

Withdrawal/Redaction Sheet

Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
--------------------------	---------------	------	-------------

001. list	re: Personally Identifiable Information (2 pages)	00/00/0000	b(6)
-----------	---	------------	------

COLLECTION:

Clinton Presidential Records
First Lady's Office
Melanne Verveer
OA/Box Number: 20018

FOLDER TITLE:

AIDS [Acquired Immune Deficiency Syndrome] [Folder 1]

2013-0534-S

rc1881

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

Freedom of Information Act - [5 U.S.C. 552(b)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).

RR. Document will be reviewed upon request.

b(1) National security classified information [(b)(1) of the FOIA]
b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

CULTURE, *et cetera*

Choosing what?

"In 1992, Al Gore scored points with pro-abortion voters in a debate with former Vice President Dan Quayle when he challenged Mr. Quayle to '[Repeat] after me: "I support the right of a woman to choose." Can you say that?'

"Maybe this year, the Republican nominee will have to ask Mr. Gore whether he possesses the ability to use the word *abortion*. In two major speeches last month ... Mr. Gore expressed his commitment to a 'woman's right to choose' but stopped short of saying what she could choose.

"He wasn't always so reticent ... in remarks to a November dinner for the National Women's Law Center, he threw in the common Clintonian line about the importance of 'making abortion safe, legal and rare.' But in a June 1 speech at a Women for Gore event, Mr. Gore ... [said] 'And know this, I will always, always defend a woman's right to choose.'

"Why the sudden reluctance to say *abortion*, even when speaking



Al Gore

on the subject? Why just vague references to women and choosing? Is he concerned that saying the actual word *abortion* will undermine his recent attempts to cast his campaign in a religious glow?"

— Timothy Lamer, writing on "Ducking the 'A' word" in the July 3 issue of *World*

Conservative kids

"[The Nickelodeon network] commissioned a national poll of 6- to 14-year-olds and parents to find out what's happening with kids and what's important to them, our Kids' State of the Union. ...

"We found that the state of the union for kids today is surprisingly good. Kids today tell us that they are content, secure and family-focused. ...

"When we were kids, our parents always told us that anyone could grow up to be the president. When you ask today's kids, that's literally true. ... But their question is, who wants to be president anyway? Only four in 10 want to be president at all. Their reasons, however, don't appear to be a disdain for politics but a recognition that the job itself is a major hassle.

"Still, the bottom line is that these kids want to be good moms and good dads and they want to be part of the helping professions. Their outlook is very down-to-earth and people-focused.

"Kids also indicate having a

strong sense of values. More than 70 percent of the older kids in the study said it was important to wait until they got married to have sex. They also said they don't expect to have sex until they're 23. I think parents feel good about that. But here's a contrast. Their parents expected their kids to begin having sex at 18. You know, this may be the first generation of parents that are more liberal than their kids."

— Herb Scannel, Nickelodeon president, in a luncheon address Tuesday at the National Press Club

Wimp of the jungle

"Disney's new animated Tarzan is the politically correct heir of several generations of Hollywood Tarzans — a facsimile of a facsimile. Gone is the social Darwinist worldview that underpinned the original. ... The embarrassing problem of what to do with the 'natives' in a post-racist age is solved by eliminating the natives altogether. Disney's gorillas live in a jungle uninhabited by human beings, until Europeans intrude.



The Tarzan in Disney's new animated movie lacks some of the characteristics of Hollywood Tarzans from past generations.

"The Disneyfied Tarzan is such a wimp that he is not allowed to kill anything or anybody, although our Paleolithic pacifist is permitted to use martial arts techniques in self-defense. The two villains of the movie are a homicidal ... cheetah and an English hunter — the Evil White Male without which no PC epic would be com-

plete. ... This Tarzan is a warrior for our day, when the United States refuses to send soldiers into combat because one of them might actually get hurt." — Michael Lind, writing on "Disney turns Burroughs' Ape-Man into a Momma's Boy," a June 25 posting in the on-line magazine *Slate*

The Washington Times

FRIDAY, JULY 2, 1999

South Africa's AIDS battle turns into a problem for Gore

Vice president seeks to reassure Black Caucus

ASSOCIATED PRESS

Vice President Al Gore is caught in a clash between AIDS activists seeking cheap generic drugs for South African victims of the disease and U.S. laws intended to protect drug companies from having their patents violated abroad.

Mr. Gore, wary of appearing to be siding with the drug industry in an emotion-laden dispute, wrote to the Congressional Black Caucus' chairman that he does not oppose South Africa's attempts to produce or obtain generic AIDS medicines as long as those efforts do not violate laws protecting patents.

Mr. Gore acted after demonstrators from the group ACT UP began showing up at his campaign rallies, saying Mr. Gore was siding with pharmaceutical companies at the expense of Africans with AIDS. It created a policy dilemma for Mr. Gore, and aides worried it would haunt his bid for the Democratic presidential nomination.

"I want you to know from the start that I support South Africa's efforts to enhance health care for its people," Mr. Gore wrote in last Friday's letter to Rep. James E. Clyburn, South Carolina Democrat. "I support South Africa's effort to provide AIDS drugs at reduced prices through compulsory licensing and parallel importing, so long as they are carried out in a way that is consistent with international agreements."

"What does that mean?" asked Dr. Peter Lurie, an activist with Public Citizen who has performed AIDS research in South Africa. He said if Mr. Gore is saying that South Africa's law is inconsistent with international law, "then this letter means absolutely nothing."

Mr. Gore's letter was prompted by a letter June 24 from Mr. Clyburn, who chairs the caucus. He asked Mr. Gore to state clearly the position he took with South African President Thabo Mbeki regarding South Africa's Medicines Act.

Dr. Donna M.C. Green, the Virgin Islands' elected Democratic delegate to Congress, had heard AIDS activists' claims that Mr. Gore was helping pharmaceutical companies thwart South Africa's efforts to bypass U.S. patent laws so it could get AIDS medicines at a lower cost.

"All of us got a bit concerned. We thought we generally were on the same page with him on this issue," Mr. Clyburn said. He said he thought the AIDS activists had unfairly targeted the vice president, but he now feels "my suspicions as to what this was all about seem to have been well-placed."

Chris Lehane, a Gore spokesman, said: "This is one of those situations where emotions are obscuring what the real information is. The vice president supports efforts to provide South Africa with AIDS drugs at reduced prices. He's working to create a framework to make that happen."

Nevertheless, ACT UP promised to keep protesting and said it would challenge other presidential candidates on the issue, too.

"This statement is smoke and mirrors. We want action," said Asia Russell of ACT UP Philadelphia, which amassed 400 protesters outside a Gore event Monday. "We plan to continue our work against Gore until he does more than simply issue a statement about this yearlong effort... to do the dirty work of the pharmaceutical industry."

South Africa's 1997 law granted the government unspecified power to obtain cheaper AIDS drugs for the country, where more than 3 million people are HIV positive and 2.5 million children are expected to be orphaned because of the virus over the next 10 years.

About 40 pharmaceutical companies in South Africa, Europe and the United States are challenging the law in South African courts, fearing it may be used in a way that violates patent rights.

Mr. Gore said in his letter that the Clinton administration expressed concerns about the law's vagueness and asked the South African government to assure it would "not undermine legal protections" for patent holders.

According to Gore aides, the misunderstanding began in February after the State Department submitted a report on U.S. efforts to get the Medicines Act amended. A provision inserted into last year's budget required the report as a condition for releasing U.S. aid to South Africa.

The Washington Times

FRIDAY, JULY 2, 1999

Withdrawal/Redaction Marker

Clinton Library

DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. list	re: Personally Identifiable Information (2 pages)	00/00/0000	b(6)

COLLECTION:

Clinton Presidential Records
First Lady's Office
Melanne Verveer
OA/Box Number: 20018

FOLDER TITLE:

AIDS [Acquired Immune Deficiency Syndrome] [Folder 1]

2013-0534-S

rc1881

RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

Freedom of Information Act - [5 U.S.C. 552(b)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [(a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.

PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).

RR. Document will be reviewed upon request.

b(1) National security classified information [(b)(1) of the FOIA]
b(2) Release would disclose internal personnel rules and practices of an agency [(b)(2) of the FOIA]
b(3) Release would violate a Federal statute [(b)(3) of the FOIA]
b(4) Release would disclose trade secrets or confidential or financial information [(b)(4) of the FOIA]
b(6) Release would constitute a clearly unwarranted invasion of personal privacy [(b)(6) of the FOIA]
b(7) Release would disclose information compiled for law enforcement purposes [(b)(7) of the FOIA]
b(8) Release would disclose information concerning the regulation of financial institutions [(b)(8) of the FOIA]
b(9) Release would disclose geological or geophysical information concerning wells [(b)(9) of the FOIA]

LETTERS TO THE EDITOR

Who Is Worrying About the Children?

The Post's front-page story "Welfare Reform Is on a Roll" [Aug. 3] was grossly misleading. Not until the very end, on the inside page (headline: "Welfare Reform's Triumph Is Affirmed") is it revealed that the central finding of the Urban Institute's study—which is the subject of the article—was that 60 percent of the people surveyed had jobs at the time they were interviewed. Hardly a triumph. It means that of the 2.1 million adults who went off the welfare rolls during the period studied, 840,000 did not have jobs. With their children, that is a total of 2.5 million people. Who is worrying about those children?

The real news is deeply troubling. The poor are barely better off in this phenomenal prosperity, and the extremely poor—those with incomes below half the poverty line (less than \$6,750 for a family of three)—are worse off. During the same two years studied by the Urban Institute (1996 and 1997), the number of extremely poor rose by 700,000 people—from 13.9 million to 14.6 million people. The lowest 10 per-

cent of single mothers lost nearly one-sixth of their income, and the lowest 40 percent all lost income. Why? Very simple. Benefits lost exceeded earnings gained.

A large minority of those leaving welfare do not find work, many of those who find work don't find steady work, and most of those with steady work don't earn enough to get out of poverty. In a four-state study, only a third of recent welfare recipients with jobs had steady jobs. Another analysis showed that the average income of families still in poverty after leaving welfare was less than \$9,000.

Why do so many leave welfare without getting work? Because they are pushed off for failure to show up for an appointment or some other dereliction. In Mississippi the welfare rolls have declined by something like 69 percent, but only 35 percent of those leaving found jobs. Mississippi has an aggressive sanctioning policy. Work is generally better than welfare, but getting out of poverty is the policy aim—not reducing the welfare rolls by any

means possible.

The Urban Institute study is in fact very unsettling. It implies a need for policy change, not satisfaction, especially because so many children are involved. The Post's story helped no one except the politicians who are trumpeting the success of a policy that has hurt so many poor children.

PETER EDELMAN
Washington

The writer, a professor at Georgetown University Law Center, was an assistant secretary of Health and Human Services during the first Clinton administration.

The Dud Rate Of Cluster Bombs

Virgil Wiebe's Aug. 3 letter, "Duds Keep on Killing," is somewhat misleading in its assertion that the dud rates of cluster bombs were as high as 30 percent during the Vietnam War and 20 percent during the Persian Gulf War. The very nature of cluster bomb units makes a precise figure impossible. Estimates depend on the experience and judgment of witnesses—usually the pilots involved.

When I was a forward air controller in Southeast Asia, I observed about 1,500 sorties of fighters—of which about 85 percent delivered cluster bomb units in some form. I would estimate that about 10 percent of the bomblets did not detonate. Contrary to Mr. Wiebe's pejorative language, only a tiny percentage of the cluster bomb units used in Southeast Asia fell into the category of "mines," and these were supposed to self-destruct after 28 days (although some undoubtedly did not). Commentary on weapons use and dud rates should be influenced by some firsthand experience.

Bomblets then were olive drab in color. They are now, apparently, yellow—a cautionary color in most cultures. This makes detection and removal of duds far easier. Cluster bombs, used appropriately, are a superb force-multiplier weapon in situations involving massed troops, armor, support facilities and anti-aircraft installations. Perhaps Mr. Wiebe would prefer a return to the good old days of mass dumps of 500-pound bombs—which dud at a similar rate.

KARL POLIFKA
Williamsburg

The writer is a retired Air Force colonel.

Leninists All Along

In their Aug. 2 op-ed piece, "Nicaragua Still Needs Our Help," Lawrence Pezzullo—former U.S. ambassador to Nicaragua at the beginning of the Sandinista regime—and his son, David Pezzullo, have it wrong.

They suggest that President Carter's policy of "constructive engagement," by which the United States offered the Sandinistas "the carrot of economic assistance coupled with advice" to behave as good guys, would have been good enough to prevent the Sandinistas from being the bad guys they actually were. The Sandinistas knew better when they said that their intention was to build "a communist society with dollars from the capitalist world."

The authors go further to blame the Reagan administration for the collapse of economic production in Nicaragua. The economy collapsed in Nicaragua for the same reasons it collapsed in the entire former socialist bloc: very bad economic policies.

JORGE SALAVERRY
Managua, Nicaragua

Belated Water Conservation

Cheers to The Post for its recent stories on the region's water woes and scorching heat. But in stating that the "Drought Is Worst Since Depression" [front page, Aug. 2], a major point is missed: Times have changed since the last great drought of 1930-31. Expanding populations and sprawl throughout the Mid-Atlantic region, including the Washington metropolitan area, have spawned innumerable vehicles, roads, homes and businesses. This transformation has placed enormous demand on natural resources, including water for agricultural and domestic uses.

Although these patterns are not to blame for current weather conditions, they do play a role in exacerbating the problem. The drought did not happen suddenly but has been creeping up in a series of dry and hot spells that have worried farmers (the hardest hit) and environmentalists for months. Yet many area residents and policymakers are just beginning to acknowledge that reducing water consumption is a good idea. Still others—most notably in the District—remain complacent and shortsighted.

Must we reach a point of severe crisis to act? Even when drought doesn't strike and even in places where water restrictions are not in effect, small sacrifices can go a long way toward saving one of our most precious resources. Watering lawns

and gardens less, not hosing sidewalks, fixing leaky plumbing, taking shorter showers and recycling water are easy habits.

Practicing them reduces wasteful consumption and mitigates the impact of dry periods (including this one, which has no end in sight). We would be well served not only to look back but ahead to the future and ask ourselves what legacy we want to leave behind.

NADIA STEINZOR
Washington

On my early-morning runs in downtown Washington, I am daily shocked and dismayed by what can only be called a flagrant and selfish abuse of our natural resources—the watering of sidewalks in front of many businesses as well as federal government offices. Watering sidewalks? Yes! During this, one of the worst droughts in the 20th century on the Eastern seaboard, we suffer from a collective blindness that is truly amazing.

For nearly three weeks, we have heard of the need to conserve our drastically reduced water resources. Curbs have even been put on watering our lawns and washing our cars. Why, then, has no legislator curtailed our ability to water the sidewalks, for goodness' sake?

EMILY S. GOLDMAN
Washington

The Washington Post

EUGENE MEYER, 1875-1959
PHILIP L. GRAHAM, 1915-1963

DONALD E. GRAHAM
Publisher

LEONARD DOWNIE JR. STEPHEN S. ROSENFELD
Executive Editor Editorial Page Editor

STEVE COLL
Managing Editor

MILTON COLEMAN
Deputy Managing Editor

BOISFEUILLET JONES JR.
President and General Manager

VICE PRESIDENTS

BENJAMIN C. BRADLEE At Large
MICHAEL CLURMAN Production
PATRICIA A. DUNN Labor
STEPHEN P. HILLS Advertising
ELIZABETH ST. J. LOKER Systems and Engineering
THEODORE C. LUTZ Business Manager
CAROL D. MELAMED Government Affairs
GERALD M. ROSEBERG Affiliates
MARGARET SCOTT SCHIFF Controller/Pers./Admin.
WILLIAM G. TOMPKINS JR. Marketing
MARY ANN WERNER Counsel

Published by The Washington Post Company

KATHARINE GRAHAM
Chairman of the Executive Committee

DONALD E. GRAHAM
Chairman of the Board and Chief Executive Officer

ALLAN G. SPOON
President and Chief Operating Officer

1150 15th St. NW • Washington, D.C. 20001 • (202) 334-6000

The Washington Post

WEDNESDAY, AUGUST 11, 1999

Princeton N. Lyman

Facing a Global AIDS Crisis

The toll from the HIV/AIDS epidemic is becoming more evident each day. Last year close to 2 million people worldwide died from the disease. The number of AIDS orphans is horrifying: 8.3 million children, according to UNICEF.

Less well reported is the growing economic impact. In Zimbabwe, companies report training seven workers for each job, as the death toll is so great. In Zambia, colleges graduated 300 new teachers last year; but AIDS took the lives of 600. In South Africa, analysts predict that the epidemic could kill up to 10 percent of the mining work force each year. AIDS will drive up the payroll costs of this critical industry in South Africa by 45 percent, an industry already racked by falling world prices.

While the impact today is greatest in Africa, the rate of spreading infection in South Asia is one of the most rapid in the world, threatening havoc in that already volatile region within a decade.

Faced with this devastating epidemic, African countries have become increasingly frustrated with the gap between the industrialized countries' ability to treat AIDS patients, and thus lower death rates, and their own lack of the resources to do so. This has led to attacks on the patent rights of pharmaceutical companies, by South Africa in particular, and challenges to these rights by others in the World Health Organization.

Led by Zimbabwe, countries are arguing that health should take priority over trade

or intellectual property protection. The South African challenge is technically not aimed at AIDS medicines per se. But the confrontational attitude behind these challenges has its origins in the AIDS crisis.

Most African countries would be unable to administer the complex use of AIDS "cocktails" even if the price were within reach. But a new development has offered the prospect of a partnership between the international community, pharmaceutical

companies and African and other nations under siege. This is the discovery of a relatively simple means of interrupting the transmission of HIV from an infected mother to the unborn child. At least this much could be addressed now.

Such a partnership would involve major donors, such as the United States, to cover the administrative costs, UNICEF to ensure proper ministration of the medicine, the pharmaceutical companies to make this

relatively low-cost medicine available free or at least at cost, and the governments of Asia and Africa to launch and oversee the program.

