

COMMUNITY HAZARD MAPPING

Learning Exchange on Resilience in Honduras

July 18, 2008
Trujillo, Honduras



Twenty eight community leaders from Guatemala, Nicaragua and Honduras – primarily grassroots women - together with a large number of local residents gathered in Guadalupe to prepare a community map of this small hurricane prone coastal town in Honduras. This community hazard mapping exercise was part of a four-day, four-country learning exchange, sponsored by GROOTS International's Community Resilience Program and hosted by Comite de Emergencia Garifuna. The exchange was organized in response to demands from Latin American grassroots women who heard about community mapping in Jamaica at a regional planning meeting in Guatemala in March 2007 and asked to learn community mapping from the Jamaicans in order to understand how to reduce the impact of disaster in their communities. For several years, Construction Resource and Development Center in Jamaica has been training grassroots women to map their communities; and to use mapping as an organizing, learning and advocacy tool. Holding the exchange in Honduras with the Comite de Emergencia Garifuna as the host organization allowed visiting participants from disaster-prone areas from Jamaica, Guatemala and Nicaragua to see for themselves the destruction wreaked by Hurricane Mitch and community-led rebuilding efforts over the last ten years.

The exchange was opened by local authorities from Trujillo and surrounding *municipios* working in partnership with Comite. Some of the officials present had been part of the Comite initiated agricultural tool banks that had helped restore their farms after Mitch.

After participants shared that they were here to learn how they could do hazard mapping in their own communities, Carmen Griffiths provided an overview on community hazard mapping. She explained that community mapping was simply about putting community information into a picture and helping communities to collectively understand the 'big picture'. "Mapping is a tool to help communities express their needs," explained Carmen. "When people don't know how to communicate their own needs, outsiders come in and tell them what they need and what they should do."

On the second day participants were taken to Guadalupe to map this Garifuna community on the hurricane-prone Atlantic coast. The three member resource team - Marcia Christian, Annetta Campbell and Carmen Griffiths - guided participants through the exercise, emphasizing the importance of engaging local communities, gathering information on different kinds of buildings and structures and presenting this information on the map.

Two groups of participants set off in two directions to gather information on all those things that could be destroyed or damaged during a disaster. As they walked around, participants stopped to talk to local people about their experiences of disaster noting down buildings, sanitation pipes, drains, community centers, the health center, dance clubs and shops. They saw the area by the river most affected during the last hurricane. But for some, the most exciting part of the walk was the seed bank, which the Comite has created to protect agriculture and food security in the event of hurricanes or floods.

Safely located on higher ground away from the sea, the Guadalupe seed bank had over 25 varieties of indigenous, insect-resistant plants, including many varieties of yucca and plantains. This enables families from surrounding areas to take saplings to replant in their farms; and harvest yucca in the event of hurricanes or floods.



After walking through Guadalupe, exchange participants returned to their meeting place on the beach to prepare their map in the sand. As visitors began to mark the houses, the rivers and the seed banks, locals chimed in adding and correcting the map, saying “No, no, that house goes there, next to that shop” and “this is where the river flows.” By the end of the day the group was able to prepare a map using, twigs, pebbles, plants and paper, showing vulnerable houses, main roads, the cemetery, community spaces, the yucca mills, shops and the seed bank.

After the mapping exercise in Guadalupe, Marcia Christian from Jamaica reproduced the Guadalupe map on paper to help everyone to analyze the map and identify

vulnerabilities.

Vulnerability or “*vulnerabilidad*” was not a word that everyone felt comfortable using. People found it easier to speak in terms of weaknesses, insecure or unsafe conditions which increased the likelihood of destruction and damage in a disaster. Participants named all the elements that contributed to their vulnerabilities. They named structural factors - unsafe houses on the sea side, adobe housing and poor sanitation - that could be destroyed by disasters; as well as underlying economic, social and political realities that increased the likelihood of loss and damage. These included poverty, food insecurity, the lack of government subsidies for food crops, the lack of reliable information and the loss of indigenous languages leading to the loss of indigenous knowledge of plants. Like the word ‘vulnerability’, ‘resilience’ was also not a word that was unfamiliar to most participants. This meant that they did not associate any of their efforts with building resilience. As discussions, progressed however it gradually became clear to everyone that their efforts to secure housing, improve roads and sanitation, regenerate soil, create seed banks, ensure food security and negotiate with government are all connected to the ability of communities to survive and cope with disasters.

During their reflections, participants highlighted the role of mapping in creating information that was generated by the community members; for the use of the community. Ruth Serech an indigenous leader of a national rural women’s organization from Guatemala realized that instead of paying outsiders to map communities, women could map their own communities in order to understand their weaknesses and identify practices to address these.

She said, "I thought that mapping was a very technical process. But I see now that when communities do their own mapping, it is different."

