

Science and Development

In a couple of weeks, *Science* will announce its Breakthrough of the Year—a salute that annually celebrates the achievements of a scientific enterprise that, let's face it, is located almost exclusively in the rich nations of the First World. It is a good time to ask what First World science can do, not for the West but for the Rest. In this week's announcement of SciDev.Net, a venture in which *Science* and *Nature* are participating, we undertake a modest but notable effort to provide an answer. SciDev.Net is a Web site that intends to be an important and readily accessible source of scientific information for the developing world (see p. 2073).

The need is compelling, because so many of the world's great problems (including the one that has absorbed us all since September 11) emerge from a single gripping reality: the inequitable global distribution of resources. It is not only a matter of poverty, but of consumption rates. The nations of the North use most of Earth's nonrenewable wealth, such as fossil fuels; they also contribute disproportionately to the depreciation of precious assets that are replenished only slowly, such as ocean fisheries or the quality of the atmosphere. This North/South imbalance is an equation that is certain to generate continuing tension.

In this space 2 weeks ago, Saleemul Huq explored the vulnerability of one nation on the short end of this equation. Bangladesh, where 100 million people are chronically impoverished, is at serious risk not only from economic starvation but from a prospective disaster made more likely by the expected course of climate change. A week later, Jonathan Lash made the case that these inequities create combustible material that can easily ignite. We cannot solve the problem of terrorism, he argues, by striking at the flint; we must deal with the tinder of Third World poverty.

It is commonly urged that poverty must be cured by "development"; that is, through policies that invigorate economies and thus improve incomes. That is good advice, but it leaves out innovation: an essential element in changing the economic basis for improvement. In turn, scientific understanding is essential to innovation, especially in poor countries, where even modest improvements in the science base can have magnified effects. So an obligation surely falls on the "science-rich" nations to share their knowledge with those who need it. In keeping with this obligation, *Science*, through a program called eIFL (electronic Information for Libraries), will be made available free to nonprofit institutions in the 40 poorest countries and at substantial discounts to those in other developing nations.

SciDev.Net is the brainchild of David Dickson, a former editor at *Nature*. *Science* is delighted to be a full partner with *Nature* in this venture; for the right cause, competitors can work together! The site, now up at www.scidev.net, will have timely science news, several reports or short items from *Science* and *Nature* each week, opinion features, and information about meetings, grants, and jobs. The emphasis, obviously, will be on material relevant to the developing world. *Science* normally makes papers freely available on our Web site 1 year after publication; we will be making this selected material available immediately. Regional gateways will allow SciDev.Net to tailor some information to particular settings and circumstances.

A couple of examples will suggest the kinds of stories from our journal that SciDev.Net might carry. El Niño forecasting models now make it possible to use sea surface temperatures in the Pacific Warm Pool to guide agricultural policy-makers in Indonesia, 6 months in advance. Painstaking genetic research has produced maize that displays extraordinary vigor, yielding up to half again as much product as traditional varieties, even in regions of Zimbabwe that are regularly afflicted by drought.

SciDev.Net joins a broader movement that seeks to align the scientific enterprises of the West with the needs of the Rest. The Third World Academy of Sciences is another partner in the effort, and the National Academies in the United States are now actively seeking an international consortium of similar bodies around the world. We hope that SciDev.Net can provide a communication channel that will aid such efforts to globalize science. The ultimate objective is to distribute economic and social opportunity more evenly in the world, and that is a purpose in which the best science has a vital role to play.

**What can
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Donald Kennedy