This is still a small step toward controlling this disease. Some day, a much greater partnership will be needed to administer a vaccine, once it is developed. For now, however, pharmaceutical companies, which have been notoriously insensitive to the underlying crisis when vigorously defending their patent rights (Bristol-Myers being a welcome exception), can demonstrate concern in a tangible way.

For Vice President Al Gore, dogged by protesters over his alleged defense of the pharmaceutical industries' claims against South Africa, this would be a most appropriate initiative to lead. It would have far more impact than the extra \$100 million request for HIV/AIDS he recently announced with Archbishop Desmond Tutu, as welcome as that is.

The HIV/AIDS epidemic is perhaps the most serious source of future social and economic upheaval in large parts of the world today. It demands initiatives far greater than anything done so far. A public-private partnership as described here could be the forerunner of the kind that eventually will be needed.



ASSOCIATED PRESS

The writer, a former U.S. ambassador to South Africa, is a visiting fellow at the Overseas Development Council.

The Washington Post

WEDNESDAY, AUGUST 11, 1999

THE DOCTOR'S WORLD

In Africa, a Deadly Silence About AIDS Is Lifting

By LAWRENCE K. ALTMAN, M.D.

Earlier this year, AIDS became the leading killer in Africa, just 18 years after the infection was first recognized. But if political and religious leaders had responded with effective public health programs much earlier, they might have prevented hundreds of thousands, if not millions, of deaths.

Some leaders simply denied the scientific evidence that H.I.V. was being transmitted in their countries. Others mistakenly believed they had more pressing health problems to address.

Now, as the epidemic in Africa becomes an even greater catastrophe, Dr. Peter Piot, Assistant Secretary General of the United Nations and head of its AIDS programs, says he sees signs of momentum among African leaders to fight the disease. The momentum promises to slow the relentless transmission of H.I.V., conveyed on the continent primarily through heterosexual sex, Dr. Piot said in an interview.

Nelson Mandela, the former President of South Africa; his successor, Thabo Mbeki, and Dr. Negasso Gidada, the President of Ethiopia, are among the leaders of countries with high infection rates to speak out on AIDS for the first time recently in their own countries and to beef up prevention efforts.

And, in May, at their annual meeting in Addis Ababa, Ethiopia, African finance ministers for the first time called AIDS a major threat to economic and social development.

The United Nations General Assembly recently called for a 25 percent reduction in new H.I.V. infections among young people over the next five years in the countries most affected by AIDS. And the Clinton Administration, appalled by the staggering dimensions of the African AIDS epidemic, is planning an initiative to help, Dr. Piot said.

Large-scale efforts clearly are needed. In sub-Saharan Africa, H.I.V. has infected 34 million people and killed 11.5 million since 1981, dwarfing malaria and tuberculosis. Last year, AIDS accounted for 1.8 million deaths in sub-Saharan Africa, nearly double the 1 million deaths from malaria and about nine times the 209,000 deaths from tuberculosis, the World Health Organization says.

Based on meetings with leaders of 10 African countries this year, Dr. Piot says he has noted a striking change in attitudes toward AIDS: at earlier meetings, he initiated discussions about AIDS; at the recent sessions, African leaders admitted their problems and asked for help.

"It is such a big change," Dr. Piot, a 50-year-old Belgian and a pioneer in AIDS research in Africa, said in a brief visit to New York. In years past, Dr. Piot said, even meeting with an African head of state was difficult.

He recalled on incident about 15 years ago when he and another AIDS expert waited nearly a day in the office of the Kenyan Minister of Health while officials debated whether to expel the two because they had talked to reporters about AIDS in Kenya.

In 1985, Zaire refused to give me a visa to report on AIDS, and the Government of Kenya confiscated issues of The International Herald Tribune, which carried my articles, as leaders denied the severity of their AIDS problem.

African political leaders remained silent even when AIDS was killing members of their own families.

In 1985, the press secretary to Kenneth D.



Dr. Peter Piot, the Assistant Secretary General in charge of the United Nations AIDS program, said he is finding a new attitude toward the disease among African leaders.

Kaunda, then the President of Zambia, denied my request for an interview about AIDS. The press secretary threatened to expel me for reporting on what he called an American disease. A year later, Mr. Kaunda lost a son to AIDS.

Three years after that, Mr. Kaunda became one of the first to speak out. In describing his family's loss at an international AIDS meeting in Montreal, Mr. Kaunda said that if scientists failed to cure AIDS, the epidemic would become "a soft nuclear bomb on human life." But in the years of Mr. Kaunda's silence, hundreds of thousands of Africans became infected.

Yet even now realism has not fully set in. Dr. Piot still encounters government officials who "ask me why I use the word epidemic," he said.

It takes an average of nine years for H.I.V. to progress to AIDS, and the virus spread widely and silently for a decade before being discovered. Yet even with the undetected early spread, there was time to initiate programs to prevent subsequent infections, as was done effectively among gay men in the United States and other developed countries.

In South Africa, H.I.V. rates soared during Nelson Mandela's Administration, a fact that he later acknowledged.

"It's the silence that is letting this disease sweep through the country," Mr. Mandela said on World AIDS Day in December. "It is time to break the silence."

Dr. Piot applauded Mr. Mandela and Mr. Mbeki, his successor, for calling national attention to AIDS, but said, "It took a long time, and a lot of deaths could have been prevented if they had spoken out earlier."

Today, AIDS continues to thin the ranks of Africa's small middle class, killing at least one teacher a day in Malawi and the Ivory Coast. It is devastating already weak economies across Africa and forcing children to drop out of school to till the farms and care for sick parents.

Dr. Piot challenged African finance ministers at their annual meeting in Addis Ababa in May to learn more about how AIDS was devastating their economies.

"After my speech, there was dead silence," Dr. Piot said. "I thought, another of those moments of supreme denial."

But then, he added, "One after the other, the finance ministers spoke, often making personal references to AIDS in the family or a colleague."

That evening, many joined him for a drink. "The problem was how to stop the discussions," Dr. Piot said. "That was a great moment for me."

The next day, Dr. Gidada, the President of Ethiopia, and His Holiness Abune Paulos, the Patriarch of the Ethiopian Orthodox Church, shook hands with H.I.V.-infected Ethiopians in meeting with them publicly for the first time, Dr. Piot said.

"That may have been a small thing, but it was highly symbolic in Africa," he added.

Uganda, which acted early, showed that educational programs could change sexual behavior after AIDS had struck in vast numbers.

Senegal also thwarted the assault of AIDS, Dr. Piot said, taking "vigorous action" on sex education, AIDS prevention and condom promotion to keep the infection rate below 2 percent. "It is a major political challenge to invest in AIDS prevention when there is not a huge problem," Dr. Piot said, "yet that is exactly what Senegal has done."

Through programs that political and religious leaders encouraged, the Senegalese postponed having first sexual intercourse, used condoms more often and had sex with fewer partners and less sex with prostitutes, surveys there showed.

Nigeria, Africa's most populous country, stands in stark contrast to Senegal, with an infection rate of about 9 percent and rising. A new regime appears to be willing to tackle the AIDS problem in Nigeria, which the previous regime denied, Dr. Piot said.

Dr. Piot's team has a budget of \$60 million a year, only enough to act as a catalyst for others to undertake prevention efforts. His AIDS team, for example, calls on African leaders to urge drastic efforts to fight the epidemic.

The latest figures show that international aid paid for \$150 million of the \$165 million

spent on AIDS prevention in Africa in 1997. Uganda accounted for much of the \$15 million that the African countries spent.

"It's a scandal that African countries have not spent more," Dr. Piot said.

Although the World Bank and other international agencies make money available for projects in Africa, much of it goes unspent because of bureaucratic complexities and other problems.

Dr. Piot said his agency was trying to identify untapped funds to direct toward prevention efforts, while recognizing that those nations "cannot afford everything for AIDS, certainly not lifetime anti-retroviral drugs."

Taken in combination, those drugs can cost \$15,000 a year for a single patient, require adherence to rigid schedules, and often demand sophisticated monitoring tests unavailable in developing countries. That means few Africans can benefit from the drug cocktails, which are prolonging lives and often restoring health among H.I.V.-positive people in developed nations.

To reach a largely captive audience, and one in its sexual prime, Dr. Piot is encouraging governments to spend more of their military budgets, which usually receive high priority, on AIDS prevention.

In Uganda, the infection rate is about 10 percent in the general population and up to 30 percent in the military. "There are African countries where it is said that more than 50 percent of all the military are H.I.V. infected," Dr. Piot said, "and that is a problem of national security."

It also means that many spouses and children are infected. So Dr. Piot's team aims to encourage teachers' unions, school systems and youth groups to join prevention programs in Africa.

In some West African countries, for example, Scouting groups have created an AIDS badge for those who do good deeds for people with H.I.V., Dr. Piot said.

His agency has also teamed on AIDS efforts with Caritas, a Catholic health agency based in the Vatican that is responsible for health care in many African countries, Dr. Piot said.

Although the Vatican does not approve of the use of condoms, Dr. Piot said that he had seen many Catholic priests, nuns and organizations promote condom use in Africa.

In June 1998, Dr. Piot's agency issued the first country-by-country analysis of H.I.V. It showed that one in four adults was infected with H.I.V. in certain parts of Africa and that AIDS was hitting so fiercely that it compared to the greatest epidemics of history. The report was a crucial factor in changing political attitudes, Dr. Piot said.

Dr. Piot said he was criticized for the report by many Western epidemiologists and health workers, who called the figures exaggerated.

"A lot of the criticism had to do with turf battles, from scientists who believe their disease is more important than someone else's," Dr. Piot said, "and it's the type of nonsensical competition that exists in all countries."

But now, the criticism has come full circle. In 1992, a team headed by the late Dr. Jonathan M. Mann at the Harvard School of Public Health, published estimates of H.I.V. infections in sub-Saharan Africa ranging from 20.8 million to 33.6 million by 2000.

The World Health Organization criticized Dr. Mann's estimates as excessive. Now, academic scientists are criticizing the figures of Dr. Piot's team. "When we look at the figures today, they are worse than the scenarios Jonathan had published," Dr. Piot said.

Larger budgets are needed. But pumping money into a country where AIDS is a low priority will not end the epidemic. "If a country does not recognize that it has an AIDS problem, then it is not willing to take on the tough questions," Dr. Piot said. "Outside support for something that can only be solved from the inside will not work."

"We can only win," he added, "if there is a mass movement."

ON THE WEB

The Epidemic

The New York Times on the Web explores AIDS in a special package that includes a detailed chronology and a multimedia essay, at:

www.nytimes.com/science

5 24-99

THE WHITE HOUSE
WASHINGTON

May 21, 1999

~~cc: NSC/Sand~~
~~cc: Gens~~

cc: NSC/Sand
cc: Gens
cc: Back to m

cc: Back to m

MEMORANDUM TO THE PRESIDENT

FROM: Sandra L. Thurman, Director, Office of National AIDS Policy

SUBJECT: AIDS in Africa - Response to Your Request for Additional Information

cc: NSC/Sand
cc: Gens
cc: Back to m

I'd like to help re m

Thank you for calling me in Ghana and for reiterating your concern about the AIDS emergency in Africa and the need for an invigorated US effort. As a follow-up to our conversation, this memorandum provides additional information that seeks to put the issue of AZT for pregnant women in the broader context of the AIDS pandemic in Africa.

AIDS is a plague of biblical proportion

Thanks to the commitment of Rev. Leon Sullivan, for the first time, the African American Summit focused much needed attention on the issue of AIDS in Africa and acknowledged the following bleak realities:

AIDS buries more than 5,500 people a day in Africa and that number will more than double in the next few years. The WHO just declared AIDS the leading cause of death among all people of all ages in Africa, and each day, an additional 11,000 people become HIV infected. Most of these new infections are among young people, under the age of 25. By 2005, more than 100 million people worldwide will be HIV-positive.

AIDS is leaving a generation of children in jeopardy. In many countries, between one-fifth and one-third of all children have already been orphaned by AIDS, and the worst is yet come. Within the next decade more than 36 million children will be orphaned by AIDS in sub-Saharan Africa, and this tragedy will continue to grow for at least another 30 years.

AIDS is wiping out decades of steady progress in development; doubling infant mortality, tripling child mortality, and slashing life expectancy by 20 years or more. AIDS is devastating economic growth, threatening political and regional stability, and stands a serious obstacle to the realization of your new partnership with Africa, again celebrated in Ghana.

The combination of leadership and resources can turn the tide.

In our battle against AIDS, Uganda is the model for success in the developing world. President Museveni has been a strong and effective AIDS leader, and has created an environment ripe for change. In response, the US has invested more than \$50 million on AIDS in Uganda over a ten-

cc: PC
cc: NSC
cc: Gens
cc: Back to m

year period. Through this combination of leadership and sustained resources, Uganda has cut the rate of HIV by more than half, and organized model AIDS care programs.

As an essential component of your new partnership with Africa, we need to help cultivate AIDS leadership among more African leaders, and we need to help enhance the overall investment in the war on AIDS to a level that meets the magnitude of this crisis. On the leadership front, we are beginning to see positive movement. As the realities of the AIDS become increasingly unavoidable, a growing number of African leaders are stepping up to the plate. However, the resources currently dedicated to winning this war, from both host governments and donors, are grossly inadequate. As I said in my previous memorandum, in the face of a 300% rise in annual HIV incidence and an AIDS explosion in sub-Saharan Africa, the USAID global AIDS budget has remained essentially stagnant since 1993. Other donors have followed suit. Without a dramatically enhanced response, we will lose this war.

Our Global AIDS Emergency Working Group is exploring three strategies for increasing the availability of resources to begin to meet the ever growing global AIDS crisis. First, we are looking at an increase in the USAID global AIDS budget. In this context, it is important that this increase be new money and not taken from other essential development accounts. Health, education, child-survival, and micro-finance are all interconnected components of a comprehensive human investment and AIDS strategy. Shifting money from one account to another will not improve our collective effort. Second, we are looking at an approach to debt relief that not only considers a debtor nation's economic policy but its strong commitment to investing in human capacity, particularly HIV and AIDS. Countries such as Côte d'Ivoire, Kenya, Nigeria, South Africa, and Zambia all hold considerable US debt and have a serious and growing AIDS emergency. Third, we are looking at public-private partnerships.

Finding ways to increase access to AZT for HIV-positive pregnant women is an integral part of an invigorated response to AIDS in Africa.

With additional resources, the US can partner with host governments and other donors to promote an aggressive strategy on four fronts including: containing the AIDS pandemic, providing home and community-based AIDS treatment and support, caring for children orphaned by AIDS, and gearing up for the long haul through health infrastructure and capacity development.

*ways to prev
Africa today
delivery, one* In the context of containing the AIDS pandemic, developing ways to prevent mother-to-child transmission that are workable in Africa is a high priority. In Africa today, for every ten children born to HIV-positive mothers, two become infected during delivery, one becomes infected through breast-feeding, and seven remain HIV-negative. A "short course" of AZT at the time of birth and for a week following has been found to reduce the number of babies who become HIV-positive during delivery by nearly 40%. This is extremely encouraging news. However, a host of additional issues need to be explored and addressed before this knowledge can be effectively implemented.

USAID is now devoting \$6 million to answering key questions surrounding the use of AZT to reduce mother-to-child transmission of HIV in the developing world. For example, to keep babies HIV-negative, mothers who receive AZT during delivery should not breastfeed. However, in many areas of sub-Saharan Africa, babies are as likely to die from diarrhea resulting

from misuse of formula as they are from AIDS. The lack of health care infrastructure is also a serious issue. More than 95% of pregnant women do not know they are HIV-positive and currently lack access to vital testing and counseling services needed to find out. Further, in many areas, most women deliver their children with the assistance of midwives in their homes, or in makeshift clinics unequipped for AZT interventions.

Finally, the AIDS stigma is so great in places like South Africa, that fear and denial keep pregnant women from discovering their status, even if they have the option. Recently a woman in South Africa with HIV went public with her status and was stoned to death by her neighbors, and countless others have been left destitute on the street with their children after their husbands found out they were HIV-positive. As we begin to address these issues, we will increase our ability to move forward with the implementation of an AZT intervention.

The cost of AZT remains a serious concern. Even with a price reduction from Glaxo Wellcome, AZT is expensive, particularly by African standards, and health planners face difficult choices over the best use of scarce resources. In South Africa, Health Minister Zuma has opposed providing AZT to pregnant women because it cannot be made available to all who need it and because she believes that other approaches are more cost effective. For example, she believes that it is better to focus on keeping women of childbearing age HIV-negative, thereby not only saving children from becoming infected but from becoming orphaned as well. In addition, this AZT discussion has been caught up in the debate over US policy on compulsory licensing, and South Africa's desire to produce AZT at a more affordable price. It is for these reasons that the delivery of AZT to pregnant women is one prong of a multifaceted approach to respond to AIDS in Africa.

I welcome the opportunity to discuss this with you further, and hope to have a report to you on AIDS in Africa, including recommendations from the Global AIDS Emergency Working Group, in early June.

INTERNATIONAL
INTELLECTUAL
PROPERTY
INSTITUTE

-> MELANNE VERVIER -

-> Copy TO TOM ROCKWELL - VP

July 29, 1999

Richard Socarides
Special Assistant to the President
The White House
Washington, D.C. 20500

Dear Richard,

-> // Thank you for taking my telephone call this morning about my interest in being included in the September 7 meeting on AIDS in sub-Saharan Africa which is being convened by Hillary Rodham Clinton on September 7. As I explained to you on the phone, since leaving my post as Assistant Secretary of Commerce and Commissioner of Patents and Trademarks at the end of last year, I have formed a nonprofit organization with the principal purpose of assisting developing countries to utilize the global intellectual property system for their benefit. FLOTUS

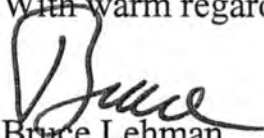
TOM -> | One of the first issues I was asked to look at by UNAIDS was the controversy surrounding delivery of patented HIV therapies to developing countries. This led to the enclosed paper which has been widely circulated in the world AIDS community. This week my colleague Lee Feldman and I had a very productive discussion with HHS Secretary Donna Shalala about our ideas and she expressed great interest in serious follow-up. The paper also has been shared with Pharma, GlaxoWellcome Corp. and the Merck Corp., who have expressed significant interest in the plan. The essence of the plan is to bring together the global public and private sectors to more efficiently bring to developing countries the benefits of state-of-the-art patented therapies for HIV disease. I believe that this is directly relevant to the September 7 meeting.

| I would deeply appreciate your assistance in having the International Intellectual Property Institute invited to participate in the September 7 meeting. I believe that we have a significant contribution to make. With regard to any concern about conflicts of interest or ethical concerns, please be advised that I in no way participated in decision making regarding this issue while I was in the Administration, and have no ethical bar to dealing

with the White House or any other Executive Branch department or agency other than the Department of Commerce.

