

Vulnerability Assessment Techniques (VAT) IV Workshop

November 29-December 1st, 2004 New Orleans, Louisiana

Overview

From Nov 29th to Dec. 1st, 2004, OAS co-sponsored with the Caribbean Bank for Development (CDB), the National Oceanic and Atmospheric Administration Coastal Service Center (NOAA CSC), and the Louisiana State University (LSU) the organization of the fourth Workshop on Vulnerability Assessment Techniques (VAT VI), which was held in New Orleans, Louisiana.

The participants ranged from International Organizations (IO), Non Governmental Organizations (NGOs), International Financial Organizations, US federal agencies, and Private sectors. The format of the workshop constituted of successions of case study presentations followed by panel discussions, and Panel/Working group exchanges. The workshop adjourned with a trip to the Grand Bayou Community, where the participants were able to get a practical understanding of a coastal community' vulnerability to risk, and most importantly to have the community's view and assessment of the risks they being faced. OAS has been in charged of moderating the study presentation and discussion on Coastal Vulnerability Assessments and Micro Vulnerability Assessments, and the Panel/Working Group exchange on the International Financial Institutions and Use of Vulnerability Assessment in Developing lending: Strengths, Weaknesses, and Future Tools Needs. The report will summarize the outcomes of these three sessions along with highlights of the others sessions. Copies of the agenda of activities and the participant list are annexed to this report.

Session 1:

Case study Presentation and Discussion on Coastal Vulnerability Assessments

The presentations and discussions highlighted the needs to:

1. Designing and coming up with efficient implementation mechanisms when developing building codes, as a means for achieving vulnerability risk reduction;
2. Making available post disaster easy-access information documents for rebuilding efforts such as the ones prepared by OAS under a World Bank Contract which are being distributed and used as of now in the rebuilding efforts in Grenada;
3. Integrating the community's perception of risk in the design and implementing of vulnerability risk reduction interventions, so that both policy makers and targeted communities are speaking the same language.

4. Facilitating and integrating capacity building mechanisms in vulnerability assessments and risk reductions activities, as a means for long term sustainability; and
5. Promoting Hazard Mitigation Practices as means for reducing community's vulnerability to natural Hazard.

Session 2:

Case Study Presentations and discussion on Micro Vulnerability Assessments

The panel discussion focused on the following issues:

1. The consultancy hiring process by Regional and International Financial Institutions give preferences to International Consultants over regional/local ones. As a response, CDB argued that lack of regional qualified consultants is an issue whenever the bank needs to conduct a research or implementation a technical intervention. As a result they often have to contact international consultants;
2. Needs to reconcile parameters used by governmental agencies and the insurance industries in producing indicators for vulnerability assessments; and
3. Reliability of the results produced by software used in micro vulnerability assessment study- Accuracy and usefulness in predicting and avoiding human and economic losses not always guaranteed.

Session 3:

Case study Presentation and discussion on Macro Vulnerability Assessments

Software and tools used in macro vulnerability assessment were presented in that session. Special attention was paid to the use of HAZUS and its potential applications. A demonstration of the software capabilities was convened the following day at 7:30 PM, in response to the high demand from the participants. The issue of having hazard assessment tools that are supply driven as opposed to demand driven has been highlighted.

It was also argued that it is desirable to have the tools design as response to identified vulnerability assessment needs, so that the data are already available for processing, instead of having the software for which data have be generated in format that do not always reflect the rationality and finality of the assessment needs under consideration. The choice of units of analysis that are representative of the community and vulnerability being assessed is crucial in producing assessments that takes into account the communities.

