

## Communities Vulnerable to Disasters in the Metropolitan Area of Guatemala City

<b>Location:</b>	Guatemala City (Metropolitan Area)
<b>Date:</b>	1993-95
<b>Sector focus:</b>	Urban hazard risk reduction and neighborhood organizational capacity building (empowerment for the management of risks)
<b>Spatial focus:</b>	Neighborhood ( <i>barrio, comunidad</i> )

### Bibliographical reference

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Gisela Gellert, *Comunidades Vulnerables a Desastres en el Area Metropolitana de Guatemala*, *Desastres y Sociedad* 7 (1996), pp. 33-48. Available on the La Red web site [www.desenredando.org](http://www.desenredando.org).

### Abstract

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This was a participatory action research study of urban vulnerability to hazards. It had two phases and worked at two scales. First was a geographic study from secondary sources of the spatial distribution of vulnerability in the whole metropolitan area. A typology of settlements was developed and a clear correlation between vulnerability and location of informal settlements on the steep slopes of ravines. For example, the greatest damage from the 1976 earthquake was suffered in these kinds of informal settlements, much of it due to landslides. This first phase was complemented by field study in four informal settlements in different parts of the metropolitan areas (North, Center, and South). The second phase was action oriented, self assessment (*autodiagnostico*) in four neighborhoods (two of the earlier field sites and two more, one of these an old neighborhood pre-dating the modern city and the other a recent, peripheral settlement). In these four areas the neighborhood improvement committees (*Comite Pro-Mejoramiento*) were particularly active. Using this local institutional/ organizational base, and also building its capacity, a series of methods was employed (see below) that provided the basis for action plans.

This study will be of interest to all institutions facing precarious urban conditions and wishing to take an integrated, capacity building approach that focuses on mitigation and not simply response or preparedness to disaster.

### Technical description

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**Hazard/risk type:** Landslide, flood, earthquake, fires, environmental risks (water contamination, solid waste, and faulty drainage)

**Type of assessment:** (1) Macro scale, geographic overview of settlement pattern and type in the metropolitan areas and the vulnerability of their inhabitants to a variety of hazards; (2) Micro scale, neighborhood based self assessment of hazards and capacity, with an action orientation. N.B. economic vulnerability at the household level was not emphasized, rather physical vulnerability at the collective, neighborhood level was implicitly identified with the hazard occurrence (which in steep ravines may not be a false judgment), and heavy emphasis was laid on self help and organized lobbying for government and non-governmental assistance.

## **CRA process**

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Collection of background studies, maps, aerial photographs. Introduction of the project using still photography by community members as a first step. Focus groups to envision an improved neighborhood. Detailed discussions to map out concrete action steps.

**Methods used:** The so-called “entry tool” was still photography done by members of the neighborhood and discussed in focus groups organized by the Improvement Committees.

**Was livelihood analysis part of the process?** No.

**Was external specialist knowledge introduced?** Yes, the researchers passed on to the local committees background information collected from external sources such as environmental and socio-economic studies, maps, aerial photographs and held workshops on how to interpret and use them.

## **Vulnerability analysis**

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Little attention was given to household or individual level vulnerability in terms of income, age, health status, etc. Most attention was directed at neighborhood wide issues.

## **Capacity analysis**

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**Resources available:** *Financial resources:* project funding by IDRC, Canada; *human resources:* Flacso/La Red specialists; *Local financial resources:* most structural mitigation works such as retention walls and drainage works are funded by the national government and municipalities, often with external aid; *local human resources:* highly organized Improvement Committees, and volunteer labor power (although in the public works that build and maintain structural mitigation against landslide people are often motivated by the attraction of “food for work” under arrangement with the World Food Program). Voluntary labor for work to protect the slopes is limited by the fact that most residents have to work seven days a week in order to make ends meet and feed the family. Time constraint is a very serious problem.

**Limitations to capacity:** *At national and metropolitan level:* public finance and the distribution of foreign aid were (and still are) highly politicized toward the end of the civil war period. Areas of the city that support the ruling party are likely to get more assistance. *At local scale:* there can be competition and conflict among committees in the same neighborhood. Low educational levels and illiteracy is also a limitation, as is the conservative influence of powerful groups such as criminal gangs and land owners.

## **Action planning and implementation**

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**What actions were actually planned?** The three older settlements came up with the identical four top problems as a result of focus group work: solid waste, landslides, drainage, and weak social organization.<sup>1</sup> The group process of envisioning a better neighborhood (the Spanish word *sueño*, or dream, was used) produced concrete proposals and also considerable lists of the organizational steps required to implement these measures. The *measures* included solid waste collection,

improvements in drainage, leveling of house plots, and, in one case, construction of a bridge from one side of the ravine to the other. The *organizational steps* included mass public meetings at the neighborhood level, organizing parents, asking the church for assistance, and lobbying for assistance with the mayor's office.