Thank you very much for your interest.

With warm regards,

A handwritten signature in black ink, appearing to read "Bruce", written over the printed name.

Bruce Lehman,
President and CEO,
IIPi

Enclosure

DRAFT

**A PROPOSAL FOR A PILOT PROJECT TO DELIVER PATENTED
HIV/AIDS THERAPIES AND OTHER TREATMENTS TO
PATIENTS IN DEVELOPING AND LEAST DEVELOPED
COUNTRIES**

DRAFT VERSION 1.3

PRINTED: 07/29/99 2:35 PM

LEE FELDMAN

CO-MANAGING DIRECTOR

HEALTHMINDER, L.L.C.

301-593-7864

LFeldman@HealthMinder.com

BRUCE LEHMAN

INTERNATIONAL INTELLECTUAL PROPERTY INSTITUTE

202-544-6610

BLEhman@iipi.org

© LEE FELDMAN, BRUCE LEHMAN 1999

Precis

The need to better control the spread and treatment of HIV and other diseases such as tuberculosis in the developing countries is a widely known and serious issue that calls for diligent and aggressive attention. This proposal addresses three critical problems:

- the high cost of pharmaceutical treatments,
- the lack of infrastructure needed to effectively deliver treatment and support services to patients, and
- inadequate incentives and assurances needed to stimulate additional subsidies and investments in the impacted countries

This paper proposes a framework of national exhaustion, tiered pricing and subsidization coupled with innovative technology that can achieve sustained and effective service delivery to patients thereby yielding improved outcomes. These measures would remove barriers and create incentives for pharmaceutical companies to actively participate in the delivery of essential therapeutics. Accordingly it should be possible to attain the level of multi-party cooperation and clinical effectiveness needed to build a program that brings meaningful treatments to the developing world.

Pharmacological interventions are a critical component in the management of HIV/AIDS, opportunistic infections and other high-impact diseases in the developing world. Affordability is a critical issue. Yet, efforts to simply restructure the price of pharmaceutical treatments to make them more affordable do nothing to bring the treatment to the patient in need. Affordability does not, by itself, translate into availability. Few developing nations have the service infrastructure needed to properly deliver the full spectrum of HIV and other treatments and critical patient support services that are required over a sustained period of time. Available pharmacological interventions and accessible clinical interventions are the necessary predicates for a successful disease containment program.

This paper discusses the implementation of policies and technologies that would help assure the affordable and effective delivery of pharmaceuticals, treatments and support services resulting in improved outcomes. In particular, the framework:

- Lays a foundation that encourages developing countries to accept national exhaustion of patent rights and support for patent holder rights.
- Discusses how a full spectrum of care can be effectively delivered to patients
- Creates incentives for patent holders to participate in both special pricing models and programs that bring the benefits of the latest innovations to the developing world.
- Helps address the concerns of patent holders that special pricing would lead to the formation of gray markets that erode the fundamentals of their business.
- Helps create an environment where subsidization of pharmaceutical purchases required by the impacted countries can be made with greater assurance that treatments are being delivered in a manner that is clinically effective.

The policies and technologies discussed are not revolutionary, but there is an obvious need for a demonstration project. While a pilot project would necessarily include private industry, three international entities, by virtue of their mandates, should coalesce to shepherd the effort: (a) the World Bank, (b) the World Intellectual Property Organization and (c) UNAIDS.

A successful pilot program will demonstrate the effective case management of patients, a regulated and rational pharmaceutical distribution model and a measurable impact on HIV, opportunistic and other high-impact disease.

INTRODUCTION

In recent years HIV/AIDS and tuberculosis have become the principal public health crisis for a number of countries in the developing world, particularly in sub Saharan Africa. While new advances in drug therapy such as AZT, protease inhibitors, non-nucleoside reverse transcriptase inhibitors and antiretrovirals have drastically lowered morbidity in the United States and developed countries, these therapies are virtually unknown in impacted areas of the developing world. First line therapies for TB are becoming less effective as multiple drug resistant strains evolve. Second line therapeutics and other more complex interventions are often considerably more expensive.

The problem of making effective therapies available in developing and least developed countries stems from several causes. First, of course, is the high cost of treatment. In the United States the annual bill for prescriptions of protease inhibitors usually exceeds \$10,000 per patient. This is a price beyond the reach of individuals in countries where annual per capita incomes may be a fraction of this annual cost. Second, these pharmaceuticals require a sophisticated medical infrastructure and level of patient cooperation beyond the capacity of many developing and least developed nations. Finally, the relative poverty of populations in these countries and their resulting inability to stimulate market demand deprives developers of the necessary incentive for investing in solutions. Absent potential consumer demand, the patent system is ill equipped to impel producers of these therapies to risk scarce venture capital.

This paper proposes an integrated policy and technological approach to resolving these difficult problems. The first section outlines a policy based on principles of national exhaustion, tiered pricing and subsidized pharmaceutical purchases. The second section describes technological measures based on sophisticated information systems, established models of patient care and controlled pharmaceutical delivery.

PART I NATIONAL EXHAUSTION, TIERED PRICING AND SUBSIDIZED PURCHASING

At the present time developers of state-of-the-art therapies look to the exclusivity, which they enjoy in developed country markets, as the means to command a product price enabling them to amortize the cost of their investment and produce a profit. To the extent that individual patients lack the financial means to pay for these prescription therapies, governments pay the costs.

Until recently, few countries in the developing world offered patent protection to pharmaceutical products. Therefore, the basic market foundation underlying manufacture and distribution of newly developed drugs has not been a factor in making pharmaceuticals available in the developing world. As a result of the Agreement on Trade-Related Aspects of Intellectual Property rights ("TRIPS Agreement") adopted as part of the Uruguay Round of Negotiations, all WTO member countries must begin the process of integrating into the patent-based system of developing and distributing pharmaceuticals. Fear of this change has caused a backlash among public health professionals in the developing world, leading recently to a heated debate in the World Health Organization over a code of conduct, which would conflict directly with the TRIPS agreement.

The TRIPS Agreement allows developing countries until January 1, 2005 to provide product patent protection for pharmaceuticals and least developed countries until January 1, 2006, with a possible extension. Due to fears that patent protection will adversely impact costs, a number of non-

governmental organizations and policy makers in the developing world have begun to look for mechanisms within TRIPS that would allow for compulsory licensing and parallel importing of protected pharmaceutical agents. While this would not address the cost of the fine chemicals used in the production of many of drugs at issue, it could potentially impact the worldwide pricing structure for these products. It is not clear that widespread use of compulsory licensing will significantly impact affordability and certainly it does nothing to address availability. Today, the absence of patent protection in many countries is not providing inexpensive or effective access to patients in need of many of these treatments. Nevertheless, even if it does not impact availability, a large-scale effort to use compulsory licensing to address issues of affordability could have serious impact on the integrity of the international system of patent protection and could undermine the incentives at the heart of a very successful system of innovation. Furthermore, the sophistication of manufacture and delivery of state-of-the-art HIV treatments is beyond the means of most developing countries. Therefore, compulsory licensing could only create reliable sources of supply if countries imported product from generic-producing countries. Again, large-scale importing of products produced under compulsory licenses could have the effect of undermining the cost structure of these same products in countries where parallel import is legal. In other countries, gray markets will likely develop if reliable sources of alternative "low-price" product become available. Accordingly, the challenge is to develop a plan that both harnesses the powers of innovation and investment of product developers and addresses the cost issues of populations in developing and least developed countries.

Such a plan has three components:

1. segregation of territorial markets so that ability to pay can be figured into the pricing of a pharmaceutical product in a developing country;
2. a system of determining price levels appropriate to the ability to pay in such a market;
3. a system of sustainable subsidization to assist the purchase of a pharmaceutical when the ability to pay is out of reach even at a below market price point.

A discussion of each of these three components follows.

Segregation of Territorial Markets – The Issue of Exhaustion of Rights

A longstanding controversy in international intellectual property law has been whether a patent holder exhausts his or her rights to control the resale or use of a product in a territorial market different than the one into which the product was first sold. In general patent holders have argued that the principle of national exhaustion applies, meaning that their loss of control after the first sale of a given patented product applies only in the territory of the country in which it was first sold. Opponents support the principle of international exhaustion; meaning that rights to control resale and use of a legally manufactured product exhaust anywhere in the world after the first sale takes place. Consumer groups have generally supported the principal of international exhaustion.

With regard to pharmaceutical products, public health policy makers in the developing world have generally favored the principle of international exhaustion. This is consistent with the point of view that the less control pharmaceutical manufacturers have the fewer difficulties poorer countries will have obtaining and administering needed pharmaceuticals.

However, a practical side effect of international exhaustion is that it is much more difficult for drug manufacturers to consider ability to pay in establishing different price points for different markets. Were pharmaceutical companies to establish significantly lower prices for developing country markets, they would risk having products sold in those markets re-imported into their profit-

generating home markets. These re-imports are generally known by the name "gray market" products. Consumer groups in developed countries such as the United States naturally favor the "gray market" and oppose marketing strategies that result in consumers in their societies subsidizing lower prices in other markets.

Even under a regime of international exhaustion, countries can adopt systems of price controls (discussed in the next section) which reduce the cost of drugs within national markets. The difficulty with this strategy, standing alone, is that drug companies may refuse to manufacture in or export to those markets. And, with full implementation of the WTO/TRIPS agreement, developing countries that wish to be a part of the international trading system will be unable to copy without a license from the patent owner. While the WTO/TRIPS agreement does allow countries to grant compulsory licenses, they can only be granted once some comparatively strict preconditions are met. In any event, therapies such as AZT and protease inhibitors are difficult, if not impossible, to replicate and administer without the cooperation of their developers. This calls for a cooperative relationship between patent holders and licensees rather than a relationship imposed upon them by the state. Therefore, in the post WTO/TRIPS world developing countries may have to reconsider where their self-interest lies in the debate over territorial versus international exhaustion. Effective implementation of the principle of national exhaustion requires its broad acceptance at the international level – in particular among higher-priced countries so that the differential pricing scheme described above may work. If not, it is inevitable that the products placed on the market at a lower, concessional price in one country will find their way into a higher-priced country.

Setting Price Levels Appropriate to Developing and Least Developed Country Markets

The market price of sophisticated HIV/AIDS treatments is clearly beyond the reach of consumers in developing or least developed countries. Therefore, a key element in supplying drugs such as AZT and protease inhibitors to these markets must be a method of establishing appropriate price levels likely below the world market price. The use of price controls is not unknown in the pharmaceutical world. Government regulation of prices has been utilized in the past in highly developed countries such as Canada. As an alternative to direct price regulation, the single payer health systems of some European countries operate in such a way as to set prices at a level lower than would be the case where there are multiple consumers. These developed country models should be examined as a basis for establishing below world market price levels appropriate to specific developing and least developed countries. Although producers generally oppose any kind of price controls or non-market price setting, the advantage of such a system for them is that it would open up markets and revenue streams which are currently unavailable to them. Two factors would be of critical importance in gaining their cooperation in such a system. First, they would have to be assured that drugs sold at non-market price points would not find their way into non-regulated markets. This implies both a relationship between a system of national exhaustion and price controls and a need for cooperation between health authorities and patent holders. As discussed above, a broadly accepted system of national exhaustion allows patent owners to consider ability to pay in a given country in setting prices for pharmaceutical products. Price controls are imposed by health authorities also on the basis of ability to pay. Thus, with a system of national exhaustion and cooperation between patent owners and health authorities there should be a convergence between price points set by patent owners and health authorities.

The second factor in obtaining the cooperation of the pharmaceutical producers in a system of price controls would be that developed countries not use such a system as a precedent to establish additional price controls themselves.

International Subsidization of Pharmaceutical Purchases

Even assuming a significantly lower price level could be established for HIV/AIDS drugs sold in a given developing country market, few developing or least developed countries enjoy income levels enabling them to pay. This is particularly true in sub Saharan Africa. Therefore, any comprehensive effort to supply state-of-the-art pharmaceuticals to these countries will require a significant program of international subsidization by wealthy states and manufacturers. Given the moral imperative involved, the costs of political destabilization resulting from unchecked epidemics, and the significant risk of new disease strains which could defy treatment and find their way back into the developing world, a program of international subsidization is reasonable. The World Bank has a history of organizing such programs. Along with UNAIDS it could put together a coordinated plan, involving international aid programs of developed countries and private sector humanitarian organizations to supply the necessary funding. Over time it will be necessary to create a subsidization regime that is sustainable. Given an appropriately controlled product delivery infrastructure, such an effort can include long-term price support by manufacturers for imported product and local production facilities.

Of course, in addition to assisting in the coordination of fund raising, UNAIDS has an extremely important role to play in organizing the means to deliver the therapies involved to patients, including the training programs, patient education programs, and the infrastructure for delivering sophisticated pharmaceutical products in general. The last section of this proposal suggests the implementation of a patient care delivery and pharmaceutical distribution system.

Conclusion: The Need for a Pilot Project Coordinated by Three Specialized Organizations

The costs and administrative complexity of a global effort to supply new drug therapies to developing and least developed countries are sufficiently high that it would be imprudent to attempt such an effort without testing its feasibility first. Therefore, this proposal is focused on identifying one developing country in a position to host a pilot project.

Together with private industry, three international specialized agencies have the mandate, expertise, and ability to organize the pilot project outlined above. They are the World Bank, the World Intellectual Property Organization and UNAIDS.

Expertise and norm setting authority over international patent law lies with the World Intellectual Property Organization in Geneva. Establishing an international consensus on how rules of territorial exhaustion should apply to developing country pharmaceutical markets clearly are within the jurisdiction of WIPO. UNAIDS, also located in Geneva, has the expertise to develop a program directed at the training and medical infrastructure issues critical to the effective administration of state-of-the-art anti-AIDS pharmaceuticals. Finally, the World Bank is in a position to put together the international effort to raise the funds necessary to subsidize the purchase of patented pharmaceuticals.

PART II

IMPLEMENTING A REGIME TO MANAGE DISTRIBUTION AND TREATMENTS

The success of this program relies on the ability to successfully deliver drugs to patients in combination with an effective treatment regime. HIV risk management and HIV/AIDS treatments are complex and require sustained therapeutic management. Accordingly, pharmacological therapies alone are insufficient absent other clinical management and support services.

Three major challenges must be met in order to deliver meaningful treatments to patients:

1. An effective clinical case management program must exist to coordinate the delivery of a full spectrum of care (including pharmaceutical therapeutics, HIV and other disease risk management, clinical services, social services, etc.) so as to achieve the maximum clinical benefit
2. A regulated pharmaceutical distribution network to help: (a) control delivery of these specific pharmaceutical products to patients, (b) achieve appropriate utilization, and (c) reduce product diversion and the development of a gray market
3. A multi-tiered, resource optimized, case management infrastructure to coordinate patient care, risk management and the delivery of pharmaceutical product.

Resource Optimized Case Management Services

Supplying pharmaceutical interventions alone will not provide the level of measurable clinical benefit and improved outcomes required to make this proposed program a success. The complexity of the disease necessitates execution of a case management capability to help provide patient support services and appropriate clinical management of each case.

In the developing nations, case management services can be provided by an array of providers arranged in tiers according to level of sophistication and training. Examples are First Nation's programs in Canada that employ local residents as "front line" care workers working under the remote supervision of specially trained nurses and clinicians. Other examples are midwife programs that successfully operate in rural regions throughout Pakistan.

In these programs, local care workers provide the wide array of fairly comprehensive, hands-on support services required by patients during intervals between visits by more highly trained case managers. While not a requirement for this program, rudimentary telemedicine systems can also be implemented. Front line care workers can be remotely supervised and assisted to provide an even higher level of support service.

Case Management Tiers

Patients require continuous, but varying levels of support over the duration of their treatments. It is reasonable to provide services with the least expensive resource capable of accomplishing the task. Different "tiers" of case management resources and primary care services would be assembled. Each tier would be trained and outfitted to provide services based on the complexity of the support activity and the skill level of the caseworkers in that tier. Patients requiring services beyond the skill/capabilities of the tier are identified and moved to the next tier.

The critical ingredient to managing a tiered care delivery system is an underlying set of protocols and technologies that:

1. help senior case managers properly evaluate the level of support required by a patient at any particular point in time, and
2. help determine how and when services are provided to those patients.

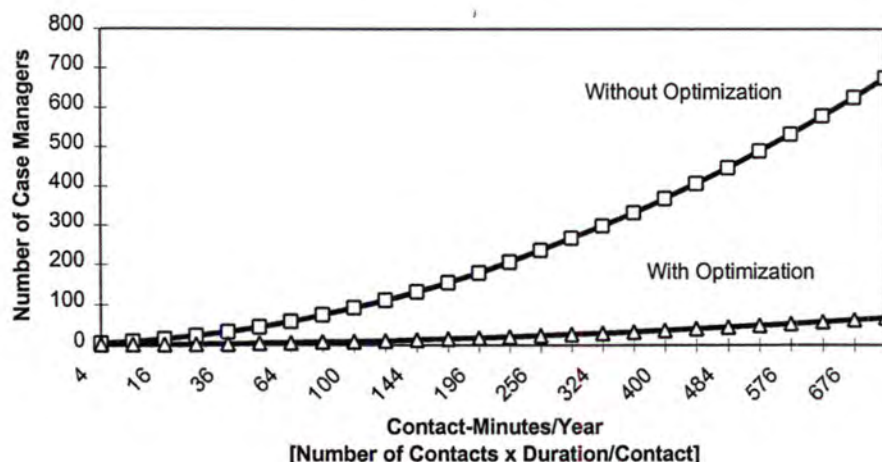
It is envisioned that the most senior nurse case managers and a network of participating clinicians will have access to a sophisticated, but easy to use, modeling and optimization technology. This technology enables the nurse case managers to understand how to schedule interventions with patients and, utilizing geographic overlays, can help them coordinate their rotations (visits with patients). Optimization technology also helps case managers task care coordination by local care workers who perform basic support services. Local care workers can also utilize the system to access case managers when an episode occurs that requires a more complex type of intervention. The infrastructure to implement and operate such a technology in the developing world is currently available and the advanced algorithms and computational platforms employed can be operated remotely where required.

