JGW-11 SOUTHERN AFRICA

James Workman is a Donors' Fellow of the Institute studying the use, misuse, accretion and depletion of fresh-water supplies in southern Africa.

Of Dams & Disease **Triage In An H₂O-Negative, HIV-Positive Landscape**

James G. Workman

JANUARY, 2003

ALONG THE SENQU RIVER, Lesotho — Here in southern Africa, more than anywhere else on earth, water is life and AIDS is death and never the twain shall meet. Or so I'd imagined. Ostensibly the region's scarcest natural resource and deadliest human virus *should* have nothing to do with each other. I expected I might splash through my 'water' fellowship without ever wading into the pandemic. Not that I was blind to countries like Botswana, where I was surrounded by one in three adults who carry the virus and where four of five teen boys are forecast to die of Acquired ImmunoDeficiency Syndrome. It's just that watching rivers shrivel up into drought-led famine felt bleak enough. To narrow my focus and avert depression, I'd hoped to steer clear of the subcontinent's plague.

Today that hope seems distant and naïve. It has become painfully obvious that water scarcity and AIDS — the two most pervasive forces shaping the future of sub-Saharan Africa — are now mutually inescapable. They could not help but collide in a subtle chain of volatile and grim combinations.

Few saw these collisions coming, and there is little concerted response. That



The Protagonist: Hubris set in concrete, or hero blind to tragic flaws? The process of erecting dams like Katse played an unwitting part in the project's premature end.

Since 1925 the Institute of Current World Affairs (the Crane-Rogers Foundation) has provided long-term fellowships to enable outstanding young professionals to live outside the United States and write about international areas and issues. An exempt operating foundation endowed by the late Charles R. Crane, the Institute is also supported by contributions from like-minded individuals and foundations.

ICWA

LETTERS

TRUSTEES

Bryn Barnard Joseph Battat Mary Lynne Bird Steven Butler William F. Foote Kitty Hempstone Pramila Jayapal Peter Bird Martin Ann Mische Dasa Obereigner Paul A. Rahe Chandler Rosenberger Katherine Sreedhar Edmund Sutton Dirk J. Vandewalle

HONORARY TRUSTEES

David Elliot David Hapgood Pat M. Holt Edwin S. Munger Richard H. Nolte Albert Ravenholt Phillips Talbot

Institute of Current World Affairs The Crane-Rogers Foundation Four West Wheelock Street Hanover, New Hampshire 03755 U.S.A. may be due to the massive scales of both the 'health crisis' and 'drought crisis.' Or it may be that specialists work in isolation in their own respective fields oblivious to 'other' crises competing for limited funds. Regardless, today AIDS and water scarcity individually grip every socioeconomic aspect of the region. As they expand, they grip each other. As a consequence they gripped the time, thoughts and emotions of your correspondent, who traced the interwoven currents of HIV and H_oO as they cascaded through highland village and lowland metropolis until on Christmas morning they carried me inside an abandoned- and orphaned-baby hospital, with HIV-positive infants-a wrenching place where I lack the nerve to return.

* * *

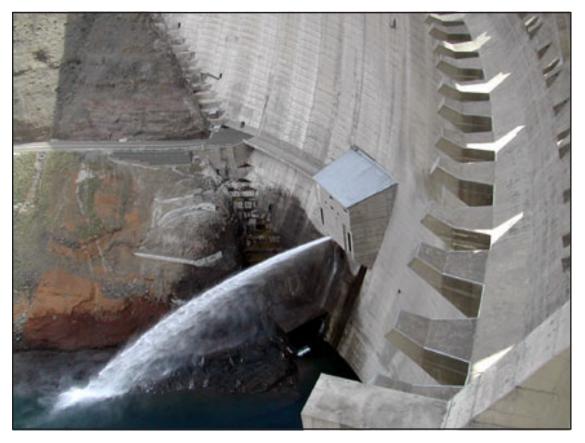
But before entering that hospital, let's set the stage for the HIV/H₂O dramatic forces that will take us there. Starting in the Maluti Drakensberg mountains, rain falls to form the great southern African artery, the Orange/ Sengu River. Next, we need a tragic protagonist: For nearly two decades, in that river's tributaries, the Lesotho Highlands Water Project (LHWP) has mounted the most ambitious water-supply scheme on the continent.¹ Katse Dam, then Mohale, rose as the highest mega-dams in the southern Hemisphere. Combined, they comprised only two halves of the first stage in a four-phase, \$20 billion monster project designed to turn Lesotho's lifeblood into a chain of reservoirs to maintain South Africa's urban and industrial heartbeat.