Impressed by the Comité's efforts to sustain livelihoods and ensure food security through the seed banks and yucca mills used to make a bread that can last up to 2 years, Haydee Rodriguez, leader of a Nicaraguan Union of Cooperatives called Las Brumas found that it was useful to understand how mapping could help analyze vulnerabilities in the communities, but it would be important to involve other leaders, local authorities and religious people in this. She added that they were doing similar to the seed banks in the mountains of Nicaragua, but we are calling these seed banks 'green houses for reforestation.'

Evangelista Garcia, from a Garifuna community that has recently become part of the Comité, liked the idea of learning to make community maps that would enable communities to understand their weaknesses and organize to address these.

Another leader from the Comité said "People often talk about community mapping but no one shows communities how they can do it for themselves. Sometimes people come here and ask questions and take our knowledge to use in other places."

The Jamaican team also brought their experiences and insights to the discussion, Annetta Campbell from Mt. Vernon, Jamaica presented the process of mapping in her hurricane and flood prone community and explained how community mapping led her community to organize itself and collectively negotiate with local authorities to build footbridges and improve the infrastructure in their flood and hurricane prone community.

Carmen Griffiths drew attention to some points that everyone should keep in mind while mapping communities.

- Let communities teach us about their realities.
- Visit the community in advance to prepare them for mapping.
- Trust building is a central to the process. Trust is an important part of getting the community involved and mobilized as well as getting accurate information.
- Mapping one's own community is different from mapping others' communities.
- Start by mapping your own community and invite neighboring community leaders to watch and learn so that they go back and map their own communities.

Participants also had their own insights and lessons from the mapping exercise included:

- Look for community solutions to address problems – buildings, organizations, information,
- Use language and words that are easy for everyone to understand
- Include different points of views from inside and outside the community such as children, youth, elderly and local authorities

The final day of the four day exchange focused on learning from the experiences of the Comité. Exchange participants took a two-hour bus ride then a boat trip down the Aguan River to Santa Rosa de Aguan. This was among the communities worst affected by Hurricane Mitch in 1998. Participants walked around to see the remnants of broken buildings and abandoned houses on huge sand dunes and heard how the hurricane completely changed the landscape of Santa Rosa - huge tracts of land had been completely submerged by the rising waters and the two main streets had 'disappeared'. Everyone was taken aback by the level of destruction and awestruck by the ability of communities to survive the disaster and rebuild their lives. Guatemalans from the coast realized that this could easily happen to them.

After Hurricane Mitch, over 350 houses had to be relocated in a new area called La Planada, further upstream and away from the sea. The Comité raised funds from American Jewish World Service to buy land for relocation while the local authority had an agreement from the Government to fund the construction of 250 houses. But after the construction of 100 houses in the first phase, the local authority only received funds for 90 more of which 62 are now complete. Transporting construction materials to the new site of Aguan was a Herculean task and the skyrocketing transport costs resulted in reducing the size of houses, leaving families with one bedroom rather than two. Local authorities said that the community members had worked tirelessly, building canoes to transport

construction materials across the river and then carrying materials to the building sites. But they admitted that the reconstruction was far from complete. "For people to live in the houses they needed safe drinking water, sanitation, health clinics and electricity," said the Mayor.

When the visitors walked around the settlement they noticed that roofs were made of asbestos and weren't entirely hurricane-safe and much of the infrastructure was indeed incomplete. Carmen Griffiths observed that the water supply and sanitation were poorly designed and the water supply could easily get contaminated. Residents of the new settlement also reported that several people had been to stay behind in the old settlement in Aguan because this remote new settlement would not support their livelihoods. The authorities also confirmed that they did not have adequate water, sanitation or electricity for the settlement. In short it was evident that ten years after Hurricane Mitch, communities of Santa Rosa de Aguan are still recovering.

Early next morning before they embarked on their eighteen-hour bus journeys that would take them home to Guatemala and Nicaragua, exchange participants congratulated Comite on the work they were doing and shared some of the lessons they were taking home.

Dominga Cucul from the National Organization of Widows in Guatemala said that she had learned a lot from the mapping. " We have to use this (hazard mapping) to communicate our vulnerabilities to local authorities...I also understood which houses were safe and I saw some houses in the new community that were safe and some that were not safe. I also learned about seed banks and realized that these were living trees and plants not just seeds which had been collected and stored."

Inspired by the organization and the leadership she had seen in the Comite's work, the President of the Fishers' Federation in Guatemala said the exchange had taught her that "it is not enough to know how to draw a map of the community, we have to understand the community's history, their context, and their struggles and how they survived the hurricane.

As governments lay out their plans for implementing the Hyogo Framework of Action they need to move away from the idea that disaster-prone communities are passive beneficiaries of programs and resources. Rather, governments must invest in collaborations with organized groups of grassroots women and their communities to strengthen and scale up their rich repertoire of resilience practices.