This technology can substantially leverage the population that can be served by one senior nurse case manager. Therefore, it is possible to cost-effectively create a system that uses lower-skilled and lower wage local workers to provide many of the hands-on interventions that would otherwise have to be provided by an expensive nurse case manager. With supervision and occasional visits from more highly trained nurse case managers, patients will be assured of receiving an appropriate level of care sufficient to achieve an improved outcome.

Without the technology, meaningful case management would likely be impossible as it would require hundreds of personnel to support the large number of patients and the level of coordination would overwhelm management's ability to rapidly respond to patient needs. Without a sustained program, the treatment regime collapses and the outcomes are poor.

The following table shows one analysis of the labor required to provide equivalent levels of case management interventions with and without the support of optimization technology.

**Case Managers Needed for 100,000 Cases as a Function
of Increasing Contacts and Durations
[With and Without Resource Optimization]**



Regulated Pharmaceutical Distribution Network

In the industrialized nations, pharmaceuticals are delivered through a homogeneous, well-developed product distribution system. A logistically sophisticated delivery pipeline includes wholesalers, distributors and retailers. In this distribution model, many different parties retain quantities of product as inventory before it is delivered to the consumer. This inventory is often maintained in regional and local warehousing facilities with automated picking systems designed to minimize labor costs. Just-in-time delivery capabilities, eliminate the need to maintain inventory at retail locations where space is very expensive.

This robust model of distribution can not work in countries where the distribution infrastructure does not exist and where there are tremendous opportunities to engage in arbitrage by diverting product from one market to another. It is especially difficult to manage dissemination of pharmaceuticals if:

- the product is sold domestically at a price substantially below the world price
- there are limited inventory management and control systems to track inventory
- there are large quantities of product available in the distribution system that are subject to "inventory leakage" and diversion
- there is no way to ascertain patient utilization to ensure that the product is reaching those patients in need
- the product is manufactured locally under license and excess production is not controlled.

In the developing world, it will be necessary to implement a "pull" distribution model. The underlying premise of a pull distribution system is that product does not enter the local-market distribution pipeline in large quantities, and it only enters the pipeline when there is a known consumer (patient) demand in a controllably small geography. Furthermore, product is paid for in a manner that inhibits the formation of local black markets. A "pull" distribution model operates much like a drop shipment system wherein product is not shipped from the manufacturer or controlled warehouse until the end consumer generates an "order" (much like how a catalog order is processed). Rather than distributing and warehousing the inventory in any quantity, the product is distributed to a geography only in anticipation of a particular order being generated (i.e., a refill is going to come due). Because there is no infrastructure to create the "order", a modeling approach coupled to the case management system is used to determine when demand necessitates re-supply and this generates the insertion order. Orders can be aggregated, but no large stockpiles are allowed. Shipments can be tracked and monitored to the point where it is delivered or administered to the patient or to a local distributor (this does not have to employ a great deal of physical or labor infrastructure). Because of the wide disparity between the value of the product and the income of people who work in the distribution system, there is always the issue of local black market diversion. A number of techniques can be used to reduce the incidence of diversion including paying distributors a percentage of product value for successful delivery to the patient. Another technique is to make the product freely available at the local level, thus reducing its "street value". Product is paid for at the national or regional level where it is easier to implement controls that prevent diversion. By eliminating the street price and paying a commission only for successful delivery to patients, there is less incentive to divert product from patients to be sold on a local black market

Coordinating Case Management with Pharmaceutical Supply

Because the management of HIV and the treatment of AIDS and other high-impact disease requires a clinical and social case management adjunct to patient care, there is an opportunity to implement a drug delivery system that runs concurrently with the case management system. The case management system is approximately aware of the quantities of pharmaceutical and other supplies being used by patients under management and, at the right time, it triggers the insertion of refill orders into the pipeline for ultimate delivery by a visiting case worker or fulfillment by a local pharmacy.

Factors such as the inherent latency of the pipeline and the projected demand for product in a given geography are computed by the optimizer as is the projected interval until each patient is expected to need supplies. The optimizer also computes when case management interventions will be required based on a number of factors including case plans and episodic incidents. The scheduling algorithm then uses the output from these models to calculate when the patient will next see a skilled care worker or case manager. These case managers can be entrusted to arrange the delivery of pharmaceuticals directly to patients in that geography.

Such a system makes it possible to “feed” the distribution pipeline in a much more controlled way and reduce the incidence of untraceable diversion. Other control measures can be implemented to reduce the likelihood of significant quantities of product being outside of control while in the distribution pipe. This approach makes it significantly more difficult for the gray market to assemble and divert meaningful quantities of product and dramatically increases the costs of doing so.

It must be pointed out that even in the developed nations there have been instances of gray market product diversion for “street” resale of products by patients (and others) that need money (e.g., for food or housing). Yet, when drug delivery strategies have been coupled to clinical case management services, appropriate utilization increases and the instances of “street resale” have been significantly reduced. This has been shown to result in better compliance and improved patient outcomes – especially as measured by the incidence of hospital admissions related to opportunistic disease.

Even in those areas where a reliable retail distribution system exists, the technology will help caseworkers oversee and coordinate appropriate drug utilization – a critical factor in managing this disease.

CONCLUSION

A powerful arsenal of new treatments now exists to help manage the course of HIV and other high-impact disease such as TB. Information management technologies have been developed that make it possible to cost-effectively deliver treatments and the adjunctive patient support needed to improve outcomes. HIV infection is being treated with some real success in the developed world and there is a reasonable expectation that it is now possible to manage the treatment of HIV and other intractable diseases in the developing world. A mandate to create the policy and legal foundation to make these treatments available is forming. There are compelling reasons of global dimension to find a way to bring these capabilities together.

A coordinated pilot program consisting of:

- innovative policies,
- international cooperation and funding

can be combined with

- sophisticated information technology,

DRAFT

- established models of case-managed patient care, and
- controlled pharmaceutical delivery systems

to achieve an affordable and effective effort to stem the course of a pandemic.

White House to unveil AIDS strategy

By Susan Page and Steve Sternberg, USA TODAY

WASHINGTON - Calling the AIDS epidemic in sub-Saharan Africa "a plague of biblical proportions," the White House on Monday will propose spending an additional \$100 million next year for prevention and treatment and will urge the rest of the world to do more to join the battle.

Vice President Gore will unveil a new White House report on AIDS in Africa, and Hillary Rodham Clinton will convene a meeting next month of officials from the World Bank, the United Nations, foundations and corporations to fortify and coordinate efforts to stem the epidemic.

By the end of the year, the White House also promises to host a religious leaders' meeting, and the National Security Council will help sponsor a summit of African leaders.

"AIDS is not only causing unfathomable human suffering; it is jeopardizing economic growth, political stability and civil society in many sub-Saharan African nations," the White House report concludes. In the past decade, 12 million people in sub-Saharan Africa have died of the disease, which is expected to deprive 40 million children of one or both parents in the next decade.

Within a few years, the 30-page report warns, the epidemic will spread in force to India, Southeast Asia and the former Soviet republics.

Poll on AIDS

► Most Americans don't believe global AIDS crisis is coming under control.

Sure, that is false 30%
Probably false 37%
Probably true 20%
Sure it's true 2%
Don't know 11%

► A majority support increasing U.S. assistance to fight AIDS in Africa

Very fav. to increased aid 23%
Somewhat favorable 31%
Neutral 15%
Somewhat unfavorable 14%
Very unfavorable 15%
Not sure 2%

► African-Americans are more than twice as likely as all voters to be very favorable to increased U.S. assistance

African-American voters 53%
All voters 23%

Poll by Peter D. Hart Associates, commissioned by Children's Research and Education Institute. Phone survey of 1,411 respondents in March. Margin of error: +/- 3 percentage points.

- look at acleinites
how AOS fits

So. Africa -

Zambia - Lgr'n debt
2000 feet
1-3 orphaned by AOS
Chiluba Pres.

The White House report was prepared by Sandra Thurman, director of the Office of National AIDS Policy, who conducted two fact-finding tours to the region this year.

AIDS activists welcomed the announcement. "The most important thing is that the U.S. has to show leadership in combating this disease everywhere in the world," said Cornelius Baker, president of the National Association of People with AIDS. But, he added, "This is a very small down payment."

South African Archbishop Desmond Tutu is to join Gore at Monday's announcement, as will Olivia Nantongo, a 20-year-old Ugandan woman who lost her mother and other family members to the disease.

This year, the U.S. government is spending \$125 million on HIV prevention and AIDS care worldwide, with \$74 million of it devoted to Africa. Of the additional \$100 million, \$48 million would go to prevention, \$23 million to care of AIDS patients, \$10 million to care of AIDS orphans and \$19 million to help governments deal with the epidemic.

Congress must approve the new funding, 70% of which is earmarked for Africa and 30% for Asia and the former Soviet republics.

The report emphasizes the need to mobilize other countries and international organizations. "I hope that the developed world join together to help our African neighbors," said Sen. Orrin Hatch, R-Utah, who has been active on the issue.

key product'n - so of -
 - produce generic - lawsuits
 - emergency law to
 appropriate medicine law.

Jim Bassett
 VP.

\$ 600 mill - agree
 prevent'n

in line w → Int'l trade agreements
 emergency

tips ⊕ Amer

Conflict in Africa
 1 in every 5
 infected

In S. Africa - still too expensive

Challenges debt relief
 resources
 part of dev. strategy
 political issue

Patient care
 1 prev.
 2 care & treatment
 3 infrastructure
 4 orphans

more
 collaborative
 efforts -
 having r
 in front of
 dev.
 not free drugs
 Comprehensive
 industry
 response

HIV/AIDS - more broadly part of
 econ. + dev. piece.

Here -
 Admin - init'ive

Pilot - UNAIDS - agencies in some
 countries doing shopping
 best practices & nat'l plans

* [needs to be seen as development
 issue]

Mitigation in Africa - issue can't ignore

Next steps - such a crisis

* Summers & Walpewski - demo for tied
 to debt relief

show how it can be done

TO: **Melanne Verveer**
FROM: **Gayle Smith**
RE: **FLOTUS AIDS Event**

Melanne:

Sorry we have been unable to connect. Sometimes I think voicemail is a terrible curse.

I've talked to Sandy Thurman and to my team about corporate invitees for the FLOTUS event, and have come to the conclusion that what we need to aim for is inspiring and leveraging a greater commitment from the corporate community, as opposed to simply coordinating with those companies which are already engaged. My reasoning is pragmatic: few large American corporations investing in Africa have taken on the HIV/AIDS issue in a serious way, as yet.

As such, I recommend the following:

Johnson, BET. As we discussed

✓ **CEO, Coca-Cola.** Coke has not taken the AIDS crisis seriously enough, but has engaged on social issues through its foundations. I suspect that there may be some apprehension about the impact on corporate profit of being seen to be raising a sensitive issue. It is possible, however, for Coke to initiate support for HIV/AIDS prevention in countries – like Uganda – that have taken the issue into the public arena at the highest levels, and where association is not a risk, simply because the AIDS issue is not sensitive.

✓ **CEO, American Airlines.** I understand that among U.S. corporations active in this country, American Airlines is among the best. AA is establishing a partnership with South African Airlines, and thus offers a link between a corporation with a track record of involvement (and experience) here, and a new link with Africa.

✓ **Chevron.** We need one of the oil companies (NSC, State and others can follow up with all of the oil companies, including through our extensive work

*Eric
Can you get
names of CEOs, addresses
+ phone #'s for checked
companies OPL might
have them*

*Bristol Myers
Squibb*

with the Corporate Council on Africa), simply because they are our biggest investors.

Please let me know if you'd like additional information, and what assistance we can offer as you put this event together.

And now, on an important note --- **Erica Barks-Ruggles is about to depart the NSC.** As you may know, she will be moving back to State to work with Tom Pickering. As you may suspect, I am devastated. I will be hosting a reception on August 11 at 5:00 in the Indian Treaty Room for her and another member of my staff who is departing. We will send you an invitation, and I sincerely hope you'll be able to join us. I know that Erica has loved working with you, the First Lady, and your office.

I'm in over the weekend if you have questions.

July 30, 1999

Dear:

I would like to invite you to the White House on September 7 to join me and a small group of senior representatives from the U.S. government, multinational institutions, foundations, and the corporate sector for a meeting to explore strategies to better address the international AIDS crisis.

This devastating epidemic is an assault on health and development that has few, if any, modern equals. Only 20 years ago, we did not even know HIV existed. And at the beginning of this decade, who among us would have thought that, by 1999, AIDS would be the leading cause of death in sub-Saharan Africa and the fourth leading cause of death worldwide?

In the face of this reality, the President has recently asked for a \$100 million increase in funding for international HIV/AIDS programs as the cornerstone of a broad and comprehensive new international initiative to combat the epidemic. But this is just a part of the international effort necessary to control the spread of HIV and deal with the associated problems of patient care.

Today, 34 million people are living with HIV or AIDS worldwide. AIDS related diseases have killed 14 million men, women and children – mostly in Africa where more than 5,000 deaths are reported each day. By 2010, 40 million children will have been orphaned by HIV/AIDS. Economic development in many African countries has ground to a halt, and the hard won social and health advances of the last 20 years are being reversed by the new realities of the epidemic. And these statistics do not begin to describe the personal tragedy for many of those living with HIV/AIDS and their families.

Still there is cause for hope. Heads-of-State worldwide are increasingly acknowledging AIDS prevention as a public health and political priority. National HIV/AIDS control strategies have been written, and Uganda and Thailand have shown that successful national AIDS prevention programs can work. Unfortunately, a serious crisis remains and much more needs to be done. Many developing countries are losing the battle with the epidemic – overwhelmed by human and financial costs.

I have asked you to join me for this meeting to help build the momentum necessary to engage all stakeholders in winning the war against HIV/AIDS. Financial support for AIDS prevention efforts remains the most critical unmet need. However, this meeting is not intended to be a donors conference. Rather, we will seek to discuss strategies, and identify priorities and new partnerships for assisting countries in their HIV/AIDS control efforts.

The meeting is planned for September 7 at 10:30 AM at the White House. Please arrive at the East Appointments Gate of the White House no later than 10:15 AM.

I hope you can join me at this meeting, and I look forward to seeing you in September. Please call Katy Button in my office at (202) 456-6266 to confirm your participation.

Sincerely yours,

Hillary Rodham Clinton



Embassy of the United States of America

Pretoria, August 16, 1999

MEMORANDUM

TO: Ms. Melanne Verveer, Office of the First Lady
Fax: (202) 456-6244

Ms. Sandy Thurman, Director, Officer of National AIDS
Fax: (202) 456-2438

FROM: James A. Joseph, U.S. Ambassador to South Africa

A handwritten signature in dark ink, appearing to read "James A. Joseph".

SUBJECT: First Lady's Conference on HIV/AIDS

The Kaiser Family Foundation is willing to match a contribution from the U.S. Government of up to \$10 million in new funding for AIDS prevention in South Africa. This funding would be directed through the National Adolescent Sexual Health Initiative (NASHI) chaired by First Lady Zanele Mbeki.

The Foundation would be happy for this to be announced as a deliverable at the First Lady's conference on September 7.

Dr. Michael Sinclair, Senior Vice President of the Kaiser Family Foundation, is based in Washington and prepared to meet with you or anyone you recommend to move this idea along. Please let me know how we should proceed.

cc: Mr. Leon Fuerth, OVP
A/S Susan Rice, DOS
Dr. Michael Sinclair

SACHS ON DEVELOPMENT

Bernard

Helping the world's poorest

Jeffrey Sachs, a top academic economist, argues that rich countries must mobilise global science and technology to address the specific problems which help to keep poor countries poor

IN OUR Gilded Age, the poorest of the poor are nearly invisible. Seven hundred million people live in the 42 so-called Highly Indebted Poor Countries (HIPC), where a combination of extreme poverty and financial insolvency marks them for a special kind of despair and economic isolation. They escape our notice almost entirely, unless war or an exotic disease breaks out, or yet another programme with the International Monetary Fund (IMF) is signed. The Cologne Summit of the G8 in June was a welcome exception to this neglect. The summiteers acknowledged the plight of these countries, offered further debt relief and stressed the need for a greater emphasis by the international community on social programmes to help alleviate human suffering.

The G8 proposals should be seen as a beginning: inadequate to the problem, but at least a good-faith prod to something more useful. We urgently need new creativity and a new partnership between rich and poor if these 700m people (projected to rise to 1.5 billion by 2030), as well as the extremely poor in other parts of the world (especially South Asia), are to enjoy a chance for human betterment. Even outright debt forgiveness, far beyond the G8's stingy offer, is only a step in the right direction. Even the call to the IMF

BY INVITATION



Jeffrey Sachs is director of the Centre for International Development and professor of international trade at Harvard University. A prolific writer, he has also advised the governments of many developing and East European countries.

and World Bank to be more sensitive to social conditions is merely an indicative nod.

A much more important challenge, as yet mainly unrecognised, is that of mobilising global science and technology to address the crises of public health, agricultural productivity, environmental degradation and demographic stress confronting these countries. In part this will require that the wealthy governments enable the grossly underfinanced and underempowered United Nations institutions to become vibrant and active partners of human development. The failure of the United States to pay its UN dues is surely the world's most significant default on international obligations, far more egre-

gious than any defaults by impoverished HIPC. The broader American neglect of the UN agencies that assist impoverished countries in public health, science, agriculture and the environment must surely rank as another amazingly misguided aspect of current American development policies.

