

*In the end, we conserve only what we love.
We will love only what we understand.
We will understand only what we are taught.*
—Baba Dioun, Senegalese ecologist

CLIMATE AFFAIRS: AN INITIATIVE FOR THE 21ST CENTURY

In 1998, NCAR Political Scientist Michael Glantz presented a keynote talk at the 25th anniversary conference for the School of Marine Affairs at the University of Washington. Before the late 1960s, formal multidisciplinary marine affairs programs did not exist. But as the need to make multidisciplinary decisions in the marine environment became evident during the lengthy Law of the Sea deliberations, educational programs arose to address the need for expertise from the fields of economics, political science, engineering, geography, history, marine ecology, fisheries, along with the obvious ones: oceanography and international law. Marine affairs is now an established and respected multidisciplinary activity. Sparked by the various Intergovernmental Panel on Climate Change activities and other policy concerns related to energy use, it appears that the international community has embarked on a process to develop a "Law of the Atmosphere."

As a result of these factors, Glantz proposed a parallel need in the twenty-first century for multidisciplinary education and training programs focused on the notion of Climate Affairs. A Climate Affairs program encompasses education, professional training, and research and application aspects related to the following six areas: **Climate Science, Climate Impacts on Ecosystems and Societies, Climate Policy and Law, Climate Politics, Climate Economics, and Climate Ethics and Equity.**

Climate Science objectives are (1) to understand the climate system, (2) to understand its components and their interactions, and (3) to recognize society as a key component. **Climate Impacts on Ecosystems and Societies** encompasses both managed and unmanaged ecosystems. Societal impacts include both direct and indirect impacts of climate on human activities, and of society on climate. A wide array of issues can be explicitly discussed and explored under **Climate Policy and Law**, including regulations pertaining to the climate system, which incorporate laws dealing with air pollution, transboundary transport of pollutants, ozone depletion, tropical deforestation, and so forth. **Climate Politics** refers to the pathways

pursued by competing decision makers and interest groups, from local to global. **Climate Economics** encompasses how a government's, a group's, or an individual's economic well-being might be influenced directly and indirectly by climate variations on all time scales. This includes the economic impacts of severe weather events.

Is there a moral responsibility for countries that have climates favorable to sustained agricultural production to assist those countries whose climate regimes are more problematic for sustained and reliable agricultural production? Are seasonal forecasts equitably distributed just because they are placed on the Internet? The study of **Climate Ethics and Equity** can be used to examine and possibly change the inequities that exist among different climate-sensitive sectors, regions, and groups in society. A key concern of environmental ethics is the conflicts involving inter- and intra-generational climate-related issues.



Why Climate Affairs?

The idea to look at climate and climate-related issues through the multidisciplinary lens of Climate Affairs has been catalyzed by the spirit of the times. That spirit reflects an obvious growing concern about a broad range of climate-related issues that affect society and the environment. In the coming decades, the ability of

societies around the world to cope effectively with climate variability, weather and climate extremes, and the likelihood of global warming and its yet-to-be-determined effects on precipitation and extreme events will increasingly be tested and are likely to dominate the concerns of local as well as national decision makers. Glantz suggests that, in this regard, the twenty-first century has a good chance of becoming the “climate century,” a century in which climate-related concerns will occupy significant attention from the present as well as successive generations of policy makers.

Climate Affairs programs will foster the development of multidisciplinary activities at colleges, universities, and other education and training institutes and centers around the globe. The first and foremost goal of Climate Affairs is to “educate the educators,” at first in developing countries where people are seemingly most vulnerable and in need of climate-related information. Educators in industrialized countries could also benefit greatly from a consideration of Climate Affairs, as their countries’ economies are vulnerable in many ways to climate variations and change.

Establishing Climate Affairs activities will enable students to concentrate part of their education and training in areas of research, impact assessment, and policy implications that center on climate-related issues. Students will thus be better prepared to work in water resources, industry, agriculture, fisheries, mining, insurance, education, health, civil defense, government agencies, and disaster prevention, each of which is climate-sensitive.

Where Are We Now?

Various groups have expressed interested in setting up climate affairs activities in their countries. The UN University and NCAR held their first training workshop on “Climate Affairs in the South and Southeast Asian Region” in February 2002, prompting the University of Malaya to establish such an activity. The Asian Institute of Technology in Bangkok is also involved in creating a Climate Affairs program.

Shannon McNeeley (ESIG) is working on setting up a Climate Affairs education and outreach program with the Alaska Native Science Commission and the University of Alaska. It will focus on the impacts of climate and environmental changes in Alaska, with a particular focus on Alaska Natives. This program will combine knowledge and techniques from western science and from indigenous traditional knowledge and wisdom.

Several spin-offs from NCAR’s Climate Affairs have already begun in China: the notion has been embraced by the National Planning Committee of China to develop an International Center for Desert Affairs,

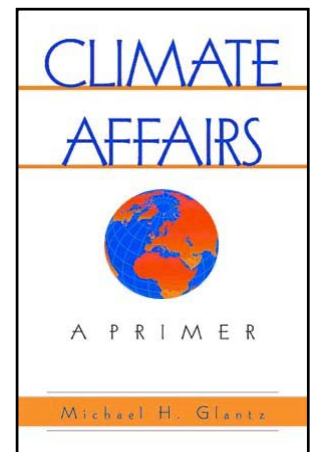
based on the template of Climate Affairs. This new international Center was inaugurated in mid-October 2002 at Xinjiang University in Urumqi, China. The Chinese Meteorological Administration (CMA), the largest meteorological service in the world, is also developing Climate Affairs activities.

The idea of similar programs and activities for “Weather Affairs” and “Water Affairs,” using the Climate Affairs template, is already being proposed to researchers and educators as another way to gain insight into chronic climate-related problems that plague societies.

In sum, the overriding objectives of a Climate Affairs education or training activity are to:

- **build** the human and institutional capacity in developing and industrialized countries to understand and deal effectively with climate and climate-related issues;
- **educate** and train key personnel from selected institutions (universities, colleges, educational and training centers) to set up and conduct climate-related multidisciplinary programs or activities; and
- **improve** society’s ability to identify and respond to the impacts of climate variability, climate change, and extreme events by improving its levels of awareness and preparedness.

Michael Glantz has written a book on Climate Affairs (Island Press) that brings together the existing knowledge of the climate-society-environment interplay. The book provides an introduction and overview of this new framework and is supported by many examples. It is designed to heighten awareness, understanding, and concern about the need for climate-related knowledge for future decision makers. The book is available as of mid-May 2003.



For more information about this project, please contact Michael Glantz (glantz@ucar.edu). More information is also available on the website at www.esig.ucar.edu/cxa



ESIG/NCAR
3450 Mitchell Lane
Boulder, CO 80301
303-497-8119

The National Center for Atmospheric Research (NCAR) is sponsored by the National Science Foundation.