**Were actions actually carried out?** Yes.

**Have these actions turned out to be sustainable?** After 10 years the Improvement Committees are less active. The project left responsibility for seeking funds to implement plans with the ad hoc committees. However, with the peace accords that ended the civil war in 1996, foreign donors focused on Guatemala's rural problems, not on the urban sector. Support for urban projects was difficult to find. Increased Guatemalan immigration to the U.S. meant that urban dwellers were more likely to use remitted income from family members working in the U.S. to seek individual solutions to urban environmental problems.

**Were there any unanticipated additional benefits of the actions?** Some young people involved in the project, especially the photographic side of it, may have become more interested in school and pursuing a professional career.

**Were there any unanticipated negative consequences of the actions?** Some conflict and tension among different Improvement Committees competing for scarce resources and for leadership (leading to political power).

**Limitations on action/ sustainability of actions:** High mobility of population in the neighborhoods, in addition to the limitations on capacity mentioned earlier, has limited the continuity of Improvement Committee activity.

## Indicators

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The project did not employ any indicators of outcomes.

## Contextual notes

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**Existence/ role of prior or contemporaneous conflict?** The civil war in Guatemala was only formally ended in 1996, so that this persistent and massive social and political reality will have influenced both the level of activity, militancy, and outspokenness of urban residents and their leaders.

**Role of displacement/ relocation?** Some of the residents of these neighborhoods, with the exception of Santa Cruz Chinautla which is an indigenous community of long standing, are likely to have been people displaced from rural Guatemala during the civil war in the 1970s and 1980s. Part of the population of some of these neighborhoods migrated into greater Guatemala City as victims of the earthquake of 1976.

**Role of prior disaster & prior recovery attempts?** There had been very catastrophic and traumatic signal events in the moderately recent past such as the 1976 earthquake. In addition, in one neighborhood there were frequent, small landslides and house collapses – a constant reminder of the hazard they face. By contrast, the most recently established settlement, only 4 years old at the time of the study, had not (yet) had an experience of a landslide, and in the other two it had been some time since an occurrence. Thus in these three settlements, focus groups tended to come up with a wider range of "community problems" that were not directly related to landslides and earthquakes – more related to environmental risks such as water contamination, solid waste, and bad drainage.

**Significant historical, geographic, economic, political, or cultural issues that influenced this instance of CRA and its consequences?** The historical growth of Guatemala City, rural exodus both because of disruption by the civil war and lack of sufficient employment and livelihood options

in the countryside are major factors in urban vulnerability in this country. The militancy that had resulted in the civil war in the first place also created a cultural of outspoken and active local organization, which was balanced with the fear of repression and assassination by death squads, especially in the early 1980s, when hundreds of local leaders, literacy teachers, priests, and doctors were killed.

On the positive side, ancient Maya values of group process and the importance of responsible leadership worked to the advantage of the CRA process, especially in the oldest, indigenous settlement.

## Strategic notes

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**How has this practice of CRA influenced change in policy and practice at the national level?** No.

**How has this practice of CRA influenced change in policy and practice at local level?** The participating Improvement Committees learned the methods of self assessment, problem solving, and action planning and were able to practice them independently.

**How has this practice of CRA influenced the level of organization and solidarity in the locality where it was carried out?** Yes, at least for some time.

**Less divided along class, gender, age, ethnic lines?** Women gained voice in the Improvement Committees.

**More divided along these lines?** No.

**Are the people living in this area more able to speak out on issues that concern them?** Yes, through the Improvement Committees.

**Have new civil society organizations been created directly or indirectly because of this practice of CRA?** No.

## Keywords

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Urban vulnerability, landslide, earthquake, solid waste, water contamination, neighborhood organization, structural mitigation, still photography as self assessment tool, action planning.

## Lessons learned

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- ◆ Visual media such as photography, especially when created and interpreted by the population itself, can focus attention and enrich a consultative process such as the “visioning” in the CRA project.
- ◆ The pressures and limitations on neighborhood level initiatives are strong and sustainability of project actions is extremely difficult and often limited to a short period of time.

## Resource person(s)

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<sup>1</sup> Priority lists diverged after the top four and included concern with lack of roads, insufficient recreational areas, political conflict, alcoholism, wild dogs, open sewers, dangerous electricity transmission wires, and upslope-down slope resident conflicts.