The conditions in many HIPC are worsening dramatically, even as global science and technology create new surges of wealth and well-being in the richer countries. The problem is that, for myriad reasons, the technological gains in wealthy countries do not readily diffuse to the poorest ones. Some barriers are political and economic. New technologies will not take hold in poor societies if investors fear for their property rights, or even for their lives, in corrupt or conflict-ridden societies. The Economist's response to the Cologne Summit ("Helping the Third World", June 26th) is right to stress that aid without policy reform is easily wasted. But the barriers to development are often more subtle than the current emphasis on "good governance" in debtor countries suggests.

Research and development of new technologies are overwhelmingly directed at rich-country problems. To the extent that the poor face distinctive challenges, science and technology must be directed purposefully towards them. In today's global set-up, that rarely happens. Advances in science and technology not only lie at the core of long-term economic growth, but flourish on an intricate mix of social institutions—public and private, national and international.

Currently, the international system fails to meet the scientific and technological needs of the world's poorest. Even when the right institutions exist—say, the World Health Organisation to deal with pressing public health disasters facing the poorest countries—they are generally starved for funds, authority and even access to the key negotiations between poor-country governments and the Fund at which important development strategies get hammered out.

The ecology of underdevelopment

If it were true that the poor were just like the rich but with less money, the global situation would be vastly easier than it is. As it happens, the poor live in different ecological zones, face different health conditions and must overcome agronomic limitations that are very different from those of rich countries. Those differences, indeed, are often a fundamental cause of persisting poverty.

Let us compare the 30 highest-income countries in the world with the 42 HIPC (see table on next page). The rich countries overwhelmingly lie in the world's temperate



Poverty and its ills: better remedies required



zones. Not every country in those bands is rich, but a good rule of thumb is that temperate-zone economies are either rich, formerly socialist (and hence currently poor), or geographically isolated (such as Afghanistan and Mongolia). Around 93% of the combined population of the 30 highest-income countries lives in temperate and snow zones. The HIPC's, by contrast, include 39 tropical or desert societies. There are only three in a substantially temperate climate, and those three are landlocked and therefore geographically isolated (Laos, Malawi and Zambia).

Not only life but also death differs between temperate and tropical zones. Individuals in temperate zones almost everywhere enjoy a life expectancy of 70 years or more. In the tropics, however, life expectancy is generally much shorter. One big reason is that populations are burdened by diseases such as malaria, hookworm, sleeping sickness and schistosomiasis, whose transmission generally depends on a warm climate. (Winter may be the greatest public-health intervention in the world.) Life expectancy in the HIPC's averages just 51 years, reflecting the interacting effects of tropical disease and poverty. The economic evidence strongly suggests that short life expectancy is not just a result of poverty, but is also a powerful cause of impoverishment.

All the rich-country research on rich-country ailments, such as cardiovascular diseases and cancer, will not solve the problems of malaria. Nor will the biotechnology advances for temperate-zone crops easily transfer to the conditions of tropical agriculture. To address the special conditions of the HIPC's, we must first understand their unique problems, and then use our ingenuity and co-operative spirit to create new methods of overcoming them.

Modern society and prosperity rest on

the foundation of modern science. Global capitalism is, of course, a set of social institutions—of property rights, legal and political systems, international agreements, transnational corporations, educational establishments, and public and private research institutions—but the prosperity that results from these institutions has its roots in the development and applications of new science-based technologies. In the past 50 years, these have included technologies built on solid-state physics, which gave rise to the information-technology revolution, and on genetics, which have fostered breakthroughs in health and agricultural productivity.

Science at the ecological divide

In this context, it is worth noting that the inequalities of income across the globe are actually exceeded by the inequalities of scientific output and technological innovation. The chart below shows the remarkable dominance of rich countries in scientific publications and, even more notably, in patents filed in Europe and the United States.

The role of the developing world in one sense is much greater than the chart indicates. Many of the scientific and technological breakthroughs are made by poor-country scientists working in rich-country laboratories. Indian and Chinese engineers account for a significant proportion of Silicon Valley's workforce, for example. The basic point, then, holds even more strongly: global science is directed by the rich countries and for the rich-country markets, even to the extent of mobilising much of the scientific potential of the poorer countries.

The imbalance of global science reflects several forces. First, of course, science follows the market. This is especially true in an age when technological leaps require expensive scientific equipment and well-provisioned research laboratories. Second, scientific advance tends to have increasing returns to scale: adding more scientists to a community does not diminish individual marginal productivity but tends to increase it. Therein lies the origin of university science departments, regional agglomerations such as Silicon Valley and Route 128, and mega-laboratories at leading high-technology firms including Merck, Microsoft and Monsanto. And third, science requires a partnership between the public and private sectors. Free-market ideologies notwithstanding, there is scarcely one

technology of significance that was not nurtured through public as well as private care.

If technologies easily crossed the ecological divide, the implications would be less dramatic than they are. Some technologies, certainly those involving the computer and other ways of managing information, do indeed cross over, and give great hopes of spurring technological capacity in the poorest countries. Others—especially in the life sciences but also in the use of energy, building techniques, new materials and the like—are prone to "ecological specificity". The result is a profound imbalance in the global production of knowledge: probably the most powerful engine of divergence in global well-being between the rich and the poor.

Consider malaria. The disease kills more than 1m people a year, and perhaps as many as 2.5m. The disease is so heavily concentrated in the poorest tropical countries, and overwhelmingly in sub-Saharan Africa, that nobody even bothers to keep an accurate count of clinical cases or deaths. Those who remember that richer places such as Spain, Italy, Greece and the southern United States once harboured the disease may be misled into thinking that the problem is one of social institutions to control its transmission. In fact, the sporadic transmission of malaria in the sub-tropical regions of the rich countries was vastly easier to control than is its chronic transmission in the heart of the tropics. Tropical countries are plagued by ecological conditions that produce hundreds of infective bites per year per person. Mosquito control does not work well, if at all, in such circumstances. It is in any event expensive.

Recent advances in biotechnology, including mapping the genome of the malaria parasite, point to a possible malaria vaccine. One would think that this would be high on the agendas of both the international com-

Different ecologies		Rich countries (42)	HIPC's (30)
Population per person, PPP\$1		1,187	18,818
Life expectancy at birth, years		75.1	51.5
Population by ecologies, % in			
Tropical		55.6	0.7
Temperate and snow		17.6	3.7
Highland		12.5	92.6
Unweighted averages		14.0	2.5

Different resources

Indicators of global science 1995, % of world totals



Source: J. Sachs; UNESCO



community and private pharmaceutical firms. It is not. A Wellcome Trust study a few years ago found that only around \$80m a year was spent on malaria research, and only a small fraction of that on vaccines.

The big vaccine producers, such as Merck, Rhône-Poulenc's Pasteur-Mérieux-Connaught and SmithKline Beecham, have much of the in-house science but not the bottom-line motivation. They strongly believe that there is no market in malaria. Even if they spend the hundreds of millions, or perhaps billions, of dollars to do the R&D and come up with an effective vaccine, they believe, with reason, that their product would just be grabbed by international agencies or private-sector copycats. The hijackers will argue, plausibly, that the poor deserve to have the vaccine at low prices—enough to cover production costs but not the preceding R&D expenditures.

The malaria problem reflects, in microcosm, a vast range of problems facing the HIPC in health, agriculture and environmental management. They are profound, accessible to science and utterly neglected. A hundred IMF missions or World Bank health-sector loans cannot produce a malaria vaccine. No individual country borrowing from the Fund or the World Bank will ever have the means or incentive to produce the global public good of a malaria vaccine. The root of the problem is a much more complex market failure: private investors and scientists doubt that malaria research will be rewarded financially. Creativity is needed to bridge the huge gulfs between human needs, scientific effort and market returns.

Promise a market

The following approach might work. Rich countries would make a firm pledge to purchase an effective malaria vaccine for Africa's 25m newborn children each year if such a vaccine is developed. They would even state, based on appropriate and clear scientific standards, that they would guarantee a minimum purchase price—say, \$10 per dose—for a vaccine that meets minimum conditions of efficacy, and perhaps raise the price for a better one. The recipient countries might also be asked to pledge a part of the cost, depending on their incomes. But nothing need be spent by any government until the vaccine actually exists.

Even without a vast public-sector effort,

such a pledge could galvanise the world of private-sector pharmaceutical and biotechnology firms. Malaria vaccine research would suddenly become hot. Within a few years, a breakthrough of profound benefit to the poorest countries would be likely. The costs in foreign aid would be small: a few hundred million dollars a year to tame a killer of millions of children. Such a vaccine would rank among the most effective public-health interventions conceivable. And, if science did not deliver, rich countries would end up paying nothing at all.

Malaria imposes a fearsome burden on poor countries, the AIDS epidemic an even weightier load. Two-thirds of the world's 33m individuals infected with the HIV virus are sub-Saharan Africans, according to a UN estimate in 1998, and the figure is rising. About 95% of worldwide HIV cases are in the developing world. Once again, science is stopping at the ecological divide.

Rich countries are controlling the epidemic through novel drug treatments that are too expensive, by orders of magnitude, for the poorest countries. Vaccine research, which could provide a cost-effective method of prevention, is dramatically underfunded. The vaccine research that is being done focuses on the specific viral strains prevalent in the United States and Europe, not on those which bedevil Africa and Asia. As in the case of malaria, the potential developers of vaccines consider the poor-country market to be no market at all. The same, one should note, is true for a third worldwide killer. Tuberculosis is still taking the lives of more than 2m poor people a year and, like malaria and AIDS, would probably be susceptible to a vaccine, if anyone cared to invest in the effort.

The poorer countries are not necessarily sitting still as their citizenry dies of AIDS. South Africa is on the verge of authorising the manufacture of AIDS medicines by South African pharmaceutical companies, despite patents held by American and European firms. The South African government says that, if rich-country firms will not supply the drugs to the South African market at affordable prices (ones that are high enough to meet marginal production costs but do not include the patent-generated monopoly profits that the drug companies claim as their return for R&D), then it will simply allow its own firms to manufacture the drugs, patent or no. In a

world in which science is a rich-country prerogative while the poor continue to die, the niceties of intellectual property rights are likely to prove less compelling than social realities.

There is no shortage of complexities ahead. The world needs to reconsider the question of property rights before patent rights allow rich-country multinationals in effect to own the genetic codes of the very foodstuffs on which the world depends, and even the human genome itself. The world also needs to reconsider the role of institutions such as the World Health Organisation and the Food and Agriculture Organisation. These UN bodies should play a vital role in identifying global priorities in health and agriculture, and also in mobilising private-sector R&D towards globally desired goals. There is no escape from such public-private collaboration. It is notable, for example, that Monsanto, a life-sciences multinational based in St Louis, Missouri, has a research and development budget that is more than twice the R&D budget of the entire worldwide network of public-sector tropical research institutes. Monsanto's research, of course, is overwhelmingly directed towards temperate-zone agriculture.

People, food and the environment

Public health is one of the two distinctive crises of the tropics. The other is the production of food. Poor tropical countries are already incapable of securing an adequate level of nutrition, or paying for necessary food imports out of their own export earnings. The HIPC population is expected to more than double by 2030. Around one-third of all children under the age of five in these countries are malnourished and physically stunted, with profound consequences throughout their lives.

As with malaria, poor food productivity in the tropics is not merely a problem of poor social organisation (for example, exploiting farmers through controls on food prices). Using current technologies and seed types, the tropics are inherently less productive in annual food crops such as wheat (essentially a temperate-zone crop), rice and maize. Most agriculture in the equatorial tropics is of very low productivity, reflecting the fragility of most tropical soils at high temperatures combined with heavy rainfall. High productivity in the rainforest ecozone is possible only in small parts of the tropics, generally



on volcanic soils (on the island of Java, in Indonesia, for example). In the wet-dry tropics, such as the vast savannahs of Africa, agriculture is hindered by the terrible burdens of unpredictable and highly variable water supplies. Drought and resulting famine have killed millions of peasant families in the past generation alone.

Scientific advances again offer great hope. Biotechnology could mobilise genetic engineering to breed hardier plants that are more resistant to drought and less sensitive to pests. Such genetic engineering is stymied at every point, however. It is met with doubts in the rich countries (where people do not have to worry about their next meal); it requires a new scientific and policy framework in the poor countries; and it must somehow generate market incentives for the big life-sciences firms to turn their research towards tropical foodstuffs, in co-operation with tropical research centres. Calestous Juma, one of the world's authorities on biotechnology in Africa, stresses that there are dozens, or perhaps hundreds, of underused foodstuffs that are well adapted to the tropics and could be improved through directed biotechnology research. Such R&D is now all but lacking in the poorest countries.

The situation of much of the tropical world is, in fact, deteriorating, not only because of increased population but also because of long-term trends in climate. As the rich countries fill the atmosphere with increasing concentrations of carbon, it looks ever more likely that the poor tropical countries will bear much of the resulting burden.

Anthropogenic global warming, caused by the growth in atmospheric carbon, may actually benefit agriculture in high-latitude zones, such as Canada, Russia and the northern United States, by extending the growing season and improving photosynthesis through a process known as carbon fertilisation. It is likely to lower tropical food productivity, however, both because of increased heat stress on plants and because the carbon fertilisation effect appears to be smaller in tropical ecozones. Global warming is also contributing to the increased severity of tropical climatic disturbances, such as the "one-in-a-century" El Niño that hit the tropical world in 1997-98, and the "one-in-a-century" Hurricane Mitch that devastated Honduras and Nicaragua a year ago. Once-in-a-century weather events seem to be arriving

with disturbing frequency.

The United States feels aggrieved that poor countries are not signing the convention on climatic change. The truth is that these poor tropical countries should be calling for outright compensation from America and other rich countries for the climatic damages that are being imposed on them. The global climate-change debate will be stalled until it is acknowledged in the United States and Europe that the temperate-zone economies are likely to impose heavy burdens on the already impoverished tropics.

New hope in a new millennium

The situation of the HIPC has become intolerable, especially at a time when the rich countries are bursting with new wealth and scientific prowess. The time has arrived for a fundamental re-thinking of the strategy for co-operation between rich and poor, with the avowed aim of helping the poorest of the poor back on to their own feet to join the race for human betterment. Four steps could change the shape of our global community.

First, rich and poor need to learn to talk together. As a start, the world's democracies, rich and poor, should join in a quest for common action. Once again the rich G8 met in 1999 without the presence of the developing world. This rich-country summit should be the last of its kind. A G16 for the new millennium should include old and new democracies such as Brazil, India, South Korea, Nigeria, Poland and South Africa.

Second, rich and poor countries should direct their urgent attention to the mobilisation of science and technology for poor-country problems. The rich countries should understand that the IMF and World Bank are by themselves not equipped for that challenge. The specialised UN agencies have a great role to play, especially if they also act as a bridge between the activities of advanced-country and developing-country scientific centres. They will be able to play that role, however, only after the United States pays its debts to the UN and ends its unthinking hostility to the UN system.

We will also need new and creative institutional alliances. A Millennium Vaccine Fund, which guaranteed future markets for malaria, tuberculosis and AIDS vaccines, would be the right place to start. The vaccine-fund approach is administratively straightforward, desperately needed and within our

technological reach. Similar efforts to merge public and private science activities will be needed in agricultural biotechnology.

Third, just as knowledge is becoming the undisputed centrepiece of global prosperity (and lack of it, the core of human impoverishment), the global regime on intellectual property rights requires a new look. The United States prevailed upon the world to toughen patent codes and cut down on intellectual piracy. But now transnational corporations and rich-country institutions are patenting everything from the human genome to rainforest biodiversity. The poor will be ripped off unless some sense and equity are introduced into this runaway process.

Moreover, the system of intellectual property rights must balance the need to provide incentives for innovation against the need of poor countries to get the results of innovation. The current struggle over AIDS medicines in South Africa is but an early warning shot in a much larger struggle over access to the fruits of human knowledge. The issue of setting global rules for the uses and development of new technologies—especially the controversial biotechnologies—will again require global co-operation, not the strong-arming of the few rich countries.

Fourth, and perhaps toughest of all, we need a serious discussion about long-term finance for the international public goods necessary for HIPC countries to break through to prosperity. The rich countries are willing to talk about every aspect except money: money to develop new malaria, tuberculosis and AIDS vaccines; money to spur biotechnology research in food-scarce regions; money to help tropical countries adjust to climate changes imposed on them by the richer countries. The World Bank makes mostly loans, and loans to individual countries at that. It does not finance global public goods. America has systematically squeezed the budgets of UN agencies, including such vital ones as the World Health Organisation.

We will need, in the end, to put real resources in support of our hopes. A global tax on carbon-emitting fossil fuels might be the way to begin. Even a very small tax, less than that which is needed to correct humanity's climate-deforming overuse of fossil fuels, would finance a greatly enhanced supply of global public goods. No better time to start than as the new millennium begins.

Bernard



Orphans of the virus

NDOLA, ZAMBIA

The AIDS epidemic is leaving a horrifying number of African children without their parents

TWO-THIRDS of the patients at the main hospital in Ndola, in the copper-mining region of northern Zambia, are dying of AIDS. Some have lost so much weight that their arms look like broken broom handles and their tattoos are shrivelled and illegible. Their immediate wish is not for costly anti-retroviral drugs, but for food. In theory, the state-run hospital provides meals for all patients, but several complain that they have not eaten all day, and beg for 100 kwacha (four American cents) for breakfast.

Poverty hastens death among AIDS sufferers. And in Zambia, as in much of Africa, the sheer number of AIDS deaths aggravates the poverty of those who survive. The disease in Zambia is so common that it has lost its social stigma. The Zambian health ministry estimates that half the country's population will eventually die of it. Only tycoons and cabinet ministers can afford proper treatment. The death toll is worse than anything Peter McDermott, who runs the Zambian office of Unicef, the UN's agency for children, has seen in the numerous war zones where he has worked. Most of those who die are mothers or bread-winners. Esti-

mates of the proportion of Zambian children under 15 who have lost one or both parents (usually but not always from AIDS) range from 13% to as high as 50%. Even at the lowest estimate, this is a dozen times higher than the level in industrialised countries.