ZAMBIA ANGOLA Lake Kariba Harare o ш ZIMBABWE n o NAMIBIA BOTSWANA m Limpopo I S Windhoek Metsiamenong • 4 Walvis Bay N Pietersburg 0 Gaborone _ Pretoria Mbabané o Maputo Johannesburg. SWAZILAND Maseru © LESOTHO Orange R. Semongkong Durban SOUTH ATLANTIC Nourivier INDIAN FRICA OCEAN OCEAN 500 Mi Cape Town Port Elizabeth 500 Km 0 20 mi FREE STATE .Butha-Buthe 0 20 km Maluit Mips SOUTH AFRICA KWAZULU Peka NATAL Pitseng Mokhotlong C Maseru KATSE Roma. MOHALE Matsieng Thaba-Tseka Marakabei LESOTHO Mafeteng Sengu Mohales Hoek SOUTH AFRICA TRANSKEI

Lastly we need a Greek chorus: anti-dam critics saw only flawed hubris set in concrete. They mounted ineffectual protests against dams, forging strategic alliances between social and environmental activists. They argued that fixing leaks, reducing demand and investing in conservation would quench the region's thirst at a fraction of the cost. The leading Cassandra, Witwatersrand University professor Patrick Bond, summed up objections in his book *Unsustainable South Africa*, calling LHWP (take a breath): "costly, corrupt, poorly designed, badly implemented, economically damaging, ecologically disastrous and distributionally regressive."

He might also have called it "politically unstoppable," for it was impervious to attack. Indeed, to detractors the Lesotho dams seemed the modern African equivalent to those giants marching across earth in H.G.

¹ JGW-10 outlined the social, economic and ecologic context of the dam itself, apart from HIV-Aids



The LHWP often has been an honest and progressive voice, spending much on AIDS-related education and social work. Only recently, after building shiny new latrines, schools, sports fields and clinics around dam developments, the LHWP learned that what those communities really needed: new mortuaries.

Wells' *War of the Worlds*. Ironically, and painfully, however, the dam had an unexpected Achilles heel. No one predicted how thoroughly HIV would co-evolve with, from and through the LHWP, disturbing its construction, operation, quality, planning, use and eventually, its very *raison d'etre*. Perhaps only in hindsight, acting as forensic water analysts, can we start to glimpse how, through AIDS, the process of the dams' robust construction played an unwitting role in the project's premature end.

Act One. Even before the first concrete was poured, the bi-national water project's earliest role was to help HIV spread, transporting it across borders and ferrying it between lowland city and highland village. How? Well, to raise a big dam you need heavy equipment. To move equipment to a remote area you need roads. To build roads and operate that equipment you need a semi-skilled male migrant labor force from the city. To bring urban laborers to the middle of nowhere you need to pay them relatively good money. With money, that labor will seek ways to entertain itself after work, typically with wine, women and song.

That's been the classic western-water-development story, ever since the Roman Empire's aqueducts. But in Africa — as cash-laden city boy meets cash-hungry hometown girl — the stage becomes a Petri dish for HIV transmission. Newly paved roads into rural areas become disease vectors; truckers and workers become virus carriers; the Lesotho dam construction sites and their surrounding developing villages become breeding grounds for the virus' subsequent dispersal.

Five years ago at Katse Dam alone, an employee of Save the Children counted 700 young female Highland villagers earning a lucrative income as sex workers. Today, four in five Highlands patients in those villages are infected with HIV; one study documented a 40-percent rise in HIV rates for populations nearest the Highland dams. So it continues; exquisitely paved roads that open up previously isolated rural communities to cheap foreign economic goods also open them to costly foreign viral bads.

Water scarcity largely drives development projects in Southern Africa. But it would be unfair and misleading to single out dam construction for disproportionate blame in spreading the AIDS pandemic. Human variables — ranging from uprooted tribal structures, migrant labor, post-colonial political instability and a preference for 'dry sex' — all play pivotal roles. And while modern infrastructure may act as catalyst, any project or road facilitates the spread of the virus; Lesotho mineworkers returning home from South Africa were likely the earliest HIV vectors.