Session 4:

Case study Presentation and Discussion on Earthquakes Vulnerability Assessments

The engineering and socio-economic approaches for assessing buildings vulnerability to Earthquakes, and community to natural disaster in general were the focus of that session. Successful Implementation of building codes is important in of primary importance in achieving successful hazard mitigation measures. The rational behind the success of building codes implementation in French Caribbean, as opposed to Eastern Caribbean Islands, has been flagged- it is being attributed to the fact that loses from disaster are completely absorbed by the insurance sector, which is required to internalize all costs for rebuilding of ensured houses for the first 10 years after construction. Also, the professionalism and prestige of the land management office contribute to that success as well, as there are less room for corruption from inspectors who are quiet well paid. Once again, the need to take into account community's view of vulnerability risk assessment needs has been revisited in that session. Disaster Manager Specialist should avoid assuming that technology for using and getting information from Hazard Vulnerability Assessment tools are available in all communities.

Session 5:

Panel Discussion on International Financial Institutions and Use of Vulnerability Assessment in Development Lending: strengths, weaknesses, and future tools needs.

Prior introducing the panelists, Steven Bender, the moderator of the OAS, flagged the general context in which disaster management practices are being framed today. International Organization, as well and International Financial Institutions, are dealing with Units of sovereign countries which are mostly democratic, which implies more involved processes to come up with a communally acceptable approach to deal with any identified hazard related issue requiring national, regional and international consensus. The new socio-economic arrangements among nations resulting from globalization initiatives constitute new challenges for hazard risk managers and the implementation of hazard mitigation practices.

Representative from The World Bank (WB), the Caribbean development Bank (CDB) and the Central American Development Bank (CADB) made a brief presentation on the approach being used by their respective institution to address issues associated with disaster management.

The CDB representative exposed the institution's approach in addressing vulnerability risk reduction initiatives in the 30 member countries as constituting in:

1. Generating macro vulnerability indices in order to establish member Countries' profiles;

2. Adopting a country specific approach involving close relationship with each member countries in order to ensure their complete adherence and integration to the vulnerability risk reduction programs being implemented;
3. Promoting sustainability in Project Design and Implementation; and
4. Integrating the concerns of climate changes into vulnerability risk reduction initiatives.

The WB vulnerability risk reduction approach relies on:

1. Activating the so called ERDMP: Emergency Recovery Disaster Management Program, which is a 5 years max program, for which implementation has to be triggered by a disaster event such as Hurricanes devastation in Grenada and Haiti;
2. Maintaining a balance between disaster management needs and other sector of economic development; and
3. More recently, due to increase need for vulnerability risk reduction initiatives specially in the Caribbean region, the approach has evolved toward :
 - a. Facilitating the use of risk transfer mechanisms for disaster losses sharing;
 - b. Re-designing new financial tools to address the increase needs for disaster mitigation and emergency responses in the region;
 - c. Implementing contingency financing loans mechanisms; and
 - d. Holding vulnerability risk management and disaster management in general as an integral sector of developmental such as health, communication, and education.

The representative of the Central American Development Bank (CADB) explained that integration of vulnerability risk reduction concerns into the institutions practices is a priority and steps toward its full integration in the Back management practices are being undertaken.

The discussion séance following the panelists' brief presentation highlighted the following:

1. Disaster Management is elevated to the rank of sectoral planning such as health, and education, as stated by the WB representative;
2. Application of Bank's guidelines associated with disaster Management and implementation when octoying loans are necessary in order to reach expected outcomes; and
3. Facilitate integration of Disaster mitigation practices by establishing trust funds and grants for supporting the implementation of disaster mitigation related activities in member countries: LICUS for the WB and DMFC at CDB.

Session 6:

Panel/Group on the Experiences in Recent Hurricane Events

The following issues were highlighted:

1. Weakness of the insurance sector in Eastern Caribbean countries, as a cause of the chaos being registered in the rebuilding sector in post Ivan Grenada;
2. Non efficiency of the financing management for pools and electrical wires transportation, as a probable explanation for the complete absence of communication channels in the first days of Post Ivan Grenada;
3. Lack of education and training for the new generation of Caribbean disaster managers- the early training sessions were organized by the OAS, and go back more than 10 years ago- the clear need for re-education and training has been flagged considering that high level of staff turnover in the region;
4. Need to establish early warning mechanisms for the Caribbean, as the station previously based in Miami that used to emit early warning message to the region no longer exist- the clear need to establish a regional early warning system is of primary importance; and
5. Post Ivan Caiman Islands represents a more critical situation than depicted in the media- More than 80% of the islands have been affected, and mention of that situation is merely made public about that in the region. It is "the best kept secret" in the region- to repeat Tony Gibbs. In fact, one needed a presidential permit to be able to get to the island in the early day after the disaster.