It is not only children who are hit. Faides Zulu, a grandmother from a shanty town outside Ndola, was supported by her daughter until she and her husband both died. Suddenly, Mrs Zulu had lost her only source of income and gained five new dependants. Despite her age (she is old enough to have no idea when she was born) and frailty, she has resumed the heavy task of growing vegetables in her small plot and carrying them to market. Hand-outs from a local charity cover clothes and the \$7-a-year school fees for each child. She says that without the 25kg of maize meal she is given each month, the family would starve.

Many are less fortunate. About half of all Zambian children are malnourished to the point of being stunted, a fifth severely so. Lack of food hinders these children's mental development. Lack of education retards young brains still further: half of rural chil-

dren and 68% of rural orphans in Zambia do not attend any classes at all. In Ndola, unemployment has become the norm as the copper mines, mismanaged for decades, are now sacking workers by the thousand. Hundreds of families face eviction from mine-owned houses. In the recently expanded cemeteries around Ndola, several graves have been dug up: local thieves are so desperate that they strip fresh corpses of the smart suits in which they are buried.

State welfare payments reach less than 2% of Zambians; charitable organisations help only a tenth. Almost the entire burden of coping with the orphan problem falls on the extended family. Zambian families have adapted impressively to the crisis. According to one study, 72% of Zambian households care for one or more orphans. Zambia's old socialist regime preferred to put orphans into state institutions, but the current government, arguing that orphanages are an expensive way of making children miserable, has closed almost all of them.

Most orphans are now fostered by relations, who offer more love and pumpkin-leaf stew than the government ever could. But extra mouths mean less food to go round, so many fostered children are made to work for their keep. And since fostering is informal, orphans usually enjoy fewer legal rights than other children. Formal adoptions require paperwork and the co-operation of sluggish bureaucrats, so they are rare: in 1996 there were only 18 in the whole of Zambia.

The unlucky ones receive no care at all. Babies born HIV-positive in Zambia usually die within a year. Uninfected babies should be able to survive, but, if the mother dies, her relations sometimes wrongly think the baby too is doomed, and so do not waste scarce food delaying the inevitable. The disease has led to a dramatic increase in the number of homeless children: perhaps 90,000 live on Zambia's streets or in the bush, scratching a living by recycling broken bottles or through petty theft. Too poor to afford glue to dull the evening chill, they sniff fermented sewage.

Other African countries' statistics on AIDS orphans are even less reliable than Zambia's. But a study of 19 sub-Saharan countries by USAID reckoned they would have 40m orphans by 2010, largely because of AIDS. According to the UN, there were 35 countries (all poor) where the proportion of orphans doubled, tripled or quadrupled between 1994 and 1997. However good the care of these children, it is hard to imagine robust economic growth where so many adults are dying in their productive prime, leaving the very young and the very old to cope alone.

HELPING THE THIRD WORLD

Bernard



How to make aid work

WASHINGTON, DC, LUSAKA AND GABORONE

Aid to poor countries has largely failed to spur growth or relieve poverty. It can work—but only if aid is limited to countries that are pursuing sound economic policies. More donors should try it

"THE poor always ye have with you," said Jesus, and 2,000 years of history have not proven him wrong. People who live permanently hungry, racked by parasites and forced to walk miles each day to fetch water, are more numerous now than ever before. Roughly 1.2 billion people—a fifth of the world's population—subsist on less than \$1 a day. On June 18th, at a summit in Cologne, the rich world's leaders came up with a plan to ease their plight.

Under the "Cologne Initiative" the G8 group of industrialised countries agreed to provide more debt relief, more quickly, to more poor countries. This, it is hoped, will release resources for health and education and generally make life in the third world less miserable. Tony Blair, Britain's prime minister, spoke of "the biggest step forward in debt relief and help to the poorest countries that we have seen for many years." Perhaps. But that depends on how it is put into practice.

The initiative is directed at the clumsily-named Heavily Indebted Poor Countries (HIPC). The first comprehensive HIPC debt-relief plan dates from 1996. It aimed to reduce the debts of countries that maintained good economic policies to a "sustainable"

level. This is calculated for most countries as a stock of debt (discounted to reflect its present value) equal to no more than 200-250% of annual exports. Alternatively, for extremely open economies, sustainability could be defined as a ratio of debt to government revenue of 280%.

Unfortunately, the original HIPC plan proved slow (only Uganda, Bolivia and Guyana have benefited so far) and stingy (in many cases the amount of debt service actually paid was likely barely to budge). Led by bishops, rock stars and charities, a loud campaign emerged to push for more and faster debt relief. The Scriptures call for forgiveness of debts every 50 years, some noted, reckoning that the next mass write-off was due in the year 2000.

The Cologne Initiative may fall short of millennial salvation but it is an improvement on its predecessor. The criteria for defining HIPCs have been broadened: a sustainable debt burden now implies a debt/export ratio of 150% or a debt/revenue ratio of 250%, and it will be easier to qualify for the second.

Under the new plan 33 countries (with a total of 430m inhabitants) are likely to be eli-

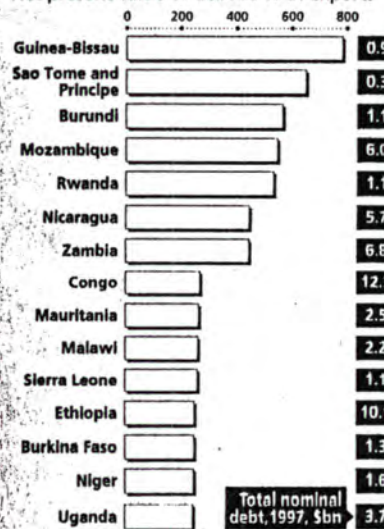
gible for debt relief, compared with 26 under the original plan. And relief should arrive more quickly: the G8 have agreed to shorten the time a country must follow good policies before its debts are cut and to offer "cash-flow" relief in the meantime. Creditors also promised to include for the first time some \$20 billion-worth of concessional loans in the debt calculation. When added to earlier pledges, the G8 claim, their efforts could reduce the stock of nominal HIPC debt by up to \$70 billion: from some \$130 billion today to as little as \$60 billion. Viewed in present-value terms, the initiative itself offers debt reduction of \$27.5 billion, which is more than double the \$12.5 billion available before.

That is a big change—if it attracts genuinely new aid money. The G8 say that the IMF's share of financing debt relief should come from selling up to 10m ounces of gold and reinvesting the proceeds. But America's Congress must approve that arrangement, and a number of lawmakers have said that they want no part of a gold sale. There is also talk of using World Bank profits, though these are unlikely to cover the Bank's proposed whack of \$5 billion. Conspicuously absent are financial commitments from the rich countries: the G8 merely promised to consider new contributions "in good faith". The debt-relief plan will be put to the annual IMF-World Bank meetings in September for agreement on its structure and financing.

The danger is that the promised relief for HIPC debtors will either prove elusive or come at the expense of other aid and other recipients. Official aid flows have been broadly stagnant anyway throughout the

Poor debtors

Net present value of debt as % of exports*



Sources: World Bank; IMF

*Pre-HIPC Initiative

1990s (see top chart)—in part because aid has produced so few successes and so many mistakes. But there is hope in the fact that this initiative comes at a time when many donors—not least the World Bank—are rethinking their whole approach to aid. History offers one outstanding clue: if relief is not carefully aimed at countries with a genuine commitment to sound economic management, it will be wasted.

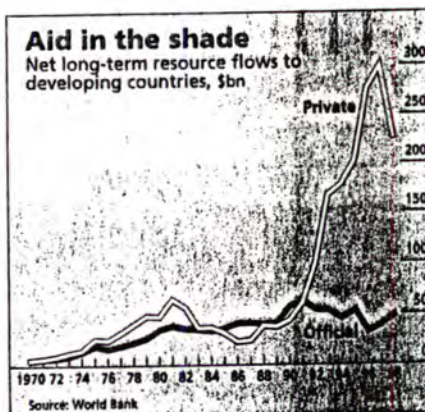
Unhelpful help

Over the past 50 years rich nations have given \$1 trillion in aid to poor ones. This stupendous sum has failed spectacularly to improve the lot of its intended beneficiaries. Aid should have boosted recipient countries' growth rates and thereby helped millions to escape from poverty. Yet countless studies have failed to find a link between aid and faster economic growth. Poor countries that receive lots of aid do no better, on average, than those that receive very little.

Why should this be? In part, because economic growth has not always been donors' first priority. A sizeable chunk of Saudi Arabian aid, for example, aims to tackle spiritual rather than material needs by sending free Korans to infidels. During the cold war, the Soviet Union propped up odious communist despots while America bankrolled an equally unsavoury bunch of anti-communists. Keeping thugs like North Korea's Kim Il Sung and Liberia's Samuel Doe in power hardly improved the lives of their hapless subjects. Even today, strategic considerations often outweigh charitable or developmental ones. Israel gets the lion's share of American aid largely for historical reasons, and millions of American voters support it. Egypt gets the next biggest slice for recognising Israel. Russia and Ukraine receive billions to ensure that they do not sell their surplus nuclear warheads.

Even where development has been the goal of aid, foul-ups have been frequent. Big donors like to finance big, conspicuous projects such as dams, and sometimes fail to notice the multitudes whose homes are flooded. Gifts from small donors are often strangely inappropriate: starving Somalis have received heartburn pills; Mozambican peasants have been sent high-heeled shoes. Poor research can render aid worthless: a fish farm was built for Mali in canals that were dry for half the year. The Turkana nomads of north-western Kenya, long pestered with ill-planned charitable projects, refer to foreign aid workers and their own government alike as *ngimoi*: "the enemy".

Aid faces further hurdles in recipient countries. War scuppers the best-laid plans. A shipment of vaccines was destroyed in Congo when rebels cut the power supply to the capital, shutting down the refrigerators where the medicines were stored. In Afghanistan, Taliban zealots have closed aid-financed hospitals for employing female doc-



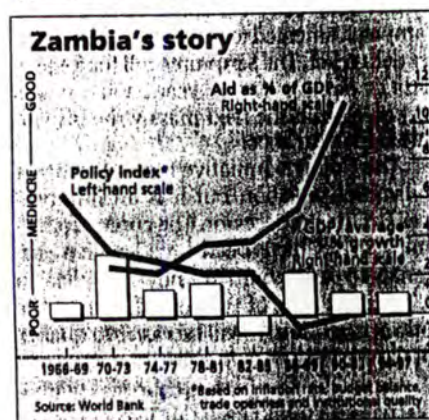
tors. Less spectacularly but more pervasively, corruption, incompetence and foolish economic policies can often be relied on to squander any amount of donor cash. One example, Zambia, speaks for many.

At independence in 1964, Zambia seemed poised for success. The second-richest country in Africa, it had a popularly elected government committed to helping the poor, big copper mines and a generous stream of aid. Most donors believed that the main obstacle to third-world development was lack of capital, and that giving poor governments cash to invest would spur rapid growth. It was not so simple.

Zambia's first president, Kenneth Kaunda, set up a one-party socialist state and nationalised everything from dry-cleaners to car-part retailers. His officials told farmers what to grow, bought their crops and sold them at heavily subsidised prices. Mr Kaunda assumed that the copper mines would provide an inexhaustible source of revenue, however badly managed. Zambians came to see government loans as a perk of freedom from colonial rule.

In the mid-1970s, the price of copper tumbled, and it became harder to pay for all this. Foreign donors picked up the slack. As Mr Kaunda's economic policies grew worse, aid climbed steadily, reaching 11% of real GDP by the early 1990s. IMF loans were tied to free-market reforms, but these were enacted reluctantly and frequently reversed.

Donors agitated for free elections and in 1991 Frederick Chiluba, a former union lead-



er and avowed economic reformer, became president. Aid began to flow again, but Mr Chiluba's zeal to privatise was soon dampened by the discovery that state-owned firms provided ministers with lucrative opportunities for patronage. Corruption is becoming as great a brake on growth as socialism was under Mr Kaunda. William Easterly of the World Bank says that, if aid had had the predicted accelerating effect on growth between 1961 and 1994, Zambia's income per head would now be more than \$20,000. In fact, it has dawdled at around \$400.

Growth and poverty

GDP is not a foolproof measure of well-being. Wealth may be unevenly spread, so that a high average disguises widespread wretchedness. Nor does GDP take account of the hidden costs of pollution, for example. But when GDP grows, social indicators tend to improve with it.

In Thailand, where income per capita tripled between 1966 and 1990, the proportion of the population living in poverty fell from more than half to just 2%. Infant mortality fell by two-thirds. Slower-growing countries did less well: in India, income per head doubled, infant mortality fell by half and half the population stayed stuck in poverty. In no-growth countries such as Ethiopia, all the advances in modern medicine and the efforts of foreign donors could not effect more than a 27% drop in infant mortality over the same period.

Until recently, the fastest-growing emerging economies were clustered in East Asia whereas the disaster zones were disproportionately African. This led many to conclude that culture was the best predictor of economic success. Actually, sound policies and institutions, backed by liberal helpings of aid, are usually a better guide.

Take Botswana. Zambia's neighbour was, at independence in 1966, one of the world's poorest countries. One British official called it "a useless piece of territory". To begin with, aid financed virtually all government investment and much of its recurrent expenditure too. Then prospectors found diamonds under the Botswanan desert. Unlike many African governments, Botswana's did not squander the windfall. Diamond dollars were ploughed into infrastructure, education and health. Private business was allowed to grow; foreign investment was welcomed. Aid projects were approved only if they were sustainable and did not duplicate the work of others.

From 1966 to 1991, Botswana's economy grew faster than almost any other in the world. It helped that its government was unusually honest and competent. Cabinet ministers did not award themselves huge pensions, mansions and public contracts. In Zambia, government bigwigs drive Mercedes limousines. Those in Botswana choose locally-assembled Hyundai sedans. Even

the president, Festus Mogae, has been seen doing his own shopping.

Botswana abolished exchange controls this year. Its budget is usually in surplus and GDP per head tops \$3,000. The country remains vulnerable to swings in the price of diamonds, but it has made a better job of diversifying than most third-world mineral producers. Their task completed, donors are packing their bags.

Cash advances or advice?

The reason that aid has worked in Botswana but not in Zambia is simple. Botswana had good economic policies, soundly administered. Zambia did not. A recent study by the World Bank* sorted 56 aid-receiving countries by the quality of their economic management. Those with good policies (low inflation, a budget surplus and openness to trade) and good institutions (little corruption, strong rule of law, effective bureaucracy) benefited from the aid they got. Those with poor policies and institutions did not. Badly run countries showed negligible or negative growth, and no amount of aid altered this. Well run countries that received little aid grew steadily, with GDP per head increasing by 2.2% a year. Well run countries with a lot of aid grew faster, at 3.7% per head a year.

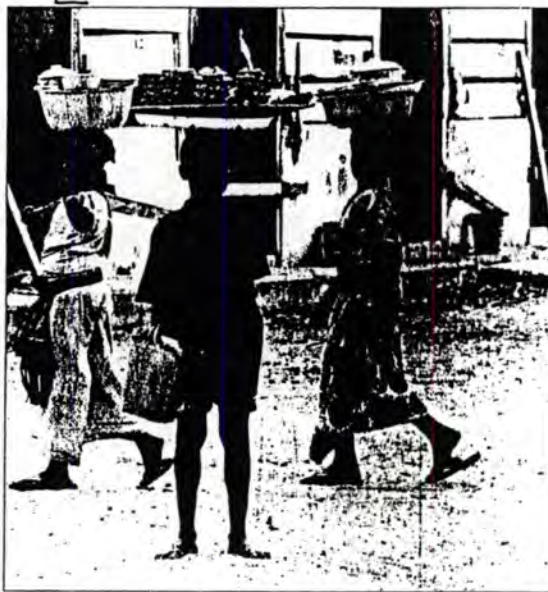
Several things explain these differences. In countries with poor management, aid is sometimes stolen. Its effectiveness is often limited anyway by the fact that it tends to displace, rather than complement, private investment. In countries with good management, aid "crowds in" private investment: if an economy is growing fast, the returns on road-building or setting up a new airline are likely to be high. A poorly managed, stagnant economy offers private investors fewer opportunities.

It seems clear that aid should be directed towards countries with good management and lots of poor citizens. Yet many donors continue to behave as if it were not. Bilateral aid has tended to favour allies and ex-colonies. A 1998 study by Alberto Alesina and David Dollar found that a former colony with a closed economy received about twice as much assistance as a non-colony with an open one. Undemocratic ex-colonies also received twice as much as democratic non-colonies. On some figures, countries with poor management got just as much bilateral aid as those with good management. (Nordic aid was an exception to this dismal trend.)

Can aid persuade countries with bad policies and institutions to adopt good ones? It is not easy. For years the IMF and World Bank have made their loans conditional on

policy reform, but the record is mixed, to put it kindly. Governments often agree to cut subsidies or tackle corruption, but later backtrack. Zimbabwe's president, Robert Mugabe, frequently promises one thing to donors and the opposite to domestic interest-groups. Kenya's Daniel arap Moi is skilled at selling the same reforms several times. Even when recipients blatantly flout aid conditions, donors often hand over the money anyway, for fear of sparking an economic collapse or even bloodshed.

Good policies cannot be imposed on unwilling pupils. Attaching conditions to aid can strengthen the arm of governments that are trying to push through wise but unpopular measures. Broadly, however, reforms rarely succeed unless a government considers the reform programme essential, and its



Give them a break

own. A recent study by David Dollar and Jakob Svensson found that elected governments were much more likely to implement reforms than unelected ones, and new regimes more likely than old ones.

For countries with foolish leaders, a better approach than offering money is offering ideas. The architects of successful reforms in Indonesia in the 1970s, and in several Latin American countries in the 1980s and 1990s, were largely educated abroad, often at aid-givers' expense. The crash course in market economics given to top African National Congress members before they won South Africa's first all-race elections in 1994 helped turn them from Marxists into fiscal conservatives. Ethiopia's new leaders took degrees in business administration in the mid-1990s.

Rethinking aid

A condition of the G8's new debt-relief plan is that the cash it frees be spent on worthy things like education and health. The World Bank is well aware of the difficulties in en-

suring that this actually happens but many donors are not. Aid-givers often finance specific projects, such as irrigation and the building of schools. Since the schools are usually built and the ditches dug, donors are satisfied that their money has served its intended purpose. But has it? Probably not.

