly *Oxfam Focus on Gender*)

Women and the Environment. 1993. Geraldine Reardon, ed. *Oxfam Focus on Gender* 1 (1)

Women and Emergencies. 1994. Bridget Walker, ed. *Oxfam Focus on Gender* 2 (1)

Humanitarian Work. 2001. *Gender and Development* 9 (3)

Climate Change. 2002. *Gender and Development* 10 (2)

*The Macedon Digest/Australian Journal of Emergency Management* 8 (4), 1993/94.

*Department of Humanitarian Affairs News* (Women in Emergencies), 1997.

I DNDR *Stop Disasters* (Women and Children: Keys to Prevention), Vol. 24, 1995. Also see "Prevention pays: success stories featuring women and children" (Fact Sheet #1).

*International Journal of Mass Emergencies and Disasters*, Vol. 17 (1), Special Issue, Women and Disasters, Edited by Betty Hearn Morrow and Brenda Phillips, 1999.

#### **Websites**

GDN: The Gender and Disaster Network [[www.anglia.ac.uk/geography/gdn](http://www.anglia.ac.uk/geography/gdn)] includes downloadable papers, contact information for members, reports, and other materials. A comprehensive bibliography of English-language writing on gender and disaster is also maintained on this website. See [http://online.northumbria.ac.uk/geography\\_research/gdn](http://online.northumbria.ac.uk/geography_research/gdn).

CARDIN: Caribbean Disaster I nformation Network to Resources accesses and disseminates disaster related information to prepare for and minimize the effect of dissters in the Caribbean Region. CARDIN maintains a database in English, French, Spanish and Dutch. See [http://wwwcardin.uwimona.edu.jm:1104/dis\\_info\\_dbase.asp](http://wwwcardin.uwimona.edu.jm:1104/dis_info_dbase.asp).

CRID: The Regional Disaster Information Center maintains an international collection of Spanish- and English-language documents, with a growing collection of gender and disaster writing. See [www.crid.or.cr/](http://www.crid.or.cr/).

RADIX: Radical Interpretations of Disaster ([www.anglia.ac.uk/geography/radix](http://www.anglia.ac.uk/geography/radix)) includes gender-sensitive analysis of disaster vulnerability, response, and prevention. See: [http://online.northumbria.ac.uk/geography\\_research/radix](http://online.northumbria.ac.uk/geography_research/radix).

### Conference reports

See the Gender and Disaster Network website (above) for proceedings and recommendations from conferences held in British Columbia (1999) and Miami (2000). Links are provided for documents from UN conferences in Turkey (2001) and New York (UN Commission on the Status of Women), 2002.

Proceedings from a major conference on gender and disaster in Pakistan (1996) were published by Fernando and Fernando (op.cit.).

### Videos

*Living with Disaster* (gender-aware profiles of communities responding to risk in Bangladesh, Zimbabwe, the Philippines, and Peru and Columbia). Produced by Intermediate Technology and available for purchase through Television Trust for the Environment, London, UK ([www.oneworld.org/tve](http://www.oneworld.org/tve)).

*South Asian Women: Facing Disaster, Securing Life*. Profiles women in Bangladesh, Nepal, Pakistan, and Sri Lanka responding to armed conflict, displacement, epidemic, and natural disaster). Produced by Duryog Nivaran, an alternative disaster and development agency in Sri Lanka with a strong gender focus, and available for purchase through their website ([www.adpc.ait.ac.th/duryog](http://www.adpc.ait.ac.th/duryog)).

### Also of Interest: Community Vulnerability Assessment Models

Bhatt, Ela. 1998. Women victims' view of urban and rural vulnerability. Pp. 12-26 in John Twigg and Mihir Bhatt (eds.), *Understanding Vulnerability: South Asian Perspectives*, op.cit. In the same volume see Mihir Bhatt, Can vulnerability be understood? Both articles use innovative participatory writing and analysis methodologies.

Buckle, Phillip. 2002. *Assessing Resilience and Vulnerability in the Context of Emergencies: Guidelines*. Available on-line:

[http://online.northumbria.ac.uk/geography\\_research/radix/resources/buckle-guidelines.pdf](http://online.northumbria.ac.uk/geography_research/radix/resources/buckle-guidelines.pdf). Also at this site see Buckle, Phillip, Graham Marsh and Sydney Smale, 2001, *Assessment of Personal & Community Resilience & Vulnerability*. Emergency Management Australia Report.

International Federation of Red Cross and Red Crescent Societies. *Vulnerability and Capacity Assessment: Guidelines for VCA*. Available in Spanish and English. See <http://www.ifrc.org/what/disasters/dp/planning/vca/guidelines.asp>

Pearce, Laurie. *An Integrated Approach for Community Hazard, Impact, Risk and Vulnerability Analysis: HIRV*. Unpublished dissertation. University of British Columbia. Available through interlibrary loan from the UBC Disaster Resources Centre.

Von Kotze, Astrid and Ailsa Holloway. 1996. *Reducing Risk: Participatory Learning Activities for Disaster Mitigation in Southern Africa*. [This document has many excellent training materials for community education and is highly gender sensitive.]

## FOR MORE INFORMATION ABOUT THIS PROJECT

Dr. Elaine Enarson (eenarson@earthlink.net)  
33174 Bergen Mt. Rd.  
Evergreen, CO 80439 US

Marta González (mgonzalez@flacso.org.sv)  
Facultad Latinoamericana de Ciencias Sociales  
9° Calle Poniente entre 73 y 75 Avenida Norte  
N° 3807 Colonia Escalon  
San Salvador, El Salvador

Lourdes Meyreles (lourdesmeyreles@hotmail.com)  
Facultad Latinoamericana de Ciencias Sociales  
Apartado 332-9  
Santo Domingo, Republica Dominicana

Dr. Betty Hearn Morrow (morrowb@fiu.edu)  
Department of Sociology and Anthropology  
Florida International University  
Miami, FL 33100 US

Audrey Mullings (audreym@caribsurf.com)  
Caribbean Disaster Emergency Response Agency  
The Garrison  
St. Michael, Barbados

Dr. Judith Soares (wand@uwichill.edu.bb)  
Women and Development Unit  
University of the West Indies  
Cave Hill Campus  
St. Michael, Barbados