Session 7:

Panel and Working Group on Hazard Mitigation Plans: The experiences, Incentives and Lessons Learned.

The following issues/ trends in the hazard migration sectors have been flagged:

1. Need to integrating universities into the hazard mitigation planning and policy practices;
2. Need to exercise caution in using Cost Benefit Analysis in vulnerability assessment interventions- non market valuation of environmental amenities is elaborated exercise;
3. Paradigm Shift in hazard mitigation practices from natural Hazard Management to climate risk management- hence need to integrate hazard mitigation policies and planning into climate risk initiatives is of primary importance.
4. Need to integrate vulnerability assessment practices into Ex-Post project Assessment in the Caribbean region- as being done at the IDB; and
5. Promotion of capacity building and institutional strengthening as means for achieving meaningful hazard mitigation programs.

Summary, Conclusion and Commitments:

Cassandra T Rogers of CBD, after providing an overview of the main points that have been addressed in the 2 days workshops, their relevance to the Caribbean region, and prospects for the upcoming VAT, invited the public to express their opinion about the workshop.

Russell from NOAA noted the lack of NGO representation at the VAT, which are according to him the real end users of VAT techniques and practices- he also argued for the need to ensure sustainability in designing Hazard vulnerability assessment tools.

Steven of The OAS exposed the future prospects of the VAT initiatives for the upcoming 5 years – Opportunities to have in the near future a South Asia VAT in association with Focus Humanitarian International is under consideration- A bi-annual VAT is also a possibility.

Jessamy from Jetco Caraibe flagged the need to integrate Vulnerability Risk into the long term framework of Climate Changes- And

Carlos of UNESCO advised about producing new Vulnerability Assessment tools while many of the tools available are not really accessible to the public as of now- Hence a need for standardization in data gathering and creation is needed to ensure usefulness of the materials being created.

There being any further business, Cassandra, chairperson of that final session, declared the VAT IV Workshop adjourned.

Agenda

Vulnerability Assessment Techniques (VAT) IV Workshop November 29-December 1, 2004 New Orleans, Louisiana Marriot (Canal Street) Meeting Room Gallerie 5

Organizers: Caribbean Development Bank (CDB),
NOAA Coastal Service Center (CSC), and Office for Sustainable Development and
Environment Organization of American States (OAS)

Local Organizer: Louisiana State University (LSU) Hurricane Center

Time	Title, Objective, Activities
Day 1: Monday, November 29	
Morning	Registration Opens at 11 a.m.
1:00 p.m. 20 min.	<p>Opening Ceremony: Introductions, welcome, objective review, and housekeeping</p> <p><u>Activities:</u> 1. Opening Ceremony – LSU, CDB, NOAA CSC, OAS (5 min. each)</p>
1:20 p.m. 20 min.	<p>Self Introduction of Participants</p> <p><u>Activities:</u> Round-robin introductions: Name, agency/organization, location, one sentence statement on what one wants to contribute to and take from the workshop.</p>
1:40 p.m. 15 min.	<p>Introduce Agenda</p> <p><u>Activities:</u></p> <ol style="list-style-type: none"> 1. Review workshop structure: <ul style="list-style-type: none"> • 16 Case study presentations of vulnerability assessment methodologies that have been applied in real-life case study scenarios. Focus will be on the outputs, results, and lessons learned. Additional information about the case studies will be provided during the poster session, and case studies are available on the Vulnerability Assessment Techniques and Applications (VATA) Web site. • 30 minute Q&A period at the end of the each case study presentation session. Please hold comments until after all