The LHWP often has been an honest and progressive voice, spending much on publicity and education



Far away from the Mega-Dams, and miles from the nearest dirt road or stream, this Highland village is poor, but is also isolated from the main vectors of HIV.

and social work. While exploring the Highlands, I saw free condoms and AIDS-alerting posters and safe-sex brochures everywhere I turned. But while helpful, these preventative efforts appear to be bandages belatedly plastered over a hemorrhaging jugular vein. Only recently, after building shiny new latrines, schools, sports fields and clinics around dam developments, the LHWP learned that what those communities really needed: new mortuaries.

Act Two. So after infected victims die — for unlike HIV-positive people in America, few here can afford antiretroviral drugs² and so will typically die within seven years — what happens to their bodies? Yes, the LHWP built a few clean, new mortuaries that are, alas, now perpetually full of corpses. But after only a few days, those corpses must still be dealt with by someone, somehow, somewhere. The stigma attached to AIDS means only the bravest families of the deceased will claim the body for ritual. At least in this region, African culture means villages rarely cremate their dead. So they bury them.

That's trickier than it sounds. Like buried dispersal of human urine and feces, the interment of human bodies works fine with scattered rural populations, ample land, and a burial rate gradual enough for safe, organic decomposition. Those days are long gone. Africa is rapidly urbanizing. The LHWP concentrated the rural populace around dams and water infrastructure, and those congregations are dying in flocks. Lesotho ranks third behind Botswana and Swaziland in sero-prevalence (HIV infection rate) with 23.6 percent of the population infected; since 1996 life expectancy has plunged from 58 to 44. At a sunny ceremony inaugurating a new chief, I heard Lesotho's prince rain a dark warning on Highlanders assembled: "AIDS is now the threat we share. Let us make sure your new young chief does not reign over a region of bones."

It was brave advice, long overdue, and hard to follow. Besides, the region already lacks room near villages even to bury those bones. Funeral parlors are a booming growth industry. Packed cemeteries around urban areas in southern Africa host 40 to 100 burials a weekend, a 400 percent increase over five years ago. In graveyards ranging from Maputo to Maseru to Johannesburg I have seen back-to-back crowds overlapping due to the proximity of graves and burial times. Other graveyards are already overflowing, literally, into back yards and environmentally sensitive areas. Because of stigma and its 'legacy of shame', some bodies presumed to be AIDS-infected are buried under cover of darkness. Riots broke out near Lesotho's capital when a village relocated by construction of Mohale Dam buried their dead in their new 'host' community. The host community tried to disinter the bodies days later, citing overfilling and cultural differences.

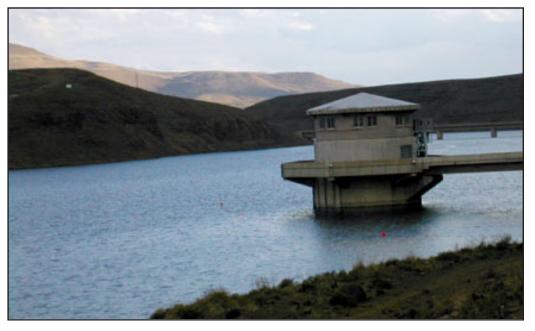
While lowlanders overcrowd urban burial sites,



Lesotho's prince warned the assembled horsemen at a ceremony inaugurating a new chief: "Aids is now the threat we share. Let us make sure your new young chief does not reign over a region of bones."

²Expensive and sometimes toxic, antiretrovirals don't 'cure' AIDS anymore than chemotherapy cures cancer. But the drug combinations, taken after someone is diagnosed as being HIV-positive, can inhibit the spread of HIV-virus, help protect the immune system and prolong lives.

Highland villages often lack soils deep enough to cover an adult body. Most of the mountain kingdom consists of steep, rocky slopes; only 5 percent of it remains precious arable land, competing with graveyards as sacred ground. At high altitude, mushrooming death rates and scarce burial space lead to impromptu, unauthorized burials in shallow graves wherever possible, even adjacent to dams, along rivers, in floodplains and below the water table. Following heavy rains, both sides of the Lesotho/South Africa borders have reported bodies floating downstream, tumbling



By contract, Lesotho's water exported to Johannesburg must meet extremely high levels of purity. That not only limits any economic activity upstream in Lesotho; it sets off health concerns about the concentration of decomposing flesh and organic chemicals now seeping into dams and rivers flowing out of the country.

from behind retaining walls, tangled in undergrowth.

Grisly images aside, this problem may trigger legal issues between South Africa and Lesotho. By contract, Lesotho's water exported to Johannesburg must meet extremely high levels of purity. That not only limits any economic activity upstream in Lesotho; it sets off health concerns about the concentration of decomposing flesh and organic chemicals now seeping into dams and rivers flowing out of the country.

