

Natural Hazards and Disaster Management

The earth seems to have experienced more than its share of natural disasters in the last few years: great or large earthquakes and devastating tsunamis in the Indian Ocean, Japan, and Chile; smaller earthquakes with devastating consequences in countries like Haiti and China; hurricanes like Katrina and more recently Irene which caused major flooding; droughts in Australia and the southwestern United States; volcanic eruptions in Iceland and Chile causing disruption of flight patterns in Europe and the southern Hemisphere, and so on. While there is no strong geological evidence that the rate of natural disasters is increasing, the growth of world population and the increase in numbers of people living in precarious settings makes existing natural disasters more costly in terms of lives and income lost. Furthermore, with global warming, we can expect sea level rise, the increase in frequency of large and damaging storms, and drought in areas unaccustomed to extreme weather. Thus, natural hazards and disaster management and response are a critical sustainability issue.

Cornell has substantial expertise in natural hazards and disaster management and response scattered all of its major Colleges. However, like society itself, communication and coordination among experts on the scientific side of disasters, and on the human infrastructure side, is not always ideal. We propose an ACSF topical lunch on this topic with the intent of bringing together for the first time, campus experts in natural hazards (earthquakes, volcanoes, floods, tsunamis, extreme weather); climate change and sea level rise; systems engineering approaches to disaster management; sociology and economics; and the impact of disasters on the poor in developing countries.