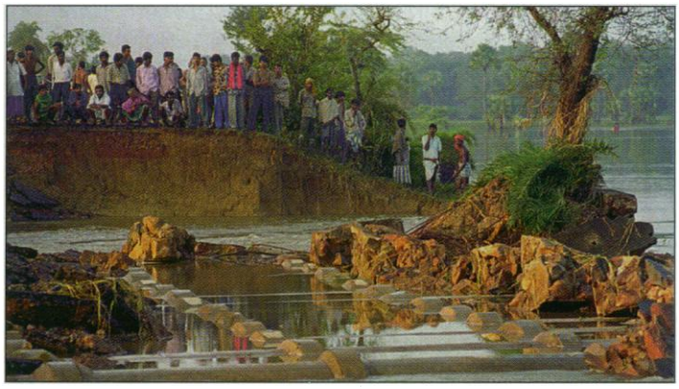
For biomedical researchers, the nail-biting will continue for a while. Only after the Boundaries Panel completes its final Phase 1 report, which will propose the lineup of IRGs, will officials begin the hard part—drawing the boundaries of individual study sections within those IRGs and testing the system to see how it would work. That is expected to take at least another 2 years, and additional changes to the blueprint seem inevitable. "We're feeling our way," Alberts cautions. "We're scientists who are doing experiments." **–BRUCE AGNEW**

Bruce Agnew is a science writer in Bethesda, Maryland.

INDIA

Cyclone Wrecks Rice, Botanical Centers

NEW DELHI—Two major Indian laboratories are struggling to recover from a powerful cyclone that swept across parts of eastern India late last month. The storm, which packed winds of up to 280 kilometers an hour, caused extensive damage to the Central Rice Research Institute (CRRI) in Cuttack and its germ-plasm stocks as well as destroying much of the collection of rare and exotic plants at the Regional Plant Resource Center (RPRC) in Bhubaneshwar.



River of ruin. A killer cyclone in eastern India washed away roads and homes and uprooted millions.

More than 8000 people have died and 15 million have been left homeless in the eastern state of Orissa, which was cut off from the rest of the country for 3 days after the storm struck on 29 to 30 October. The storm surge drove seawater as much as 15 kilometers inland in what has been described as the worst cyclone of the century.

The cyclone has "ravaged the entire campus" of India's premier rice research center, CRRI director Shanti Bhushan Lodh reported last week. All windows facing north were shattered, and the biotechnology, biochemistry, and engineering departments were filled knee-deep with water. Indian Council of Agricultural Research officials this week announced a $500,000 emergency grant to help in the rebuilding of the 53-year-old institute, which remains without electricity and water.

The 70 hectares of rice in experimental plots at the center have also been devastated. Lodh estimates that only a third of the 10,000 rice varieties being grown survived the gale-force winds and subsequent flooding that swept across the region. "The green fields of rice have now turned gray," he says. Gurdev Khush, chief of rice breeding at the International Rice Research Institute in Los Baños, Philippines, says the devastation will be "a major setback for India's rice research program" and a "tremendous loss" for scientists around the world.

Probably the worst affected will be the rice germ-plasm collection, which had its roof blown away and its refrigeration units flooded. The 22,000-strong varietal collection, one of the world's largest, is a medium-term storage facility accessed by researchers around the world. Fortunately, most of its collection is duplicated at the National Gene Bank in New Delhi, a long-term repository for the seeds. In addition, a quick-thinking scientist reportedly salvaged much of the lab's supply of temperature-sensitive enzymes and reagents by taking the materials with him on a flight to Chennai a few days after the cyclone.

The damage was even heavier at the RPRC, one of the largest botanical gardens in the world. Created 20 years ago, the center is spread over 197 hectares on the outskirts of the state capital and bore the brunt of the cyclone's fury. Most of its valuable collection of rare trees, palms, bamboos, and medicinal and aromatic plants appears to have been destroyed. Director P. Das estimates overall damage at more than $2 million; in addition to the destruction of labs, stores, and other structures, many roads and paths have been washed away. "It's the only center of its kind in India," says H. Y. Mohan Ram, an economic botanist at the Department of Environmental Biology of the University of Delhi.

Lodh is thankful that none of his 140 scientists lost their lives in the storm, but notes that "morale is very low." A visit last week from a government team resulted in the emergency grant and a backup generator, but Lodh says that the center needs "maximum help" to recover from the devastation.

–PALLAVA BAGLA

AIDS VACCINE

Chimps and Lethal Strain a Bad Mix

BETHESDA, MARYLAND—For the first time in the history of the AIDS epidemic, the National Institutes of Health (NIH) convened a public meeting to discuss a proposed HIV vaccine experiment in chimpanzees. The reason for the extra scrutiny: The test involves giving the animals a strain of the virus that quickly destroys their immune systems and possibly even causes disease.

For 2 years, researchers have debated the science and ethics of injecting chimps with a potentially lethal HIV strain to test whether the immune response triggered by experimental AIDS vaccines can block infection or prevent disease (*Science*, 19 February, p. 1090). But what was a simmering academic dispute has now become a real-world dilemma. The National Cancer Institute's Marjorie Robert-Guroff has proposed just such a test of a vaccine her lab has been developing with the drug company Wyeth-Lederle. A successful experiment, she argued, would help convince colleagues—and Wyeth—that her vaccine approach deserves more support than it's been receiving.

Billed as a "consultation" to help NIH decide whether it should back Robert-Guroff's trial, the 5 November meeting triggered impassioned debate over the role that animal "models" should play in the search for a vaccine. It also revealed that anyone who wants to use a lethal HIV strain in chimps first must build a compelling case—something Robert-Guroff failed to do, as the assembled researchers were unenthusiastic about her proposal, apparently leaving it dead in the water. "We recognize this is a complex issue," said Peggy Johnston, who convened the meeting and heads the AIDS vaccine program at NIH's National Institute of Allergy and Infectious Diseases. "This consultation is the first step, not the only step."

Robert-Guroff's vaccine is now in small-scale human trials to test its safety and ability to trigger an immune response. As her group described in the June 1997 issue of *Nature Medicine*, they had first tested the vaccine—consisting of HIV genes stitched into a harmless adenovirus—in chimps. In the most impressive study, they vaccinated four chimps and then "challenged" them with an injection of an HIV strain that doesn't appear to harm the animals. More than 10 months later, none had detectable HIV in the blood, while the lone control was infected. "We were pretty encouraged by this study," Robert-Guroff said. However, she admits that the results drew a tepid reaction from colleagues. "They said we really didn't show anything, as the [challenge] virus was too wimpy."

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