

William E. Bertrand, Payson Center Tulane University Co-Director CDMHA, Tom Mason, Co-Director USF Guatemala 11/14/2001

### The Center for Disaster Management and Humanitarian Assistance (CDMHA)

is a **joint program** of:

**Tulane University** and the



# University of South Florida in partnership with United States Southern Command



## **Mission of CDMHA**

Facilitate civil-military operations and cooperation by:

- Development and implementation of education and training programs in disaster and crisis management
- Applying state-of-the-art communication and information technologies to support disaster/crisis managers, technicians and field personnel
- Catalyzing improvements in disaster management through organizational networking and research



# **Information Management**

- Collaborate in the development and design of a Virtual Information Center (ALERTAR)
- Provide customized situation reports and briefs
- Develop new information tools to support disaster and humanitarian assistance
- □ Support the development of a critical assets database
- Develop and maintain a comprehensive regional resources contact database
- Develop Geographic Information System (GIS) tools and networks for managing complex problems



### **CDMHA Humanitarian Assistance Database**



CDMHA Home

Text Search

Map Search

Log In

### **CDMHA Humanitarian Assistance Database**

Welcome to the CDMHA Humanitarian Assistance Database (HADB). Our purpose is to create and maintain a public domain database containing contact and reference information pertaining to humanitarian assistance and disaster mitigation for the regions of Latin America, Caribbean, and South America. Using this database, we hope to speed the process of humanitarian assistance and disaster mitigation to countries in need.

### Map Search

A map of the regions of Latin America, the Caribbean and South America. By clicking on a country, relevant contacts and media will be displayed.

#### Text Search

Search for contacts and media by location, skill set or disaster.

Payson/USF members can log in here.



Search Form Search For Contacts Documents he (for Contact search) First Name	Last Name:	Search for Contacts and Documents by Name
Document Title (for Document search)	Location      Country:     Antigua and Barbuda     Argentina     Aruba     Bahamas, The	
Location, or Disaster Type	Disaster Type Hurricane Earthquake Tornado Tsunami	



# **Training and Education**

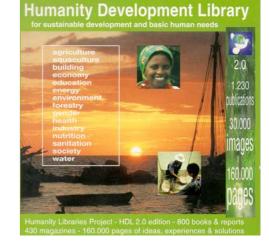
- Develop computer-based, software products with the purpose of strengthening regional institutional capacity in responding to critical events
- Establish certificate, undergraduate and graduate programs in disaster management and complex human emergencies through a consortium of universities
- Develop residential and distance short courses to enhance civil-military readiness



### Libraries

### **Human Sustainable Development Library**

- Considered one of the finest development libraries in existence
- **1230** publications, 160 000 pages
- **English**, French
- All information is contained on a single CD-ROM, also available via the web <u>http://www.humanitylibraries.net</u>



- Other libraries: Food and Nutrition Library, Medical and Health Library, World Environmental Library
- This was assembled by Payson Center faculty member Dr. Michel Loots.



### Networking

- Communicate and coordinate regularly with regional institutions engaged in crisis mitigation and response
- □Collaborate and sponsor quality research and training
- Produce appropriate data based documentation for training and development missions in collaboration with public and private sector
- Participate in relevant conferences and seminars on information management and civil military partnerships









# **Readiness Enhancing Research**

- Anthropological research on community and individual coping behaviors related to environmental stress and natural hazards
  Policy and institutional research on constraints to preparedness, mitigation, response and recovery
- □Information technology and its application to disaster response improvement (including GIS applications)
- Research on just-in-time training effectiveness and presentation
- □Research on material and processes
- □Research on medical aspects of disaster response
- Research on disaster mitigation and prevention



# **Initiatives:Early Warning**

- Early warning and risk assessment methods
- Early warning/forecasting research, flood modeling feasibility study in Central America
- Continuation of epidemic forecasting research
- ■Social science research, comparative case study research on lessons learned from response and mitigation efforts related to Hurricanes George/Mitch
- Completion of Information and Training Needs Assessment