The only water specialist to look at AIDS implications in depth, Peter Ashton³, walked me through the reality behind the official report that "inappropriately sited unofficial graveyards could lead to contamination of local ground water that is used as a community water supply." The health risk is not HIV transmission through water, of course, but is rather linked to increased nutrient levels and bacterial contamination from graves entering nearby ground-water systems. "If nearby communities rely on boreholes or wells to supply potable water from shallow aquifers," he said, "this could also lead to potential health risks for these communities."

Act Three. Beyond the cold bodies of the dead, a quiet collision between AIDS and water involves the warm bodies of the living. Just as massive layoffs affect those fired, they also impact employees who remain. Seen through a cold economic lens, AIDS is the ultimate cross-cutting unemployment force; it does not discriminate by

age, race, gender, income, sector or profession. It empties everyone's desks. And unless treatment or a vaccine arrives — both ideals still, by conservative estimates, a decade distant — there is no chance of future employment.

Those lucky to be employed often help support a halfdozen relatives, and consider themselves 'extended family' as 'brothers' or 'sisters' (bound by blood, marriage, circumcision ritual or tribal clan) to dozens more. So here, your work colleagues attend their 'close relatives' funerals not once every few years, but once or twice *per week*. Two years ago, those workers spent entire weekends at funerals. These days, to keep up, they must attend funerals on Fridays, and increasingly, Thursdays, as well.

I encountered a phenomenon among blacks here. It's called "funeral fatigue." But there is no question about whether or not to show up. In South Africa alone, funerals will increase to an average 16,000 per day in 2006, and living relatives will attend. 'Family' comes first, work second, with predictable results. The World Bank estimates the annual loss in (already anemic) GDP growth due to AIDS in Lesotho will rise to 2.7 percent by 2015.

As productivity declines, stress rises. Resentful bosses, clients, customers and voters lose patience. They may suspect that these private and public workers 'aren't even that close to the deceased,' or suppose that 'funerals' are merely a cover for absenteeism or laziness. But with a quarter to third of a nation infected, they keep

³Water Resources and Quality Specialist at CSIR, the Council on Scientific and Industrial Research, Pretoria. His made his case most eloquently in an interview and subsequent chapter (with HIV/AIDS researcher Vasna Ramasar) in Hydropolitics in the Developing World: A Southern African Perspective, University of Pretoria, 2002

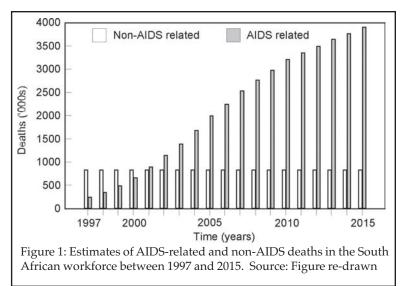
these feelings corked. After three days of getting the runaround from an LHWP spokesman in Maseru, I too grew testy. Though there to answer public questions, he had repeatedly evaded my queries — by phone, email and hand-delivered letter — inquiring into a delay in filling the newly completed Mohale Dam. Asking why he was not returning my calls, then shutting me out of interviews, he reduced my frustrations to apologetic silence. "Yes, well," he replied, looking me in the eye. "I'm afraid I've been out most of the week attending funerals of friends and co-workers." End of discussion.

It got worse. I'd grown even more peeved when I noticed that not only he was unhelpful, but in his office sat several people filling what

seemed to be the exact same do-nothing positions. I assumed typical bureaucratic bloat or African cronyism, both possibilities. But I soon grasped that the apparent job duplication was not just redundancy, but was serving a sadder purpose. It was in fact a pro-active plan; an organizational insurance policy to ensure that the massive water project kept functioning at speed. Elsewhere in the project I interviewed officials on the construction, operations and maintenance side who said they routinely trained and hired two, three or four workers for each position, from clerk to cement mixer to caterer to secretary.

Why? Doing so tripled the cost of doing business, contributed to delay in access-road construction and compensation payments, drove up the expense of water sold to Johannesburg, and lowered the wages and contracts of employees. But each year they increasingly had no alternative. By law, employers cannot screen for HIV. Unions flex their muscles. So bosses do a kind of viral math, calculate informal actuarial tables, and assume that in an average decade-long water project one or two out of every three workers could be relied on to sicken and die.

