

Expanding the Role for Science in Sustainable Development

Scientists and engineers, most of whom live in Europe, North America, and parts of Asia, have increasingly been asked to consider what role they can play in addressing the plight of millions of the world's poorest residents. According to the World Health Organization (WHO), one billion people lack access to clean water, and two billion people have inadequate sanitation. Almost 1.5 billion people, mostly in cities in the developing world, breathe air below the standards that WHO deems acceptable.

The citizens of poor countries need preparation for the changes that will accompany technological advances. In 2002, AAAS activities focused on improving indigenous science and technology capacity, in the belief that such capacity is essential to maintaining progress toward sustainable development. At the same time, AAAS fostered communication and collaboration across all national borders.

Protecting Vulnerable Watersheds >>> In an effort to repair or prevent damage to environmentally vulnerable parts of the world, AAAS continued to work in 2002 on projects in three watershed regions—the Plata Basin in South America, the Lake Imandra Basin on the Kola Peninsula in Russia, and the Mekong River Basin in Southeast Asia. A fourth project is planned for the Niger River Delta in West Africa.

The program helps give local communities and scientists the training and tools needed to use information on the impact of human populations on the local watershed, and allows local policymakers to make better decisions about land and water use.

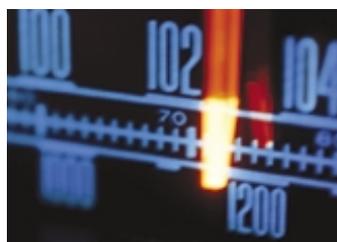
AAAS has focused on watershed regions because they offer opportunities for building a scientific infrastructure in the affected regions, as well as a useful structure for analyzing the interactions between human activities and ecosystems that must be considered in applying science to the problems of sustainability.

In 2002, local scientists working in cooperation with foreign scientists on the Kola Peninsula reported that the environment is healing faster than they had expected.

Collaboration Among Women Scientists >>> With fewer women than men applying for grants for international collaborations, the National Science Foundation turned to AAAS for help. The result was the AAAS Women in International Science Collaboration (WISC) program. The purpose has been to increase the participation of U.S. women in international science research, and to encourage collaboration early in their careers.

More than 80 researchers received WISC grants in 2002. The program provides travel grants to women scientists from the United States to plan and design new research projects with colleagues in other countries.

Initially focused on Central and Eastern Europe, in 2002 the program expanded to most other regions of the world. The projects ranged from researching the theories of elementary particles in Japan to studying developmental disabilities in young adults in Jamaica.



Training in Radio Journalism >>> The BBC World Service has estimated that for every 1,000 Africans, there are 198 radios, compared to 52 televisions and 12 newspapers. And recent studies have noted the

importance of the radio in transmitting information on HIV prevention and in alleviating rural poverty.

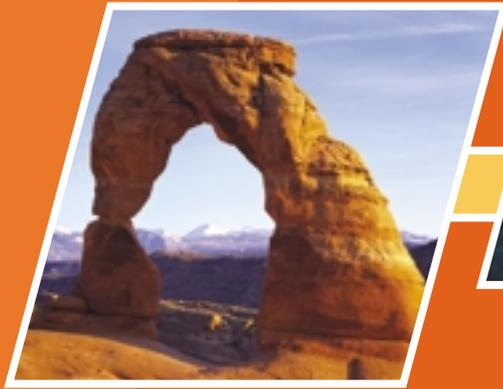
To improve the quality and the amount of scientific information that radio stations disseminate in South Africa, journalists and scientists from that country have been trained by AAAS to become radio science journalists. Five of them spent a month-long internship at AAAS in the summer of 2002, returning to South Africa in time to cover the World Summit on Sustainable Development.





“Science’s Next Wave Europe has to be seen as a contribution to improving the situation for our next generation of scientists.”

ENRIC BANDA, *Secretary General, European Science Foundation*



“We have an opportunity to help create the next generation of national and world leaders in conservation.”

GARY MACHLIS, *Chief Social Scientist at the National Park Service and coordinator of the Canon National Parks Science Scholars Program for the Americas.*