Environment, Science and Development (ESD)

FY 2004 Information Sheet

GOAL

The goal of the ESD program is to enhance our understanding of societal capacity to adapt to climate in the context of integrated environment, science and development issues. The program is designed to stimulate and support solution-oriented, place-based research most relevant to the influence of climate on development objectives and disaster preparedness. ESD seeks to apply this knowledge to improve the institutional, scientific and technical capacity needed to successfully apply climate information to practical challenges associated with sustainable development.

RATIONALE

The ESD program builds on a decade of previous applications studies in Africa, Latin America and the Caribbean, Southeast Asia and the Pacific Islands. Early applications experience illustrated the fact that the effective use of climate information requires the support of a system which links the activities of forecast production and dissemination with applications research and development initiatives, and ultimately, the integration of this information into decision making structures across a diverse array of sectors affected by climate variability (agriculture and food security, disaster management, water resources, human health, etc.). The resulting applications research projects took a region-specific approach to integrated programs of research, institutional development and capacity building, with support provided through a variety of funding mechanisms and partnerships with regional, national and international organizations.

CURRENT FUNDING PRIORITIES

Emphasis in FY04 will be given to proposals that incorporate the following elements:

- Demonstrate the specific use of climate information in a sector/s sensitive to climate variability or change. For example, decision support tools and institutional mechanisms as applied to agriculture and food security, disaster management, water quality and availability, human health, poverty reduction, species diversity and ecosystem health. A goal is to create opportunities for users in various climate-affected sectors to increase their options to incorporate these tools and mechanisms into routine practices and procedures. Investigators are highly encouraged to investigate and document actual cases where climate information has been used in early warning systems, either with success or failure.

- Work that builds on previous studies in developing countries in Africa, Latin America and the Caribbean, Southeast Asia and the Pacific Islands (see http://www.ogp.noaa.gov for more information). This includes lessons and methodologies that are transferable and collaborative between regions.

Interdisciplinary project groups, with representatives from the physical and social sciences, as well as intermediary groups (extension and media groups, indigenous knowledge systems, governmental and nongovernmental organizations, etc.) are encouraged.

- Capacity building and human resource development (including workshops, training exercises, etc.) to construct and use science and technology tools for natural resource management in communities leading to sustainability. Training or focal point discussions comprising the scientific and user communities and other stakeholders to mutually develop these strategies would be one feasible approach.

- Adaptation to extreme events as likely coping mechanisms for longer term climate change. Such information could include the formulation of policy options for increased resilience to extreme events such as droughts and floods, or to climate-related waterborn/airborn diseases.

APPROACH

Multidisciplinary teams of investigators are often needed to address the complex issues of adaptation to climate. Teams can be comprised of different social science disciplines or across the disciplines of social and natural science. Studies can be focused on regions where measurable results are possible in the near term: areas of impacts are strong and vulnerability high, and where some measure of scientific and management capacity already exists. Collaboration between investigators and decision makers in the region or sector to be studied are strongly encouraged. Collaboration between U.S. and foreign partners is also strongly encouraged. Letters indicating collaboration should be included in the proposal.

An important objective of the program is to provide feedback to the climate science and forecasting community on the level of usefulness of the current information being produced and how the information could be more effectively communicated and disseminated. It is critical to understand the decision process of the various users, and for climate information to be tailored based on the specific information needs. Creative methods of conveying the results of work done under the grant to the broader community are encouraged. For example, information can be displayed on websites, in non-scientific newsletters, on CDs, on short video documentaries that can be copied and disseminated, etc. Applicants whose proposals are chosen for funding will be expected to undertake an ongoing dialogue with NOAA's Climate and Societal Interactions group to discuss lessons learned and future questions to be addressed.

PROPOSAL SUBMISSION

The full guidelines for proposal submission can be found in the NOAA FY 2004 call for proposals for its Climate and Global Change Grants Program (http://www.ogp.noaa.gov/grants/2004/index.htm).

Please provide a minimum of four names of potential mail reviewers that NOAA could use to review your project. If we use your suggestions, these reviewers will have to sign a document that assures that there is no conflict of interest on their part in reviewing your proposal.

For further information, contact Candyce Clark, 1100 Wayne Avenue, Suite 1225, Silver Spring, MD 20910; telephone: (301) 427-2089, ext 114; or e-mail: candyce.clark@noaa.gov

FUNDING AVAILABILITY

Contingent on the availability of funds through the FY 2004 budget process, up to $500,000 may be available for new projects. Average funding level will be about $80,000 per year, ranging from $50,000 - $125,000.

BACKGROUND REFERENCES

Potential investigators are encouraged to consult the following material for the development of relevant proposals:

Jacobs, Katharine. 2001. Connecting Science, Policy and Decision-making: A Handbook for Researchers and Science Agencies, NOAA Office of Global Programs.

IRI et al. Coping With Climate: A Way Forward. Summary for Policymakers. A Multi stakeholder Review of Regional Climate Outlook Forums Conducted at an International Workshop; October 16-20, 2000; Pretoria, South Africa; 2001. Palisades, N.Y.: International Research Institute.

IRI. Preparing for El Nino: Advancing regional Plans and Interregional Communication (workshop April – May 2002), International Research Institute, 2002.

NOAA/OGP. 1999. An Experiment in the Application of Climate Forecasts: NOAA-OGP Activities Related to the 1997-98 El Nino Event.

National Research Council. 1999 Global Environmental Change, Research Pathways for the Next Decade. Report of the Committee on Global Change Research, Board on Sustainable Development, Policy Division, National Research Council. Washington.D.C..: National Academy Press.

National Research Council. 1999 Making Climate Forecasts Matter. Report of the Panel on the Human Dimensions of Seasonal-to-Interannual Climate Variability. P.C. Stern and W.E. Easterling, eds. Washington, D.C.: National Academy Press.

National Research Council. 1999 Our Common Journey: A Transition Toward Sustainability: Report of the Board on Sustainable Development, National Research Council. Washington.D.C..: National Academy Press

National Research Council. 2001 The Science of Regional and Global Change: Putting Knowledge to Work. Report of the Committee on Global Change Research. Washington, D.C.: National Academy Press.