

# GEOHAZARDS INTERNATIONAL

A Nonprofit Working Toward Global Earthquake Safety

## GHI Newsletter – December 2008

Dear Members and Friends of GHI:

Once again the time has arrived for our reflection on this year's accomplishments and for projecting our hopes for the coming New Year. We look back on a year that included the tragic loss of more than 19,000 children who died when their schools collapsed last May in Sichuan Province, China. In the weeks that followed, the challenge emerged for us to focus on how we might best offer help to reduce future risk there as rebuilding occurs. Right through the final weeks of 2008 we will undertake new outreach efforts in southeast and central Asia that apply GHI's message and mission *to reduce death and suffering due to natural disasters in the world's most vulnerable communities through advocacy, mitigation, preparation and prevention*. We look forward to partnership building with corporate and philanthropic leaders in Hong Kong at the Clinton Global Initiative Asia in early December, followed by meeting with representatives from ECO (the Economic Cooperation Organization) in Tehran to explore a multi-nation project for improved school seismic safety in 10 Islamic member countries of ECO.

We are grateful for the support given to GHI in 2008 by individuals, foundations, corporations, government agencies and other nonprofit organizations from around the world. Particularly important contributions to GHI were made by the Bechtel Group Foundation, the Catalyst Foundation, The Flora Family Foundation, OYO Corporation, Swiss Re and USAID. We are encouraged by strong support from several family foundations, including the Branscomb Family Foundation, the Ishiyama Foundation, the Klehn Family Foundation and the Simons Foundation. If you are aware of a foundation with giving guidelines that would be a good match for GHI, we would be grateful to receive this information: your help could strengthen our fundraising effort significantly.

Our GHI Board of Trustees has been strengthened this year by the addition of Thomas O. Brennan. Tom brings over 30 years experience in humanitarian and developmental interventions. His in-depth knowledge of Southeast Asia and extensive background in cross-cultural settings adds extraordinary expertise to the Board.

The year 2009 promises new and energizing opportunities for GHI to build, as stated in our Vision, *a world of self-reliant communities that can continue their economic, political and cultural development unimpeded by natural disasters*. We will continue our team efforts to bring better tsunami preparation to the people of Sumatra. We will continue our work with Pakistani structural engineers to strengthen earthquake engineering curricula and training in Pakistan. We will support the Tibetan community-in-exile in Dharamsala in its effort to seismically strengthen the Library of Tibetan Works and Archives while also continuing our work there for school disaster planning, including school earthquake drills.

You—GHI's members and friends—make our work possible through your support. Given the current economic climate, our request for your support comes even as we, like other philanthropic organizations, face exceptional challenges. We are grateful to those who contributed in 2008 and we hope that all of you will be able to join or renew your association with GHI for the coming year by returning the enclosed membership form with your tax-deductible gift. May you and your families enjoy a peaceful and safe Holiday Season.

Sincerely,



Brian Tucker, President

## GHI in the Field: Focus on School Safety

### Building Capacity Project Succeeds at School in Delhi



Ludlow Castle School is one of five lifeline buildings selected for retrofit design in GHI's USAID-funded project *Building Capacity to Reduce Earthquake Risk in India*. Since the project began in 2005, this school has developed comprehensive awareness and evacuation plans, conducted preparedness drills, and undergone structural retrofitting. Recently designated by the Government of Delhi as a "model safe school," it now serves as the prototype for activities that will be replicated in nine additional schools, one from each school district in Delhi: all will receive technical support from GHI.

Mr. B. K. Sharma (left), the school Principal, wholeheartedly supports GHI's work with his school and states: "Everyone builds a beautiful home, but if the home is not safe for the occupants, it loses its beauty. Thanks to this project, my school is now a safe home for all the 2,000 children studying under its roof and hence is the most beautiful school."

### GHI Helps Tibetan Schools Prepare for Earthquakes

When the drums began to roll on September 27 at the Gogalpur School in Dharamsala, students took protective cover beneath their desks. When the drums stopped beating a full minute later, the students filed out onto the school grounds, protecting their heads with their hands, where the teachers checked to be sure all had evacuated safely. GHI's Tsering Dhundup worked with the School Disaster Management Committee to plan and carry out the drill as part of the earthquake risk reduction program supported by the Library of Tibetan Works and Archives (LTWA) and GHI.



Situated in Zone V, the highest risk level of the seismic zoning map of India, Dharamsala's precarious location makes school earthquake safety awareness and planning a top priority. GHI will extend its earthquake safety effort to more at-risk Tibetan schools in the coming year.

### GHI Trains Bechtel Employees for School Safety in Gurgaon, India

One year ago Bechtel Corporation and GHI launched an innovative partnership that has resulted in improved school earthquake safety at the Gyan Devi School in Gurgaon (near Delhi), India. From Bechtel's 3,000 employees in Delhi, 25 volunteers were selected to be trained by GHI as earthquake safety advocates in the local community.

