

Climate Change: Managing the Risks of Extreme Events and Disasters

Frontiers in Global Change

Seminar Series

Presented by...

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Abstract:

Historically, risks from climate-related events are concentrated in extreme events. Adaptations to average conditions require a wide range of strategies and investments. Whether or not these adaptations to average conditions address the full range of challenges, they tend to manage the risks from business as usual. The record for the effectiveness of adaptation strategies for managing the risk of historical extremes is mixed, with examples of success and failure. One implication of the concentration of risks in the extremes is that many of the lessons from the past can help inform choices for the future, especially when informed by the latest science. In its 2012 Special Report, the Intergovernmental Panel on Climate Change concluded that "A changing climate leads to changes in the frequency, intensity, spatial extent, duration, and timing of extreme weather and climate events, and can result in unprecedented extreme weather and climate events." Existing data indicate increases over the last 50 years in several kinds of climate extremes, including high temperatures, the fraction of precipitation falling in the heaviest events, and extremes associated with high sea levels. Some parts of the world have seen increases in the length or severity of droughts. Climate models project continuing changes in these extremes. There is a wide range of opportunities for reducing disaster risk and improving disaster response. The most effective options tend to produce both immediate benefits in sustainable development and long-term benefits in reduced vulnerability. Solutions that emphasize a portfolio of approaches, multi-hazard risk reduction, and learning by doing, offer many advantages for resilience and sustainability. Some options may require transformation, including questioning assumptions and paradigms, and stimulating innovation. Many of the greatest challenges in designing effective adaptation strategies stem from the historical isolation of policies, organizations, and government agencies for dealing with climate, disasters, and economic development. For the future, the recognition that climate change adaptation, disaster risk reduction, and sustainable development are all aspects of the same grand challenge can open a wide range of important opportunities.

More info:

See <http://dge.stanford.edu/people/cfield>

Please join us for a meet and greet opportunity
with Dr. Field after the seminar.
~Refreshments will be served~

Date: Friday,
April 5

Location: EMSL
Auditorium

Time: 10:00 am