Most evidence suggests that aid money is fungible—that is, that it goes into the pot of public funds and is spent on whatever the recipient wants to spend it on. If donors earmark money for education, it may cause the recipient government to spend more on education, or it may make available for something else the money that it would otherwise have spent on education.

If the government is benign, the alternative may be agriculture or tax cuts. If the government is crooked, donors' funds may be spent on shopping trips to London for the president's wife or fighter planes to strafe unpopular minorities. The important factor is not the donor's instructions but the recipient's priorities. A 14-country study published by the World Bank in 1998 showed that each extra aid dollar aimed at agriculture, for example, actually decreased total agricultural spending by five cents.

This does not mean that donors should never support specific projects. Sometimes the real value of a donor-financed dam or telephone network lies in the technology that is transferred, and the advice given on how to operate and maintain the infrastructure. But the fact of fungibility suggests that aid-giving could be greatly simplified if most took the form of unconditional "balance-of-payments support". That is, cash.

Rich countries should be much more ruthless about how they allocate their largesse, whether earmarked or not. Emergency relief is one thing. But mainstream aid should be directed only to countries with sound economic management. The HIPC debt-relief plans, to their credit, do this. More donors should follow suit. Aid should also favour countries with large numbers of very poor citizens. India, Vietnam, Mozambique and Uganda, among others, meet both conditions. Many countries that receive substantial aid, such as Zimbabwe, Kenya and Russia, do not.

According to the World Bank, an extra \$10 billion in aid could lift 25m people a year out of poverty—so long as it went to poor countries that manage their economies well. The same sum spread across the current cast of aid recipients would lift only 7m out of destitution. In other words, aid could work if it were properly directed. And if taxpayers in rich countries saw their money actually doing some good, they might be happy to give more of it.

*Assessing Aid: What Works, What Doesn't, and Why, OUP, November 1998. Website: <http://www.worldbank.org/research/aid>

Bernard

Helping the poorest

ONE world, two fates. Of children who die before their fifth birthday, 98% are in the developing world. Of people who are HIV positive, some 95% are in poor countries. Of the millions who die prematurely of tuberculosis, malaria, measles, tetanus and whooping cough, all but a few thousand live in the poor world. Indeed, tuberculosis alone kills more people each year than lung cancer, the most prevalent cancer and the terror of the West. The gap is widening between rich and poor countries, especially between the very richest and the very poorest. Although that has happened for a century or more, the continued early deaths of the poor and their children are a reproach to us all. What is to be done to save those millions of young lives?

The good news is that there is some new thinking about ways to respond to this challenge. Aid agencies and drug companies are talking to each other in more constructive ways than they once did. For donor countries, this is not mere altruism: as international travel grows, rich-world governments acquire a direct interest in halting diseases such as tuberculosis, which may otherwise infect their own citizens. But affordable drugs are only part of the cure. Developing-country governments can do more to improve the health of their people than simply getting hold of western money and ingenuity.

Part of the new thinking lies in the application of economics to what has too often been a purely emotional pitch for aid. Since it published an influential report on health in 1993, the World Bank has consistently advanced the argument that unhealthy countries are condemned to slow growth. The idea that ill health reinforces poverty is less familiar than the view that poverty causes ill health, but equally true. However, one of the main virtues of the World Bank's argument is that it allows multinational aid donors to talk straight to developing-country finance ministers, who typically have more clout in the allocation of resources than do their colleagues in the health ministry.

Now, economists are tackling—or struggling with—another aspect of the health of the poor: their lack of access to drugs. Jeffrey Sachs, a Harvard economist, has drawn attention to the scale of the problem: poor countries cannot afford expensive medicines, and drug companies naturally tend to focus their research on finding cures for the ills of the rich (see pages 17-20 and 63) rather than the afflictions of the poor. Americans and Europeans rarely suffer from schistosomiasis, which afflicts 200m people worldwide, or lymphatic filariasis, which makes life miserable for another 120m. So the market is said to be too small to attract research. Gone are the days when Jonas Salk refused to patent polio vaccine, saying that to do so would be "like patenting the sun". When a drug compa-



ny spends millions to develop a vaccine, it wants an economic return.

The machinery that might guarantee such a return is now taking shape. The World Bank, the World Health Organisation and other do-gooding bodies have formed alliances with the pharmaceutical industry to promote research on affordable drugs for neglected tropical ailments. Legislation under consideration in the American Congress and to be proposed by the European Commission would also give a helping hand. All this talk still needs to be backed by money, though. Others need to emulate Bill Gates's medical philanthropy.

Important though such initiatives are, they are not enough to heal the poor. The remarkable fall in mortality rates in Europe and North America a century ago owed little to drugs and almost everything to improved nutrition and better public health arrangements: reliable water supplies, safe drains, regular rubbish collection. Yet one in six of the world's people lack safe drinking water; most of the giant cities of Africa and Asia have no sewerage system; and rubbish collection is so disorganised that between a third and half of their garbage lies uncollected. The main answers lie in making local government more efficient and more accountable. Another is money—although appropriate technology can cut costs. It is quicker to help the poor by ensuring that the water sellers on whom they rely have access to safe water than by struggling to install expensive piped supplies to the home; and wiser to arrange for septic tanks to be emptied promptly than to build water-borne sewerage systems.

Education for health

With some of the diseases that kill the poor, the surest answer is to change habits. No single change would save more lives than if people routinely washed their hands before touching food. They need, too, to filter what they drink, to feed babies hygienically, to use mosquito nets, to avoid drunken driving—and to practise safe sex. One success story is sex education in Senegal: along with condom distribution and prompt treatment of other sexually transmitted diseases, this has helped to keep HIV infection rates in Dakar below 2%, compared with 20% in Kenya's Nairobi.

Spreading such messages needs government enthusiasm. But education ministers may not think it their job to teach personal hygiene, while politicians may prefer building hospitals to preaching the virtues of hand-washing. In fact, good health care also entails reorganising national systems so that they concentrate on primary care for the poor, rather than five-star clinics for those, like the president and his cronies, who ought to pay for their own care.

Even drug-buying could be done more effectively. Poor-

country governments need to make existing cheap medicines, such as oral rehydration salts and childhood vaccines, more available. They also need to care better for those drugs they get: all too often part of the consignment ends up on the black market or spoiled by bad storage. Foreign aid for malarial

drugs in Kenya was recently withdrawn by donors exasperated by corruption, inertia and political chicanery. And there's the rub. As Professor Sachs says in his article, getting good government is not the whole answer. But of all the ills that kill the poor, none is as lethal as bad government.

Bernard



Balms for the poor

Infectious diseases hinder developing countries from developing. Making existing drugs cheaper there would help. Making entirely new drugs would help even more

PEER over the counter at a pharmacy in America, Europe or Japan and you see a wealth of drugs. Americans and Europeans spend more than \$220 billion a year on prescription medicines for everything from high blood pressure to low mood—a powerful incentive for pharmaceutical companies to keep them supplied with current remedies and to concoct new ones (see chart). Of course, drugs for such diseases as river blindness and sleeping sickness are not routinely found on western shelves since there is little demand for them. But walk into a dispensary in, say, Cameroon, and you discover that such drugs are equally scarce there—not because they are not needed, but because nobody can afford them.

Lack of money not only restricts access to existing drugs and vaccines and means of dispensing them; it also offers little incentive for drug companies to develop new medicines for people in poor countries. Globally, the World Health Organisation (WHO) estimates that more than \$56 billion a year is spent on health research—but less than 10% of that sum is directed toward diseases that afflict 90% of the world's population.

As Piers Whitehead of Mercer Consulting notes, large drug companies are more like

supermodels than charities: they won't get out of bed and into work for less than \$350m in annual sales for any given product. This is because turning a gleam in a researcher's eye into a handful of useful pills is an expensive and time-consuming business: on average, it costs \$300m and takes more than a decade. Between 1975 and 1997, an impressive 1,223 new compounds were launched on the mar-



ket. But as Patrice Trouiller, a consultant with Médecins sans Frontières (MSF), an aid group, points out, only 11 of them were designed for tropical diseases.

The problem is not merely one of human welfare, important though that is. Many economists, among them Jeffrey Sachs of Harvard University (see pages 17-20), believe it is also an issue of economic development. Better access to better medicines is not the only way to improve the health of poor countries, but it is a significant one. And creating new drugs and vaccines is such a technology-intensive business that the developing world is likely to remain dependent on western pharmaceutical firms for years to come.

New pills, old ills

Encouraging the development of new medicines is difficult because it requires both the push of financial incentives (to offset the risk of research in largely uncharted fields) and the pull of secure funding (to ensure that there is a paying market once the drugs are ready). Recently, however, some new ideas about how to solve these problems have emerged, based on new alliances between industry and the public sector.

One approach is that being taken by the new Medicines for Malaria Venture (MMV), which brings together public-sector organisations and drug companies under the umbrella of the WHO. Robert Ridley, director of MMV, sees the venture as a "not-for-profit virtual drug company", combining public- and private-sector research through funding collaborative discovery and development projects. Drug companies have millions of molecules in their chemical libraries created for more lucrative diseases such as cancer, along with thousands of old drugs currently used for other ailments, which could be developed for malaria at roughly a tenth of the cost of starting from scratch.

But finding the money to finance the research is not easy. MMV aims to register one new antimalarial product every five years, and is likely to need \$30m a year to do so. The drug companies' gifts-in-kind are worth millions, but the bulk of the required money is still expected to come from public funds and philanthropic institutions. Initial promises of \$5m have enabled MMV to begin the process of project selection, and the venture will be formally launched later this year.

Seth Berkley, head of the International AIDS Vaccine Initiative (IAVI), is hoping to do something similar for AIDS vaccines. Roughly \$2 billion a year is spent on research into AIDS treatments, most of which are either too costly or too complicated for use in poor countries. But IAVI estimates that only

Flying high

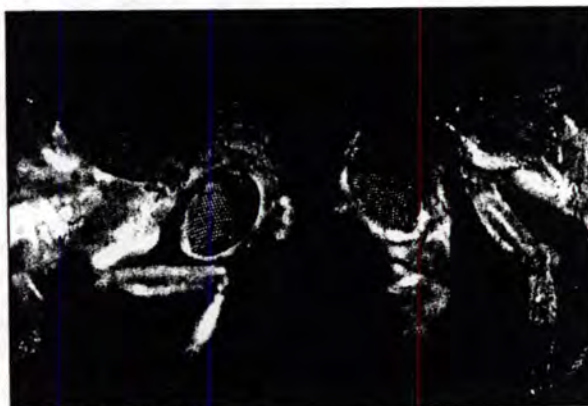
COCAINE, as addicts well know, has curious effects on the body. One of them is "reverse tolerance": rather than becoming accustomed to cocaine with increasing exposure (as happens with, say, alcohol), the brain becomes more sensitive. With each hit, responses, such as fidgeting, are more exaggerated. This sensitisation is thought to be a first step in creating an overwhelming craving for the drug that eventually leads to addiction.

In humans, studying cocaine sensitisation is tricky since most governments have strong views on giving drugs to the uninitiated, and tend to enforce them with lengthy prison sentences. So instead researchers have turned to creatures such as the fruit fly, *Drosophila melanogaster*, to probe the cellular basis for cocaine craving. In this week's issue of *Science*, biologists Jay Hirsh, Sarah Chaney and Rozi Andretic of the University of Virginia report that an appetite for cocaine seems to be connected to the mechanisms which control circadian rhythm—the so-called "body clock".

Fruit flies, like humans, have an internal biological clock that governs their activity over a 24-hour cycle. Ms Andretic recently found that the brain makes use of a biochemical called dopamine to regulate its circadian rhythm.

Other experiments on mice and flies have shown that dopamine is also involved in cocaine sensitisation. So the researchers put the two together and decided to see whether disrupting the body's internal clock might also affect cocaine craving.

When exposed to purified "freebase" cocaine, fruit flies behave surprisingly like junkies. They twitch, gnaw and groom themselves compulsively while wandering about in circles. As the drug dose rises, such erratic movements become more severe until the fly is paralysed and drops dead. Ordinarily, one cocaine hit is enough to sensitise a fly. But Dr Hirsh's team found that mutant *Drosophila* lacking genes called "Clock", "Period", "Cycle" and "Doubletime"—all of which are known to



Fruit flies on the rocks

control circadian rhythm—also lack heightened responses to cocaine even after multiple doses. In fact, "Doubletime" mutants proved particularly resistant to the drug, requiring substantially higher quantities before behaving strangely.

In fruit flies, a biochemical called tyramine seems to be responsible for such drug responses, and Dr Hirsh thinks that tyramine regulation is the chemical link between these two very different processes. After a single cocaine dose, the enzyme that makes tyramine becomes more active in normal flies. In the circadian-gene mutants, however, the enzyme's activity stays steady after a dose of the drug, so tyramine levels remain low. The absence of the circadian genes, which seem to regulate the release of tyramine, prevents flies from becoming more responsive to cocaine.

Whether sky-high flies can teach scientists much about human addiction remains to be seen. Only about a fifth of the people who use cocaine actually become addicted to it: the puzzle lies in understanding what distinguishes the casual user from the hardcore addict. But if the propensity to addiction is also genetically controlled in humans, it could provide a mechanism to address the problem at the cellular level, by regulating tyramine or its vertebrate equivalent. It might then be possible to treat cocaine addiction as a disease, rather than a criminal activity.

\$250m is spent creating vaccines, few of which are potentially useful for poor countries where about 95% of HIV infections occur. Dr Berkley wants to make life as easy as possible for potential vaccine developers by mustering expertise and money to help companies negotiate regulatory hurdles and organise clinical trials in developing countries.

IAVI is also trying to use the tricky issue of intellectual property to expand access to new vaccines. Patents have long been a sore point between the companies which own them and developing countries (such as South Africa) which want to get their hands on nifty new medicines and resent having to pay the premiums which patent-holders expect as a reward for their innovation. IAVI will invest in drug companies if they promise to provide their vaccines to poor countries (though not rich ones) at just above manufacturing cost, rather than including the usual hefty margin. If they do not, IAVI has the right to transfer the patent to another producer. IAVI has already struck a deal with one biotech company, Alphavax of North Carolina, along these lines and is hoping to do business with large pharmaceutical firms

as well. Another proposal is to allow companies that agree to develop an HIV vaccine a limited extension to their patents on blockbuster drugs in their most lucrative markets.

A different approach, being championed by MSF, is to make a virtue of the rarity of tropical diseases in the West. Since 1983 America has offered incentives in the form of tax credits and marketing monopolies to companies willing to develop drugs for "orphan" diseases, which afflict fewer than 200,000 people and so offer markets too small to attract much attention from pharmaceutical companies. The European Commission is preparing similar legislation, and Dr Trouiller of MSF is lobbying for tropical diseases to be included in it. But although orphan drug legislation has been a boon to America's biotech companies, which can use the prospect of a market of a few million dollars to lure investors, that is scarcely loose change for large pharmaceutical firms. And since only big firms can manufacture drugs in large quantities, it is crucial to engage their interest too.

A bill now before Congress could do just that. The Lifesaving Vaccine Technology Act

of 1999, introduced by Nancy Pelosi, aims to encourage drug makers to develop vaccines for malaria, tuberculosis and HIV, which together kill almost 8m people each year. The legislation proposes substantial tax credits on research and development expenses, and would cost about \$25m a year.

But while the bill has received backing from both politicians and industry executives for its tax credits, it may face opposition to its explicit endorsement of "tiered pricing"—the simple idea that poor countries be charged less than rich ones for drugs. In the past, American congressmen have complained that it is "unfair" that their voters should pay 100 times more for a measles vaccine than, say, a mother in Bangladesh.

Such opposition to tiered pricing alarms drug companies, according to Arnie Batson, a vaccine consultant with the World Bank. Even more worrying, says Walter Vandersmissen, head of government affairs at Smith-Kline Beecham Biologicals, is the prospect that rich countries might allow the import of discounted drugs from poor countries, and undercut the drug industry's sales in their profitable markets. (At the moment, America

and the European Union strictly control imports of drugs made outside their borders.)

Though many in the pharmaceutical industry are impressed by these proposals, some feel that there are now too many competing "initiatives" and that they all fall short of inspiring novel drug development. Mr Vandersmissen considers them "interesting think-tank exercises". The best way to stimulate new research, he believes, is to prove that sustainable markets can be created for relatively expensive medicines already on the shelf. This is the aim of a new international consortium, the Global Alliance for Vaccines and Immunisation, to be launched next year. It brings together the World Bank, the WHO, wealthy donor countries, poor recipient ones, philanthropic organisations and the drug industry, with the aim of improving access to existing vaccines and developing new ones.

According to Geoffrey Lamb, head of "resource mobilisation" at the World Bank, one way to finance such a programme is through a global trust fund for vaccines for needy countries. But wealthy donor governments are not keen to tie up large sums of money for long periods of time on uncertain odds. A more likely prospect, in Mr Lamb's view, is "contingent lending", in which donors promise to give money and needy countries promise to buy a vaccine if and when a useful one appears.

Ultimately, says Tim Evans, director of health sciences at the Rockefeller Foundation, rich donor countries prefer to give their money to projects (such as drug donation and immunisation programmes) which show results in a couple of years, rather than put up with the long and uncertain slog of developing new medicines. But some donors are prepared to take a more long-term view.

The biggest splash has been made by the Bill and Melinda Gates Foundation. Since last December, the foundation has given \$50m for malaria vaccine development, \$25m for AIDS vaccine research and \$100m to the Gates Children's Vaccine Programme which aims to improve access to expensive new shots against hepatitis-B, Haemophilus influenzae and rotavirus.

Though such contributions are welcomed by international health workers, they are, in Mr Evans's view, largely "catalytic"—enough to kickstart a reaction among drug developers and public health authorities, but not enough to sustain it. He would like to see a new group of donors: multinational corporations whose business in poor countries depends on a healthy workforce, who would benefit from novel drugs for their old ailments. In the end, developing new medicines for the world's poorest will depend on appeals to both altruism and self-interest. Balancing the two may prove the toughest trick of all for the new alliances between the public and private sector.

