

CLIMATE IMPACTS RESEARCH IS ALIVE AND WELL

1982, 1983, and 1984 have been interesting years for those involved in climate impact studies. For example, in 1982 and 1983 we have witnessed what is reputedly the biggest El Niño event in a century. Stories about this oceanographic-meteorological event filled newspapers around the country as well as around the world. Many of these suggested that El Niño had caused climate-related problems within the United States and elsewhere. Nearly everything was blamed on or associated with El Niño: the reduced number of hurricanes along the east coast, mild winters in the Northeast and Canada; and even outbreaks of cases of malaria in New Jersey, the plague in New Mexico, snakebites in Montana, and broken backs in California. Each claim of course carried with it its own logic.

El Niño stories were upstaged in the press by the release of an EPA report on the possible effects of a carbon dioxide-induced global warming of the atmosphere (Can We Delay a Greenhouse Warming?). The report (and the press conferences that went with its release) suggested the warming could lead in the not-so-distant future to a disintegration of the West Antarctic ice sheet, which would cause an increase of 6 to 8 meters in the sea level. A week later, a less spectacular but more responsible report on the CO₂ issue was released by the National Academy of Sciences (Changing Climate). A controversy in the media ensued about the similarities and differences between the tone as well as the findings of these two reports.

Following a meeting convened by Carl Sagan in Washington, DC last October, we have been confronted by scientific concern about yet another major climate-related issue: nuclear winter. Sagan's meeting has led to several studies about the effect on the atmosphere (especially climate) of a major Soviet-American nuclear exchange. Stories about the science and politics of nuclear winter continue to appear as news items and on editorial pages.

These recent highly visible studies may suggest to the public that concern about climate-related impacts on society centers mainly on global problems. Yet, innumerable studies have also been done during past decades on local and regional climate-related issues such as floods, droughts, frosts, tropical storms, and cloud seeding to name a few. Many of these extend back at least to the last century. More recently, climatic anomalies in 1972-73 precipitated a global food crisis and served to generate considerably more interest in climate issues on the part of individuals, groups, centers and institutes. Clark University's CENED has, for example, been very active in climate impact studies. The Illinois State Water Survey, too, has long been involved in problems involving the interaction between atmospheric processes and society. The Institute for Behavioral Studies at the University of Colorado and the National Center for Atmospheric Research's Environmental and Societal Impacts Group, among many others, have been active in climate impact assessment for several years.

Governmental and non governmental organizations have also taken interest in climate impacts, especially as a result of the Climate Act passed by the U.S. Congress in 1978. The Department of Energy under the Carter Administration established a CO₂ Assessment program, one component of which focused on the impacts on society of a potential CO₂-induced global warming. However, following the election of President Reagan and a reorganization of the DOE, the societal impacts component of the program was dropped. The American Association for the Advancement of Science, a non-governmental organization, established a standing Committee on Climate. The committee has been actively engaged in identifying important climate-related issues for research and for policymaking.

There are also several research activities undertaken by international organizations. For example, the World Meteorological Organization in Geneva has

an active World Climate Program. The UN Environment Program in Nairobi, too, has responsibility for a World Climate Impacts Program. The Scientific Committee On Problems of the Environment in Paris has sponsored several studies in the past decade related to climate impacts. These, of course, represent only a few of the important international activities that directly focus on climate impact assessments.

There are also many groups that, while they do not consider themselves as a part of a climate impacts research community, are concerned with issues such as arid lands development, energy exploitation, fisheries management, and so forth. Clearly they are also part of the climate impacts research community.

An effort is presently underway to convene a workshop to bring together representatives of those groups that are directly or less directly involved in climate impact research in order to evaluate the need to establish a more formal connection among these groups interested in climate and society and to broaden the membership of the community. This proposed "networkshop" is being organized by NCAR and is tentatively scheduled for April 1985.

In summary, in my view the climate impacts research community is alive and well. The high visibility studies that we have heard so much about recently represent only the tip of the iceberg of dedication to and interest in this field.

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