	<p>presentations have been made.</p> <ul style="list-style-type: none"> • 3 Working Sessions will include the identification of <ol style="list-style-type: none"> 1) Strengths, weaknesses, and future research needs of vulnerability assessments 2) Primary users, barriers, motivators, and opportunities to increase the application of vulnerability assessments 3) Workshop participant development of strategies and action plans for increasing the use of vulnerability assessments. <p>2. Posters will be available to view during breaks and lunch</p>
<p>1:55 p.m. 20 min.</p>	<p><i>Break</i></p> <p>Break and Poster Session</p>
<p>2:15 p.m. presentations 60 min.</p> <p>3:15 p.m. panel session 30 min.</p>	<p><u>Session 1: Case Study Presentations and Discussion</u></p> <p><u>Title: Coastal Vulnerability Assessments</u></p> <p><u>Activities:</u></p> <ol style="list-style-type: none"> 1. Moderator introduces presenters and leads discussion. 2. Four case study presentations (15 min. each) 3. Q&A session (Repeater to record) <p><u>Presentations:</u></p> <ol style="list-style-type: none"> 1. Omatoyo Kofi Dalrymple, Guyana - Assessment of Physical Vulnerability of Vreed-en-hoop and Good Hope on the Coast of Guyana 2. Valma Jessamy, JECO Caribbean – Modeling Community Response Lessons: Learnt from Hurricane Lenny (Eastern Caribbean) 3. John C. Pine, Louisiana State University – Grand Bayou Louisiana: Coastal Vulnerability and Community Sustainability
<p>3:45 p.m. 20 min.</p>	<p><i>Break</i></p> <p>Poster Session</p>
<p>4:05 p.m. presentations 60 min.</p> <p>5:05 p.m. panel session 30 min.</p>	<p><u>Session 2: Case Study Presentations and Discussion</u></p> <p><u>Title: Micro Vulnerability Assessments</u></p> <p><u>Activities:</u></p> <ol style="list-style-type: none"> 1. Moderator introduces presenters and leads discussion. 2. Four case study presentations (15 min. each) 3. Q&A session (Repeater to record)

	<p><u>Presentations:</u></p> <ol style="list-style-type: none"> 1. Eduardo Reinoso, Institute of Engineering, UNAM – Seismic and Hurricane Risk Assessment for Portfolios and Individual Buildings and Industrial Structures 2. Raymond Charles, University W. Indies, St. Augustine – Vulnerability of Coastal Roads in Trinidad and Tobago 3. Jae Park, PBS&J, Raleigh, North Carolina – Natural Hazards Vulnerability Assessment for the State of South Carolina.
5:35 p.m.	<p>Adjourn</p> <ol style="list-style-type: none"> 1. Relay information about evening event.
6-8 p.m.	<p>Evening Function at Liborio Restaurant (In walking distance) Sponsored by the Organization of American States Hors d'oeuvres and Cash Bar</p>
<p>Day 2: Tuesday, November 30</p>	
<p>8:30 a.m. presentations 60 min.</p> <p>9:30 a.m. panel session 30 min.</p>	<p><u>Session 3: Case Study Presentations and Discussion</u></p> <p><u>Title: Macro Vulnerability Assessments</u></p> <p><u>Activities:</u></p> <ol style="list-style-type: none"> 1. Moderator introduces presenters and leads discussion. 2. Four case study presentations (15 min. each) 3. Q&A session (Repeater to record) <p><u>Presentations:</u></p> <ol style="list-style-type: none"> 1. Kyle Beatty, Risk Management Solutions – Applications of Satellite Imagery in Assessing Vulnerability and Damage Assessment: Examples from Hurricanes Fabian and Isabel 2. Brock Long, FEMA Region IV – Hurricane Evacuation Studies/ Working Towards a New Process 3. Bryan Boruff, Hazards Research Lab, Department of Geography, University of South Carolina - A Multiple Hazards Assessment of Two Caribbean Nations: Barbados and St. Vincent 4. Peter Vickery, Applied Research Associates - Use of HAZUS at the federal level to advise FEMA and the President's Chief of Staff on the