Herald INTERNATIONAL Tribune

PUBLISHED WITH THE NEW YORK TIMES AND THE WASHINGTON POST

Drugs for AIDS Victims

The average African nation spends less than \$10 per person each year on health care. The mix of drugs, including the new protease inhibitors, necessary to turn AIDS from a death sentence into a chronic disease, costs at least \$12,000 per person each year. That disparity virtually guarantees that most of the 22 million Africans infected with the AIDS virus will not get the best available treatment. Few will even be able to afford less expensive life-prolonging drugs such as AZT or ddI or — far cheaper and just as crucial — medicines to fight the infections that accompany AIDS.

Washington is now arguing with South Africa about a new law in that country that could allow South Africa to make cheap versions of still patented drugs or import them at less than the manufacturers want to charge. The debate is important, and it has revealed the need to broaden the administration's policy, which has been dominated by trade issues and the desire to protect U.S. pharmaceutical patents.

Washington should stop pressuring South Africa to change the law, but even then far more will need to be done to get lifesaving medicines to poor Africans with AIDS.

Part of the challenge is to increase the availability of already affordable drugs. Last month the Clinton administration announced a \$100 million effort to fight AIDS in Africa. It will buy and help countries use some cheap treatments, like medicines for tuberculosis and other AIDS-related infections, and drugs to prevent mother-to-child transmission.

While some pharmaceutical manufacturers, most recently Bristol-Myers Squibb, are making substantial donations to fight AIDS in poor countries, they want to see governments or health organizations bear the cost of AIDS drugs. But most of the newer ones are far too expensive. Many Third World countries have long responded to the high cost of patented drugs by copying them, sometimes for a tenth of the patented price. The pharmaceutical industry argues that this pirating discourages the search for new medicines, as patented drugs are priced high in part to allow manufacturers to recover the research and development costs of all their

projects, even the unsuccessful ones.

The drug companies, and the Clinton administration's trade negotiators, have fought the efforts of Third World countries to manufacture or import cheap versions of still patented drugs. U.S. trade pressure on Thailand throughout the 1990s, for example, caused the country to put restrictions on its manufacture of cheap patented drugs and ban their import, which AIDS doctors say reduced the country's ability to fight the disease.

What really worry the drug industry today, however, are the new intellectual property rules of the World Trade Organization. Over Washington's objections, poor nations won the right to make patented drugs in certain situations, especially when there is a "national emergency." While Washington says it objects to technicalities in the new South African law, the larger reason trade officials have pressed so hard is that the industry fears that South Africa could set precedents, within the world's trade rules, for the manufacture of cheap drugs. Drug makers have sued in South African courts to block the law.

Defending intellectual property is important, but the narrowness of the administration's views is dismaying. Pharmaceutical companies would lose little if they found legal and controllable ways to let poor countries, which offer scant market anyway, reproduce drugs or buy them cheaply.

In addition, some of the most important AIDS drugs were discovered in the National Institutes of Health, or with government grants. Two examples are ddI and the protease inhibitor Norvir. That financing may well give Washington the right to allow the World Health Organization to license the drugs' manufacture, for sale only in poor nations in case of emergency. The administration should explore this option for all such vital medicines developed at taxpayer expense.

The desires of America's pharmaceutical companies have been the overwhelming force driving U.S. policy on the issue of drugs in poor nations. Surely the needs of 35 million people infected with HIV worldwide should count for more.

— THE NEW YORK TIMES

The Shape of Russia

profitably, primarily oil- and diamond-

**AIDS Convening
September 7, 1999**

Participants List

Administration

Secretary Donna Shalala
Department of Health and Human Services

The Honorable David Satcher
Surgeon General

Secretary Lawrence Summers
Department of the Treasury

Administrator Brady Anderson
US Agency for International Development

The Honorable Leon Fuerth
Assistant to the Vice President for National Security Affairs
The White House

The Honorable Sandy Thurman
Director
National AIDS Policy Office
The White House

Ms. Gayle Smith
Senior Director for African Affairs
National Security Council
The White House

Under Secretary Frank Loy
Office of Global Affairs
Department of State

Multinational Organizations

Hon. James Wolfensohn
World Bank

Mr. Eduardo Doryan
World Bank

Ms. Debrework Zewdie
The World Bank

Ms. Jan Piercy
U.S. Executive Director
The World Bank

Mr. Peter Piot
United Nations Joint Program on HIV/AIDS

Dr. Jim Sherry
United Nations Joint Program on HIV/AIDS

Foundations

Dr. Timothy Evans
The Rockefeller Foundation

Mr. Seth Berkeley
The Rockefeller Foundation

Mr. Robert Johnson
Black Entertainment Television

Ms. Debrah Lee
Black Entertainment Television

Mr. Aryeh Neier
Open Society Institute

Mr. Stewart Burden
The John D. and Catherine T. MacArthur Foundation

Mr. Gordon Perkin
William H. Gates Foundation

Mr. Drew Altman
President and CEO
Kaiser Family Foundation

Corporations/Others

Mr. Charles Heimbold
Chief Executive Officer
Bristol Myers Squibb

Robt Johnson

Mr. Ken Weg, Vice Chairman
Bristol Myers Squibb

Mr. Anthony J.F. O'Reilly (T)
Chairman
H.J. Heinz Company

Observers

Mr. Terry Anderson
Director of Policy
National Association of People with AIDS

Mr. Paul Boneberg
Director
Global AIDS Action Network

MEMORANDUM TO JACK LEW

From: Sandy Thurman
cc: John Podesta
Date: November 23, 1999
Re: Global AIDS 2001

Thank you very much for your support in securing a \$100 million increase for our global AIDS effort in the final FY2000 budget. While the budget was working its way up and down Pennsylvania Avenue, we have been working closely with the agencies in the development of an extensive implementation plan to ensure that we maximize the effectiveness of these new resources. In addition, we had a very productive meeting with the British this past week. It seems clear that the impetus for their recently announced \$35 million initiative for AIDS in Africa was our effort, beginning with the conversation on HIV/AIDS that the President had with Prime Minister Tony Blair at the G7 meeting in Cologne.

FY2001: Given the magnitude of this crisis, and the level of visibility that it is now receiving, I believe that it is very important that we build on our initiative in the FY2001 budget. Now that that this is being called "a plague of biblical proportion" and the WHO has called it the "worst health disaster since the bubonic plague", our effort cannot be a one shot deal. While it is certainly true that the US cannot fight this battle alone, it is also clear that if we seek to remain the credible leader, much more remains to be done. I would like to propose that last year's funding become part of the base and that we again request a \$100 million increase for our multi-sectoral global AIDS effort. This would enable us to do two important things including: (1) doubling the USAID global AIDS program over two years (which would require an investment of an additional \$70 million); and (2) engaging additional agencies in this fight (DOD and HHS).

Interest in, and concern for, Africa is building. The global AIDS issue continues to be a very high priority for the Congressional Black Caucus, and popular with the Congress as a whole. This weekend, a bipartisan codel of 12 members leaves for Africa, and will be looking at HIV/AIDS in Nigeria, Zimbabwe, and South Africa. [Democratic members: Gephardt, Jefferson, Kilpatrick, Meeks, and Payne; Republican members: Castle, Dickey, Dunn, Houghton, and Kelly]. I did a luncheon briefing for the members and it is clear that this trip will only serve to strengthen their already active interest. I have attached a letter to the President from Gephardt and Pelosi asking that we "redouble our efforts" with a "significant increase above the final FY2000 appropriation".

As you know, Ron Dellums has been pushing for what he calls a "Marshall Plan for AIDS in Africa". He has seen the VP several times on this matter, and is scheduled to see him again soon. His "plan" is to create a new African AIDS Agency with an annual \$200 million appropriation. I join the NSC, AID, and State in believing that the creation of a new US agency designed to deal with HIV/AIDS in a vacuum is a bad idea. But Rep. Barbara Lee has introduced this legislation with the support of more than 50 co-sponsors, including almost the entire CBC.

I believe that if we ask for an additional \$100 million in FY2001, combined with the \$100 million we secured in FY2000, we can tell them that we are pushing for a \$200 million appropriation, without getting bogged down with the Congress over the creation of a new agency. I hear that the AIDS, African American, and international communities will all be writing to the President asking for a \$200 million increase for the global fight against AIDS in FY2001.

Threats to India and the New Soviet States are the next wave. While we seek to be responsive to the reality of the devastation already unfolding in Africa, we also need to pay attention to the danger that lurks in other parts of the world. While the epidemic in India is approximately a decade behind that of sub-Saharan Africa, there may still be time to turn the tide on current projections, and prevent a tragedy of African proportions. Senator Daschle is leading a codel to India in January, and we were asked to put together AIDS briefing materials for that delegation as well. India is slated to get some money under the FY2000 effort, but they are a long way from where they need to be.

Again, thank you very much for all of your help and support on this issue. I look forward to working with you.

**Remarks by First Lady Hillary Clinton
World AIDS Day, December 1, 1999**

(Excerpt)

“I want you to know that the United States is committed to being a partner in all of these efforts. And I am proud that the congress passed the President’s Initiative to add \$100 million this year to our global fight against AIDS. This will enable us to double our financial efforts in Africa.

The LIFE initiative will help countries protect children orphaned by AIDS, care for people living with AIDS, fund strategies to prevent further HIV infections, and support clinics, organizations, and outreach programs.

This cannot and will not be a one-time commitment. The United States’ efforts must be sustained and strengthened to meet the challenges posed by this pandemic.

And I want you to know that the President and I will continue to fight for the funds from the Congress in the remaining time that the President has, so that the United States will do its part in the struggle against AIDS.”

Congress of the United States
House of Representatives
Office of the Democratic Leader
Washington, DC 20515-6537

November 24, 1999

The Honorable William J. Clinton
President of the United States
The White House
Washington, DC 20500

Dear Mr. President:

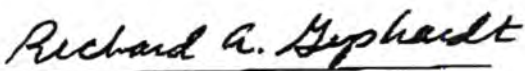
Thank you for your leadership on the global AIDS problem. We are very pleased that, working together with the Administration, we were able to secure the additional funds you requested to help fight this epidemic in Africa and around the world. We believe this was one of the most important victories in our negotiations on the final fiscal year 2000 budget.

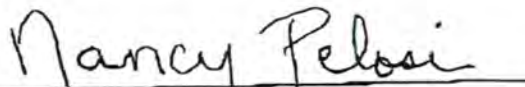
As important as this victory was, however, we cannot afford to rest. The dimensions of the problem remain daunting. In light of the disturbing trends not only in Africa and the Caribbean but in Asia and Eastern Europe, as well, we believe we must redouble our efforts if we are to make serious inroads in curbing the spread of HIV and treating those who have already contracted the virus or who are sick with AIDS.

Therefore, as you develop your final fiscal year 2001 budget, we strongly urge you to include a significant increase above the final fiscal year 2000 appropriation for global AIDS. We also strongly believe that this increase should be in addition to an increase in your budget request for our efforts to combat other infectious diseases. Building upon the success of this year's budget outcome will demonstrate to people in Africa and elsewhere around the world that our country is committed to doing its part to help bring an end to the terrible human suffering and death as a result of the global AIDS epidemic.

Again, thank you for your consideration of our concerns.

Sincerely,


Richard Gephardt, M.C.


Nancy Pelosi, M.C.

cc: John Podesta
Jack Lew

When it's over

AIDS ACTION

The Honorable Jack Lew
Director, Office of Management and Budget
Old Executive Office Building
Washington, DC 20500

Dear Mr. Lew:

On behalf of AIDS Action, the national voice on AIDS, representing all Americans affected by HIV/AIDS and the 3,200 community-based organizations that serve them, I am writing to express our strong support for funding increases for Fiscal Year 2001 in global HIV/AIDS programs. Given your commitment to increasing the federal investment in fighting the epidemic worldwide, we urge your diligence in securing maximum funding levels for these programs.

In the face of this worldwide epidemic, we urge you to push for a \$200 million increase in our global AIDS effort for FY 2001. The Administration took an important first step towards ending the global epidemic with the announcement of a \$100 million dollar initiative that is critical in ensuring that entire nations are not devastated as a result of the epidemic. The initiative must be ongoing if it is to have any measurable outcome.

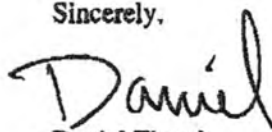
The global epidemic continues to demand strong federal leadership. According to UNAIDS, 5.6 million people were newly infected with HIV in 1999, including 2.3 million women and 570,000 children under the age of 15. There are now 33.6 million people living with HIV/AIDS worldwide, and there were 2.6 million deaths, half of which were women. An increase in our investment will put our nation on track toward a global AIDS program that begins to address the magnitude of this pandemic, and would help to further stem the rising tide of HIV and bring some modest level of care and support to those who are suffering.

This increase in funding for global AIDS programs must be new money, rather than funds shifted from the strapped budgets of other essential development accounts. Health, education, child-survival and micro-finance are all interconnected parts of a comprehensive human investment and AIDS strategy that must not be traded against each other.

We commend your commitment to assisting millions of people affected by HIV/AIDS worldwide. Your leadership is needed again in your last budget request to dramatically affect the direction of this global epidemic and create a legacy of hope for the future.

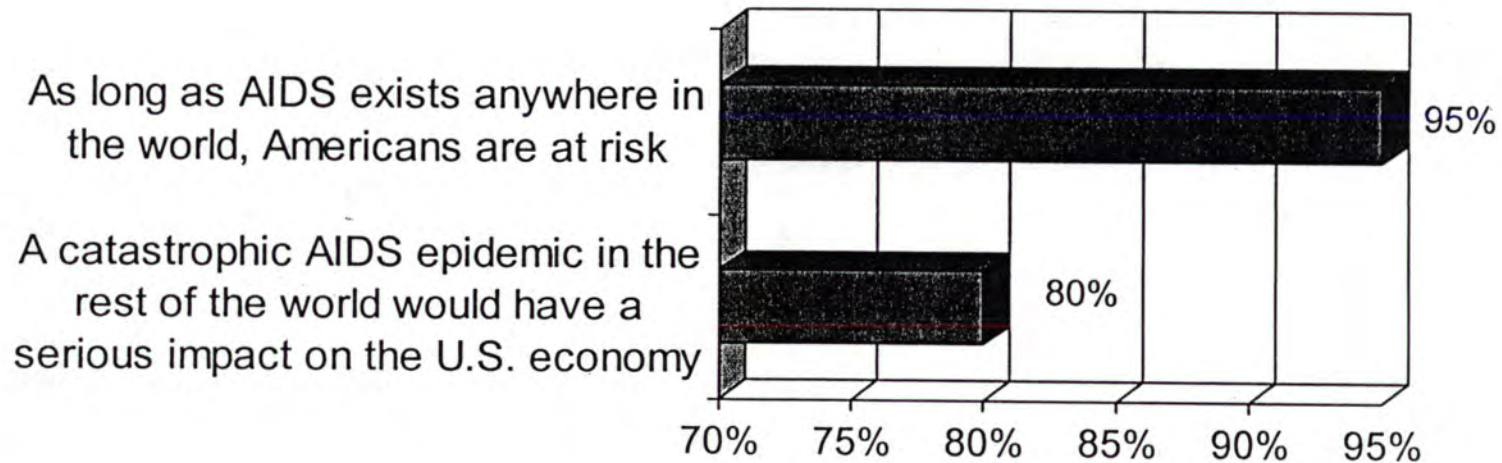
Thank you in advance for your consideration of our views.

Sincerely,


Daniel Zingale
Executive Director

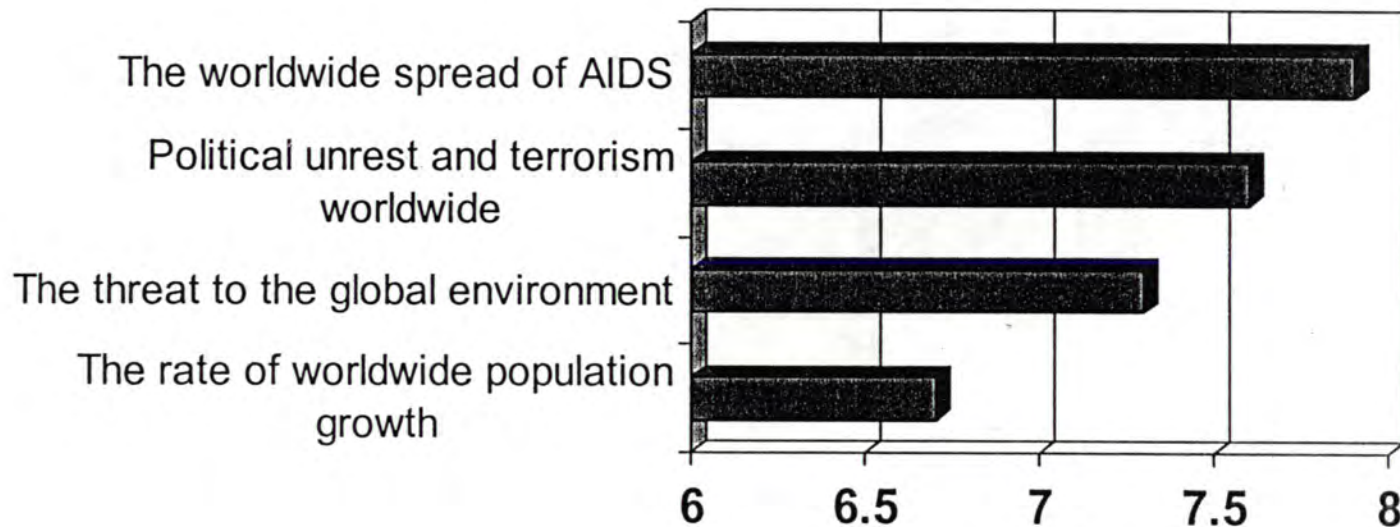
cc: John Podesta
cc: Leon Fuerth

Public Considers Global AIDS Epidemic A Serious Threat to the U.S.



Base: All Adults

Public Considers AIDS Among the Most Serious Problems Facing the World



Highest Possible (Most Serious) Score: 10

Base: All Adults