
How First World Scientists Can Reach Out to Third World Colleagues

Reprinted from *THE SCIENTIST* ® 2(20):10, 31 October 1988.

Turn to the "Tools" or "New Products" pages of *The Scientist* and you will discover splendid state-of-the-art instruments, many of which carry rather hefty price tags. It's hard not to notice that the cost of doing science has been rising precipitously. The reason? For one, scientific investigations are increasingly more detailed or far-reaching, requiring more complex and powerful instruments.

Many universities and companies in the U.S. can afford the latest equipment. But expensive instruments are, in many instances, simply beyond the reach of our Third World colleagues. These scientists typically must make do with equipment that is 20 or more years old. In many developing and Eastern Bloc nations, the absence of instruments and supplies has led to a tradition of excellence in theoretical work. And in Latin America and Africa, scientists have taken up subjects of local consequence relating to agriculture, many of which do not require sophisticated equipment.

Despite the many laudable research efforts in these countries, I fear that lack of modern equipment and supplies is increasingly dividing the world into science haves and

science have-nots. And I fear that most First World scientists are perfectly content to watch while our Third World colleagues become scientifically poorer and poorer.

So I was gratified when I recently learned of one modest but promising effort that links, in a personal way, First World scientists with their colleagues in the less developed countries. A.M. Nikundiwe, associate professor of zoology and marine biology at the University of Dar Es Salaam in Tanzania, wrote me the following description of a special arrangement between his university and some European universities:

"One approach which appears to be working is the twinning of a local department to a sister department overseas. We call these links. For example, [my] department has a link with the department of applied biology of the University of Cambridge, U.K., to bolster wildlife studies. It has another with the department of marine zoology of the University of Oslo, Norway.

"The biggest challenge, of course, is to solicit local and overseas funds to support all these projects. Whilst these schemes tend to be small in scale...the net gains are

visible and the frustration threshold of the participating scientists is considerably raised.”

The idea of links as Nikundiwe describes it seems to me to be a personal approach of much potential. The sharing of equipment in cooperative research ventures could be an important feature of such “north-south” linkages.

I hope that in making this program a little better known, the University of Dar Es Salaam and other Third World universities might find more partners, and that those in the developed nations might be inspired to reach out to the colleagues in these lands.

Such partnerships amount to more than a charitable gesture by First World scientists. The collective brain power of Third World scientists offers the world of science

great potential, and individual Third World scientists could undoubtedly contribute significantly to a number of important projects. Thus, it is really in the self-interest of the First World to reach out.

Between the large, sometimes impersonal programs of the big intergovernmental agencies and the small-scale and personal university-to-university links that Nikundiwe writes of, there may be a combined strategy that governments and agencies can back: the direct funding of Third World researchers, who would submit proposals for projects to be conducted with partners in the developed nations. When it comes to international cooperation in science, direct financial links and strong personal connections will increase the likelihood of success. ■