Rebuilding Geography in Haiti

Five years ago this month, this column described AAG's efforts, working together with our members, to respond to the devastation left behind by Hurricane Katrina in New Orleans. The online clearinghouse and special fund that we organized with support from AAG members helped rebuild geography departments in the hardest-hit areas. We continue to hear from faculty and students in those departments about the difference these resources have made in their personal and professional recovery. For the AAG, this experience helped us appreciate, in a very direct way, the importance of coordinated disaster response and of understanding the long-term nature of recovery.

Since Katrina, we have continued to witness and respond to disaster—some at a distance, others closer to home. In 2010, some of the more visible examples include the devastating earthquake in Haiti, recent floods in Pakistan inundating one-fifth of the country, and the explosion of the Deepwater Horizon well with 4.9 million barrels of oil spilled into the Gulf of Mexico, another disaster challenge for Louisianans and their neighbors. The number of disasters around the world each year has been steadily increasing, and this trajectory is unlikely to change given predicted changes in climate and corresponding impacts. All require resources for response and recovery. Geographic knowledge and information, geographic technologies, and web-based networking, not to mention the expertise to work in this context, are resources that have become essential in disaster planning, vulnerability assessment, response, and recovery.

In the five years since Katrina, the AAG and its members have become more engaged in collaborative efforts to build capacity for disaster response and recovery, with an emphasis on the contributions of geography and GIScience to these efforts. For example, the AAG has participated in a range of efforts to support rebuilding in Haiti. Individual AAG members have also independently taken action to assist Haiti (and other disaster-impacted regions). At a broader level, we are working on international efforts to create a rapid response infrastructure and capability for global disaster reduction and recovery. These efforts are described in further detail below.

Haiti

On January 12, 2010 at 16:43:10 local time, a 7.0 magnitude earthquake struck Haiti, centered near its capital, Port-au-Prince. More than 300,000 people were killed. Another 300,000 were injured. About 1.5 million live in tent encampments. Individuals important to our geography community in Haiti were among those who were tragically lost, key infrastructure was destroyed or severely damaged.

The headquarters of Haiti’s National Center for Geospatial Information (CNICS) was destroyed and its gifted Director, Gina Porcena Meneus, and five staff members were killed. Established in 2005 with support from the United States and European Union, CNICS’ role is to develop geospatial information for sustainable development and natural hazard mitigation. Operating under the Haitian Ministry of Planning, CNICS’ geospatial data and imagery archive was one of the most comprehensive in the region prior to the earthquake. However, much of this spatial data infrastructure, now desperately needed for recovery planning and redevelopment, was lost. CNICS was also the headquarters for Haiti’s national chapter of the Pan American Institute of Geography and History (PAIGH).

George Anglade, distinguished Haitian-Canadian geographer, writer, and political activist, also perished in the earthquake along with his wife of 43 years. He was one of the founders of the University of Quebec at Montreal (UQAM) and a professor of social geography there for more than 30 years before retiring in 2002. Professor Anglade actively participated in actions for a democratic Haiti.

Haiti’s leading universities, eight that are members of Agence Universitaire de la Francophonie (AUF), were devastated. The State University of Haiti (UEH), by far the largest with approximately 15,000 students and 11 faculties in locations around Port-au-Prince (and 10,000 students in the provinces), saw most of its buildings (more than 90%) destroyed or severely damaged in the earthquake. UEH has a developing
geography program with expertise in human,
ecological, cultural, and population geography.

The AAG and its members have been
involved in responding to the Haiti earthquake in
many ways, from providing aid and information in
the immediate aftermath of the disaster to ca-
capacity building activities focused on long-term
efforts to rebuild the country. The AAG office
helped coordinate and respond to requests for
geospatial expertise in the days and weeks
following the earthquake. Geographers from the
U.S. and around the world volunteered their
time and expertise through organizations such
as the International Network of Crisis Mappers,
OpenStreetMap, and GiSCorps to acquire
critical data and create maps guiding emergency
response in initial rescue efforts.