### Disaster Early Warning Systems

- National Earthquake Information Center
- Tropical Storm Watch
- El Niño Resources: Theme Pages
- Famine Early Warning System (FEWS)
- Forum for Early Warning And Early Response (FEWER)
- Global Information and Early Warning System (GIEWS)
- HazardNet
- International Crisis Group
- European Platform for Conflict Prevention and Transformation
- Minorities at Risk Project
- Stockholm International Peace Research Institute
- Refugees International
- Almanac Characterization Tool (ACT)



Implications of Moore's Law for Disaster Response and Mitigation

- Huge input of new data to the response and early warning environment.(World Data total doubling every 3-5 years)
- Advances in every scientific discipline are being driven by information tech.(NSF)
- Communication on almost every subject is near real time therefore its form and structure is important.



Vulnerability Reduction is the Path to Sustainable Healthy Development

(from the recent Kobe Conference) Vulnerability reduction is a set of strategies and actions for communities to prevent risks developing into emergencies and emergencies into disasters



## The Three Laws of Robotics

(Asimov, Isimov "Runaround" Astounding Science Fiction, March, 1942)

1.A Robot (information system) may not injure a human Being, or through inaction, allow a human being to Come to harm.

2. A robot (information system) must obey the orders Given to it by human beings except where such orders Would conflict with the first law.

3. A robot must protect its own existence as long as such Protection does not conflict with the First or Second Law.

The "Zeroth Law" A robot may not injure humanity, or Through inaction, allow humanity to come to harm.

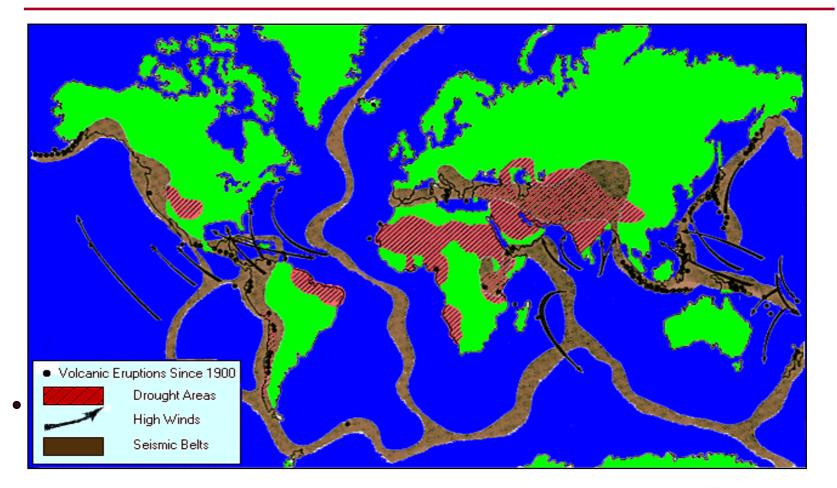


# SES by Mortality - The Titanic

- Adult Males Adult Females Children Total
- SES N Death Rate N Death Rat
- •High 173 66.5 144 3.5 5 0.0 322 37.3
- •Middle160 91.9 93 16.1 24 0.0 277 58.5
- •Low 454 87.9 179 45.3 76 71.1 709 75.3
- •Un 875 78.4 23 8.7 0 898 76.6
- •Total 1662 81.0 439 23.5 105 51.4 2206 68.2



# Disasters Causes and Effects:We Know Where They Will Happen





# In summary, the CDMHA...

- Fosters trusted partnerships among the disaster response and humanitarian assistance communities
- Leverages communication/information technologies to strength decision support related to disasters and environmental security threats
- Strengthens the readiness of civil and military organizations through traditional and non-traditional education and training programs
- Contributes to evolving standards in readiness and response through quality research