After weekend training sessions held in March 2008, GHI and Bechtel presented the earthquake safety message to students, teachers and parents over a three-day period in May 2008. Delhi Disaster Management Authority, GHI's partner in school earthquake safety efforts in Delhi, provided additional resource materials for parents and visitors. Bechtel is pleased that the project boosted employee morale, while serving the community. Inspired by this initial effort, the Bechtel-GHI team plans to work in additional schools in the Gurgaon area.



GHI-trained Bechtel employees demonstrate shake table to students in Gurgaon.



# GHI at Home: Fostering Dialogue and International Exchanges

## Progress in Pakistan Project

The second year of GHI's collaborative project with higher education institutes in Pakistan (*Building Pakistan's Capacity for Instruction, Research, and Practice in Earthquake Engineering and Retrofit*) moved forward in 2008 through exchange visits by colleagues from the US and Pakistan.

In November 2008 a team of 15 Pakistani engineering educators spent a week in California to learn more about current practices in the US, including visits with colleagues at Stanford University and the University of California, Berkeley.

When the multi-year project is completed, the engineering curriculum at major universities and other institutions in Pakistan that train future engineers and architects will include practical, case-study based course materials. These materials, developed in the project, will teach practitioners about the assessment and seismic retrofit of buildings. The entire earthquake engineering curricula at partner institutions in Pakistan will also benefit from the peer assessment included in this collaborative project funded by USAID.



Prof. Steve Mahin, UC Berkeley, explains his shaking table research to Professors S.F.A. Rafeeqi (in red cap) and Sarosh Lodi (second from right) of NED University of Engineering and Technology in Karachi, Pakistan.

## China Delegation Visits GHI

A delegation of eight legislators from Beijing, China, visited GHI on October 20 to learn about GHI's effort to improve earthquake risk management in developing regions. As a response to the Sichuan Province earthquake in May 2008, the legislators have been charged with rewriting Chinese laws that regulate earthquake risk management.



While in the US they met primarily with US federal agencies responsible for earthquake risk management in the United States. At GHI, Tom Tobin informed them about the history of California's earthquake risk management and Brian Tucker explained how GHI could help now in China.

## Patra Dewi of Indonesia's KOGAMI (Tsunami Alert Society)



Patra Dewi from Padang, Indonesia visited California in April, 2008 to present the work and history of her innovative non-profit organization, KOGAMI, to GHI Trustees (see photo) and staff members. Founded after the 2004 Indian Ocean Tsunami, KOGAMI educates citizens of West Sumatra and other earthquake and tsunami endangered areas about disaster preparedness. GHI is planning cooperative efforts with KOGAMI to improve tsunami awareness and preparation in Sumatra.

# GHI Friends and Colleagues

## GHI's November Conversation

GHI's Board of Trustees hosted the first in a series of Conversations with Brian E. Tucker on the evening of November 6, 2008. Members and guests heard GHI's Board Chair, George Mader, and Brian speak about the mission, current projects, and future expectations of GHI. These Conversations serve both to update current supporters and to introduce prospective supporters to the mission and work of GHI.

GHI plans to host more Conversations in 2009. Please check our website for notices on these and other GHI events!

If you would like to receive advance notice of Brian's appearances in your area, write to [info@geohaz.org](mailto:info@geohaz.org), with **BET on the Road** in the Subject line.

## GHI Sponsors SSA Members in At-risk Regions

As a new corporate member of the Seismological Society of America (SSA), GHI will sponsor three international colleagues as SSA members. GHI applauds and supports the efforts that they are making to improve earthquake safety in their respective regions.



Febrin Anas Ismail, shown (seated) with students, is a professor of civil engineering at Andalas University in Padang, Indonesia. Prof. Ismail assists the provincial government with earthquake and tsunami disaster management and reports that he and his colleagues try "to change the Government mindset from responsive to managing disaster by doing activities more in mitigation. We try to convince them that the cost of mitigation is only 1/60 from the cost of rehabilitation and reconstruction."

Sarosh Hashmat Lodi, shown (at left in photo) with a colleague, is a professor of civil engineering at NED University of Engineering and Technology in Karachi, Pakistan. He has worked in the field of earthquake engineering for more than 20 years. Prof. Lodi serves as a team leader in GHI's current collaborative project with NED University and other institutions in Pakistan that train future engineers and architects.



Din Muhammad Kakar, Assistant Professor of Geology at the University of Balochistan in Quetta, Pakistan, brings 20 years of research in sedimentology to his more recent earthquake studies. Prof. Kakar (at center in photo), stresses the need for improved earthquake safety measures in the region: he explains how "the peculiar geomorphology of Balochistan, its inaccessibility, low level of literacy, poverty, and ten-fold increase in population since 1935 has increased the potential threat to the existing built up environment of Quetta in particular and throughout Pakistan in general." Prof. Kakar led the field investigation of the M 6.2 October 29, 2008 earthquake in Ziarat, Pakistan.

## Honoring George Housner

We regretfully report the news of the recent passing of George Housner at age 97. Housner, often lauded as the father of earthquake engineering, was helpful to GHI when it was first being launched. "While I did not consult with him in recent years, his agreeing to be on our Advisory Board when we were just starting added to our credibility when we needed it most. He was always supportive of our efforts," said Brian Tucker.

GHI honors his profound influence on the development of earthquake engineering worldwide.

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