The AAG has engaged with the U.S. State
Department, private industry, and other organ-
izations on how to rebuild CNICS, including how
to use the data collected during the
earthquake response to reconstruct its lost
assets, replace equipment and infrastructure,
and build GIS expertise. We have also been
working with the State Department to help
identify senior level candidates for the newly
established position of Chief Geospatial Info-
mation Officer. The CGIO will coordinate the
use of geographic information and advise the
Interim Haiti Reconstruction Commission and
Government of Haiti on planning and recon-
struction activities. A geographic knowledge
and information strategy is needed for Haiti’s
recovery and development.

Haiti’s recovery and development also
require long-term engagement in capacity
building. In support of this goal, the AAG
co-sponsored and participated in a workshop
organized by the American Association for
the Advancement of Science (AAAS) and its
Caribbean Division. The workshop, entitled
Advancing Capacity for Haitian Science and
Science Education, was held July 10-18, 2010, in
San Juan, Puerto Rico and in Haiti. Haitian
scientists and educators along with colleagues
from the U.S., Puerto Rico, Canada, and
Africa participated, and developed nearly 40
specific preliminary goals and recommenda-
tions to advance science and science education
in Haiti. A final report (co-authored by AAG
staff) and recommendations will be released
by AAAS later this year.5

Professor Maguire has worked in Haiti since
1974, and also shared his vision for Haiti’s
future in an OpEd to AAG members.6

The AAG will continue its engagement with
several long-term efforts to support Haiti recov-
ery and reconstruction. We also have created and
encouraged participation by geographers and others
to the AAG Haiti Recovery and Reconstruction Fund
to help support the rebuilding of university geogra-
phy programs in Haiti, including the re-establish-
ment of CNICS, with both their institutional and
human capital needs. This Fund will also be used
to subsidize no-cost membership in the AAG for
interested Haitian geographers and their students
to the AAG’s existing Developing Regions
Membership Program. While membership is al-
ready a critical resource and subvention for
support is essential given the dire situation affecting
Haitian universities. When the AAAS report and recom-
endations on advancing science and science
education capacity is finalized, we will continue
to work closely with AAAS on its dissemination to
to key stakeholder groups (e.g., donor community)
and identify specific areas in which the AAG and
its members can contribute and act in collabora-
tion with the geography and GIS community in
Haiti. We would also like to encourage sessions
at the 2011 Annual Meeting in Seattle focused on
geographers’ activities and research—immediate
and long-term—relevant to recovery, response,
and reconstruction in Haiti.7

Infrastructure for Global Disaster
Reduction and Recovery

The response to the earthquake in Haiti and
other disasters of the early 21st century demon-
strates the necessity of harnessing geographic
knowledge, technologies and data to coordinate
relief and recovery. Yet, as Haiti illustrates, chal-
enges to reducing disaster vulnerability, risk,
and loss of life and infrastructure remain. At
the same time, opportunities exist to strengthen
and leverage existing programs and networks for
better coordination, positioning, and delivery
of needed resources and to improve response
response timelines through a comprehensive, global
network of rapidly accessible geographic infor-
mation at multiple scales.

Beginning in early 2010, the AAG met sev-
eral times with representatives of the Clinton
Foundation, Esri, ACEDI (Abu Dhab Global
Environmental, Disaster Initiative), the United Na-
tions Environment Programme (UNEP), and
others to discuss plans for the Eye on Earth
(EoE) Summit to be held in 2011, hosted by the
Government of Abu Dhabi. The purpose of the
summit is to address the needs associated with
creating international information networks that
provide access to the best available environ-
mental and social data for decision-making from
local to global scales. At the suggestion

If you wish to support recovery efforts for
Haitian geographers and university geogra-
phy programs, please consider making a tax-
deductible donation to the AAG Haiti Recovery
and Reconstruction Fund. For more information, or
to make a donation, please visit www.aag.org/
Haiti, or use the form on page 23 of this News-
letter. Thank you for your support of the AAG’s
efforts to help rebuild geography in Haiti.

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If you would like to help organize a session for the 2011
Annual Meeting about response and recovery activities
and research following the earthquake in Haiti, please
contact Jean McKendry (jmckendry@aag.org).

FALCON discussion draft, August 15, 2010.