ENVIRONMENTAL RESEARCH

Asian Network Seeks Data Sharing

TOKYO—Climate and weather patterns do not stop at national boundaries, but data about them often do. For scientists around the world, access to information such as oceanographic data and satellite imaging that is held by government agencies can be frustratingly difficult to obtain. To help break down some of those barriers, delegates from 13 nations met here for 3 days this month to plan a new framework for sharing environmental data among Asian countries. The meeting marked the first real steps of a loose-knit intergovernmental organization called the Asian-Pacific Network (APN) for Global Change Research.

The network is the youngest of a trio of intergovernmental, regional research organizations—its siblings are the InterAmerican Institute (IAI) for Global Change Research, temporarily based in the United States, and the European Network for Research in Global Change (ENRICH), with offices in Brussels, Belgium. All were spawned by a 1990 meeting in Washington on the scientific and economic consequences of global change.

Getting the Asian network up and running has been a challenge. Many Asian governments are reluctant to share even basic meteorological and geographical data, says atmospheric researcher A. P. Mitra of India's National Physical Laboratory, either because they are considered sensitive, such as mapping data, or because there is no precedent. Mitra hopes APN will, at a minimum, provide a designated contact point within each participating government. "Once you set up a program that is of interest to everybody, it could lead to some liberalization of the kind of data circulated," Mitra says.

One of the network's first formal activities will be to compile an inventory of related research work already under way throughout the region, along with a study of the economic and social issues related to climate change. An early research focus is expected to be a better understanding of the Asian monsoon. While there have always been yearly variations, notes oceanographer Aprilani Soegiarto, vice chair of the Indonesian Institute of Sciences and chair of the APN working group on scientific issues, there now seem to be persistent and significant variations from historical levels of rainfall in some regions. But dissemination of such data is no simple matter, says Soegiarto, in places where "computers may not be readily available" and observations are recorded by hand and stored in notebooks. APN hopes to computerize these data and train technicians to use them.

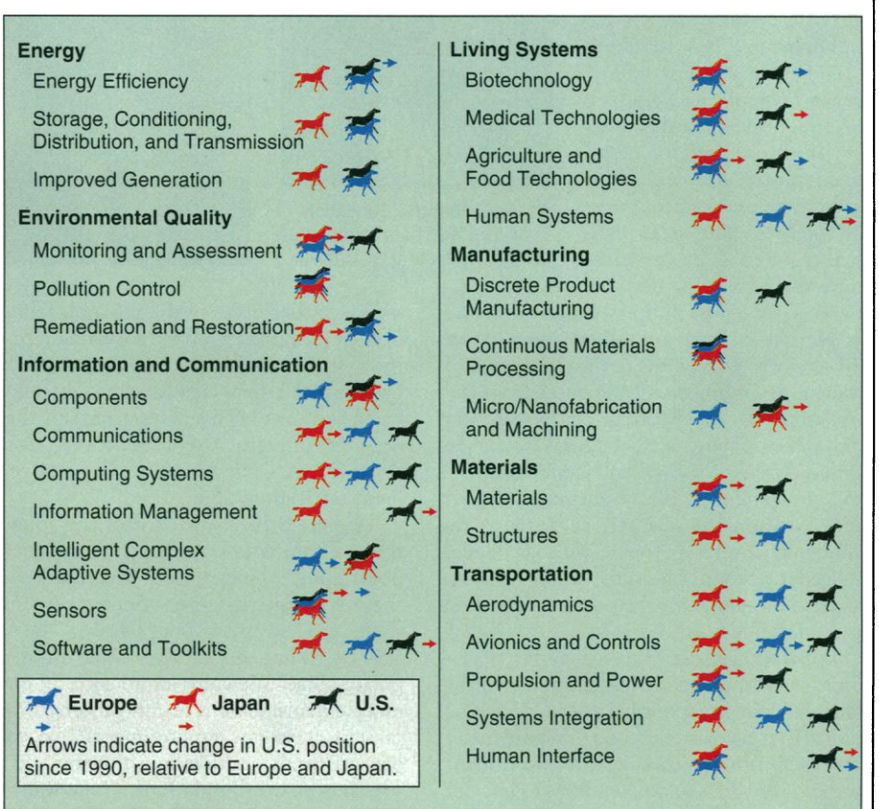
Japan led the efforts to get APN off the ground and has provided most of its initial funding. Kazuhiko Takemoto, director of the interim APN secretariat and an official of the Japan Environment Agency, had the unenviable task of trying to set up an institutional framework for APN that is acceptable to countries, such as China and Taiwan, that do not recognize each other. A formal multilateral agreement was out of the question, so Takemoto opted for an informal structure under which countries will voluntarily join individual projects. The simple existence of APN, notes Mitra, has already raised the profile of existing environmental research in the eyes of the participating governments.

It was easy, in comparison, to get the American and European networks up and running. IAI, launched by a treaty signed by 11 countries in May 1992, has already formed working groups in seven thematic areas: tropical ecosystems, biodiversity, interannual climate variability, ocean/atmosphere/land interactions, high-latitude processes, and comparative studies of coastal processes and of terrestrial ecosystems. This year the institute (now with 16 members) will move to a permanent secretariat in Brazil, and next month it will begin soliciting proposals for planning grants to create multinational research consortia. ENRICH, in operation since last year, is part of the European Union's existing research structure. But it is also trying to build ties with environmental researchers and their governments in Eastern and Central Europe and in Africa, helping them to set priorities and fostering joint activities. All three networks are working closely with START (System for Analysis, Research, and Training), created in 1990 by the International Council of Scientific Unions to oversee major international efforts on global change.

–Dennis Normile

CRITICAL TECHNOLOGIES

Report Says U.S. Holds Lead



Setting the pace. A new government report on U.S. technological competitiveness contains a mixed message: The United States is even with, or ahead of, both Japan and Europe in 27 key technological areas, but the country's lead in several categories is eroding. The National Critical Technologies Report, issued last week by the Office of Science and Technology Policy, is required every 2 years. Previous versions have had little direct influence on policy or the flow of research dollars, notes Richard Rowberg, a senior specialist for science policy at the Congressional Research Service. But they have proven helpful to lobbyists: "The reports are used by special-interest industry consortia to get more money," he says.