

more than 30 communities across the country, each working with its own high-risk groups. They include construction workers, truckers who ferry cargo across many of Indonesia's 13,000 islands, low-income women whose husbands work away from home, oil workers, sailors, and people who work with Thai fishermen. Although that variety makes it harder for public health officials to reach a mass population with a single message, it may also slow the spread of the disease by segregating it in certain communities.

Indonesia's campaign will receive a big boost at the end of the year with the start of

a 5-year, \$40 million effort funded by the United States, Australia, and Germany. The United States, which is contributing almost half the total, lists Indonesia as one of 15 priority countries in stopping the spread of HIV. The money will be used to monitor infection rates, buy lab equipment, strengthen government health facilities, train health care workers, conduct national education programs, and develop more programs like Parwati's.

However, even with millions of dollars and a massive education program, Indonesia faces an uphill battle against AIDS. "We

need hundreds of Tuti Parwatis," says Douglas. "In terms of a large national education program that takes advantage of the mass media, we're years away."

Six years into the battle, Parwati says she's committed to the long haul. But she's careful not to exaggerate her chances of success. "We have to be optimistic," she says. "Because we've started early, we may at least slow the spread of AIDS."

—Jane E. Stevens

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SPACE SCIENCE

NASA Told Belt-Tightening Won't Work

Selling the children isn't an option for families on a tight budget. But at the National Aeronautics and Space Administration (NASA), some of the kids may have to go. A new analysis by the Congressional Budget Office (CBO) predicts that NASA's plans to cope with a flat or declining budget by making its operations "smaller, cheaper, and faster" is "unlikely to produce significant budget savings" over the next 5 years. Without more money, says CBO, NASA may be forced either to kill the space station and curtail the shuttle, or gut unmanned space science. And it appears that influential members of Congress are beginning to prepare themselves for the possibility of burying the station to save science.

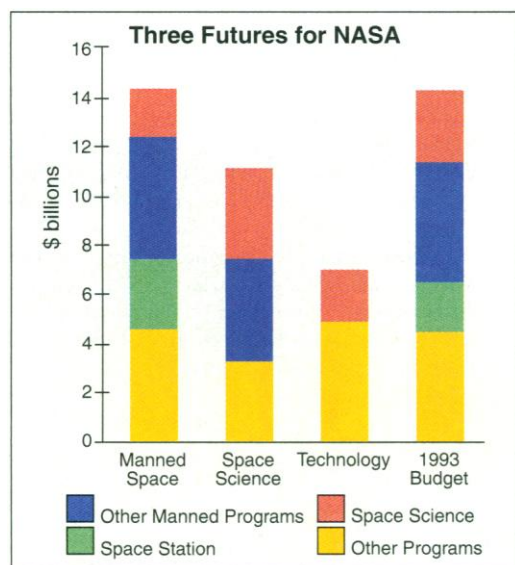
Over the last decade, CBO finds, "an expectation of future growth...permeated the agency's planning," leaving such expensive legacies as the space station, the Hubble Space Telescope, the Cassini mission to Saturn and the Earth Observing System (EOS). But since 1991 NASA's budget has been essentially flat, and next year, for the first time since 1974, the president has proposed spending less—\$14.3 billion instead of the current \$14.55 billion. Without a rising budget, CBO says, the large and expensive projects NASA began in the last decade are taking up an increasing share of its budget. "The attempt to fit a program that was projected to cost more than \$20 billion a year into an annual budget of \$14 billion risks delay, mission failure, and the loss of anticipated benefits," CBO warns.

One problem, according to CBO, is the high fixed costs of most of NASA's programs. For example, CBO finds that dropping two of the eight space shuttle flights scheduled each year would reduce operating costs by only 3%. Likewise, the cancellation last year of the Comet Rendezvous Asteroid Flyby, part of a dual mission with Cassini initially projected to cost \$3.7 billion, saved

NASA only \$700 million because it still plans to build and launch the spacecraft to go to Saturn.

A second problem is the cost of maintaining its expensive space hardware. Operating the Hubble telescope consumes nearly half of NASA's \$562 million space science operations budget. And the \$8 billion EOS project to monitor environmental changes may cost as much as \$500 million a year for operations and data analysis.

What should NASA do to cope with such a dismal financial future? CBO offers three choices: a program at current levels that places greater emphasis on manned space flight but cuts space science by more than \$1 billion; an \$11 billion option that adds \$1 billion to space science but kills the space station and relegates manned space flight to scientific purposes; or a \$7 billion program, without the station and with less science, that emphasizes technology and missions with commercial potential (see table). The two options with smaller budgets reflect, CBO



Tough choices. CBO report offers NASA three painful ways to spend its money.

says, "the national emphasis on deficit reduction and the prospect of fewer benefits."

Not surprisingly, NASA doesn't like any of these scenarios. The CBO report sacrifices "both balance and boldness," says Administrator Daniel Goldin, and "takes a defeatist approach [that] sends a chilling message to any government agency that dares reinvent itself." But Congress seems to be taking the report seriously. Representative George Brown (D-CA), the chairman of the House science committee that commissioned the report and a major backer of the station to this point, says Congress may need to address "whether it is wise[r] in the long run to terminate the space station and focus our resources more sharply on a narrower set of space goals." In particular, he says he would not support major reductions in space science to accommodate the space station.

A staunch supporter of the space station in the Senate is also readying for battle. In an interview last week with *Science*, Senator Barbara Mikulski (D-MD), chairman of the NASA appropriation committee, said she would fight for enough funding for NASA to avoid the sort of triage the CBO report recommends. If forced to choose a CBO option, she said she would pick the second, which focuses on space science, but she hopes to find enough money to fund the space station, too.

There are even signs that White House officials may not be willing to fight for every last dollar for NASA at the expense of other programs. Last week, presidential science adviser John Gibbons told the House appropriations subcommittee that funds NASA and the National Science Foundation (NSF) that he would favor NSF over NASA if the subcommittee didn't have enough money to fully fund both agencies. Noting that U.S. spending on fundamental research "is significantly lower, as a percentage of GDP [gross domestic product] than in other industrial nations," Gibbons said, "I would rather look harder at NASA than to try to find the funds [you need] within NSF's budget."

—Christopher Anderson