	potential damage from Charley and the other hurricanes in the 2004 hurricane season
10:00 a.m. 20 min.	<i>Break</i> <i>Break and Poster Session</i>
10:20 p.m. presentations 60 min. 11:20 a.m. panel session 30 min.	<u>Session 4: Case Study Presentations and Discussion</u> <u>Title: Earthquake Vulnerability Assessments</u> <u>Activities:</u> <ol style="list-style-type: none"> 1. Moderator introduces presenters and leads discussion. 2. Four case study presentations (15 min. each) <ul style="list-style-type: none"> • Background (3 min.) • Outputs, results, and lessons learned (12 min.) 3. Q&A session (Repeater to record) <u>Presentations:</u> <ol style="list-style-type: none"> 1. Tony Gibbs, Consulting Engineers Partnerships, Ltd – Rapid Assessment of Structural Vulnerability to Seismic Actions 2. Carlos A. Villacis, University of California, San Diego – UNESCO Disaster Reduction Program for Tijuana, Mexico and Antofagasta, Chile 3. Carla Prater, Hazard Reduction & Recovery Center, Texas A&M – Socioeconomic Vulnerability to Earthquakes in the Mid-American Region 4. Jaime Argudo, Universidad Catolica de Guayaquil – The RADIUS Project in Guayaquil-Ecuador
11:50 p.m. 90 min.	<i>Lunch on site (Gallerie Room 1)</i>
1:20 p.m. 90 min.	<u>Session 5: Panel Discussion</u> <u>Title: International Financial Institutions and Use of Vulnerability Assessments in Development Lending: Strengths, Weaknesses, and Future Tools Needs</u> <u>Panelists:</u> <ol style="list-style-type: none"> 1. Yvonne Moses-Grant, Caribbean Development Bank 2. Ary Avila, Central American Bank for Economic Integration 3. Maryse Gautier, The World Bank

2:50 p.m. 20 min.	Break
3:10 p.m. 90 min.	<p><u>Session 6: Panel/Working Group</u> <u>Title: Experiences in Recent Hurricane Events</u></p> <p><u>Panelist:</u></p> <ol style="list-style-type: none"> 1. Brock Long, FEMA Region IV 2. Valma Jessamy, JECO Caribbean 3. Mike Harden, Emergency Manager Escambia County, FL 4. Phillip Hinesley, Alabama Coastal Zone Management 5. Peter Vickery, National Institute of Building Sciences
4:40 p.m. 20 min.	<p>Adjourn</p> <ol style="list-style-type: none"> 1. Relay information about evening event.
6-8 p.m.	<p>Evening function at the Marriot Hotel Sponsored by the Caribbean Development Bank Hors d'oeuvres and Cash bar</p>
Day 3: Wednesday, December 1	
8:30 a.m. 90 min.	<p><u>Session 7: Panel/Working Group</u></p> <p><u>Title: Hazard Mitigation Plans- The Experience, Incentives, and Lessons Learned</u></p> <p><u>Panelist:</u></p> <ol style="list-style-type: none"> 1. Barbara Schauer, National Institute of Building Sciences, Washington, D.C. 2. Joyce Thomas-Peters, Department of Health and Welfare, British Virgin Islands 3. Jae Park, PBS&J, Raleigh, North Carolina
10:00 a.m.	Break
10:20 a.m. 60 min.	Summary, Commitment, and Conclusions

	<p><u>Activities:</u></p> <ol style="list-style-type: none"> 1. CDB, NOAA CSC, OAS, and LSU to present summaries on the key points from the case study and working sessions 2. Audience to state what they have got out of the workshop 3. Attain commitments from individuals/groups to further the development of the strategies and action plans and establish a timeframe for doing so 4. Collect Evaluations 5. Discuss field trip logistics
11:20 p.m.	Adjourn (<i>box lunch provided</i>)
1:00 p.m.	Field trip to Grand Bayou (<i>dinner provided</i>)

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