

## **Geoscientists without Borders: Leveraging G&G Technologies and Experts to Change Lives One Project at a Time**

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### **ABSTRACT**

Geoscientists Without Borders® (GWB) is a non-profit organization, under the umbrella of the Society of Exploration Geophysicists (SEG). GWB's mission is to support humanitarian applications of geoscience around the world, recognizing that geologists and geophysicists can effect positive change in communities facing environmental hardships due to natural hazards like volcanic activity and earthquakes, flooding and tsunamis; water shortages and drought, as well as other activities associated with variety of natural and anthropogenic activities. Through variety of corporate sponsors primarily from the oil and gas industry, GWB helps geoscientists work around the world, applying their specialized knowledge and technical skills to the mitigate the adverse effects of natural hazards, in some of the world's neediest communities by: ● Providing funding to projects that will benefit communities in need, where applying geoscience and information is critical to improving poor conditions, where dangerous conditions, environmental or other hazards can be mitigated, removed and improved using applied geoscience technology; ● Strengthening the global geoscience community through beneficial multidisciplinary partnerships and cooperation with other organizations active in engineering and geoscience; and ● Encouraging and training students to the broad range of geosciences careers while also strengthening university programs in geophysics and the geosciences. Since 2008, the GWB has funded approximately 50 projects in over 20 different countries. Some examples of GWB-funded projects include geophysical surveys to enhance agricultural productivity and livelihoods of smallholder farmers through improved groundwater management of the Vientiane Plain; seismic imaging to help understand and manage water quality in coastal Benin, West Africa; subsurface imaging to identify the fault that caused the 2010 earthquake and to help build Haiti's geoscience capabilities, and an integrated hydrogeological and geophysical study of the Anangu Pitjantjatjara Yankunytjatjara (APY) lands to support the Aboriginal communities in South Australia. This presentation will highlight some of the GWB success, with specific emphasis on sharing how the geological and geophysical methods and the expertise of geoscientists were applied to both advance scientific understanding of the places they are being deployed and to better the lives of the people living in them.