Absence and death of skilled labor hurts every sector. But losses become particularly dangerous when a nation's water quality and delivery is at stake. Writing of his own field, Ashton has cautioned that replacements must be trained for the anticipated AIDS-related loss of skilled water-treatment workers and specialists. If not, a dangerous downward spiral may result. The debilitation, absence and death of water- and sewerage-treatment workers may well allow microbes to get into the system and degrade the quality of drinking water. Murky water will mean more people get sick from waterborne diseases (hepatitis, worms, e.coli, cholera etc.). With high but latent HIV rates, those diseases become fatal, and increase



AIDS-related deaths in the general populace.

Act Four. Up to now the drama involved the way that water and AIDS interact on the upstream or 'supply' side. But all these upstream Lesotho HIV/H₂O impacts were mere fender-benders next to the colossal wreck that was shaping up downstream in South Africa. As noted, the Lesotho Highlands Water Project seemed unstoppable; critics could do nothing to slow down the concrete protagonist being built to satisfy a growing thirst. Then in April 2002, at the Johannesburg Press Club, South Africa's Department of Water Affairs and Forestry (DWAF) Minister Ronnie Kasrils pulled the plug on it as quietly as he could. Rather than be the second of seven giant dams, he announced, Mohale would be the last mega-dam. No new big projects, no Phase II, III or IV, were planned for the foreseeable future. "The question of further phases of the Lesotho development is still the subject of ongoing discussion," he said. "South Africa would always deal sensitively with the issue, but it might be possible to augment the Vaal River with a similar project within the country's own borders." LHWP was dead.

The announcement caught our tragedy's 'Greek Chorus' off balance. Why the dramatic, unexpected reversal? Some suspected fallout from the high-profile bribery case had taken its toll. Others pointed to prohibitively escalating costs; environmental impacts compounded downstream to the sea; social unrest spurred by the displaced people; fiscal timidity of international-development banks to take on controversial projects; global recession; difficulties of managing sediment; risks of earthquakes. Any one of these reasons might have been enough to sink future Lesotho mega-dams, and whole books have been written charting dams' shortcomings and gradual decline.⁴ But when the real reason was given, anti-dam ac-

⁴Before this fellowship I worked for 18 months with the World Commission on Dams, a global think-tank set up to document the historical experience — positive and negative — surrounding water and energy development, and to offer a new framework by which governments could move forward without undermining river environments, people, or economies. At the WCD Report's launch in November 2000, we considered ourselves the impartial and comprehensive authority on the pros and cons of dams. We examined forces threatening dams, and what, in turn, the dams threatened. But we totally missed HIV-related writing on the wall.

tivists held no celebration, accountants did not sigh with relief, and environmentalists did not cheer.

South Africa and Lesotho were burying their water project because, well, South Africa and Lesotho were burying so many of their project's future clients. Put crudely: AIDS was evaporating the demand for water.

For many, this climactic, dramatic reversal has proven difficult to swallow. Dam proponents don't like the idea that their confident projections for future demand — the basis of their status and authority in political circles could be reduced to nil by a slippery disease they didn't foresee, still don't understand and can't stop or control. In turn, dam opponents feel somehow cheated by the fact that the world's worst plague has delivered the triumph and vindication refused their well-reasoned debate. For anti-dam Cassandras, there is no joy in winning. Victory is curdled, as if Ralph Nader took office only because the Bush and Gore campaigns drowned in a flash flood. Rather than accept the Department of Water Affairs' rationale for pulling the plug, Bond calls it a "twisted and untenable reason." He asks whether it is "appropriate" to project mass death and decrease delivery goals accordingly.

Well, yes. It is entirely appropriate. And not just in regard to the Lesotho Highlands Water Project, but across arid Southern Africa (and water-stressed India and China) as well. With money as scarce as water in these regions, and HIV rates climbing higher each day, the 'health crisis' becomes an absolute crisis. It requires a clear, dispassionate examination, however uncomfortable.

Why? Time. Money. Pressure. Again, Dr. Ashton explained, "If water demand estimates do not take HIV/ AIDS-related mortality into account, demands for water could be overestimated by between ten and thirty percent This would pose several possible unanticipated consequences for the construction and operation of large-scale water supply schemes. In particular, if anticipated HIV/AIDS mortalities do indeed reach the very high levels suggested, this would delay the demand for water by between ten and twenty years. In addition, if this scenario were to hold true, the construction of large water-supply schemes within current planning time-frames would result in unnecessary expenditure of capital."

Act Five. Capital is as scarce as water here. That means that water and AIDS compete for finite funds and get politicized. So far, political debate here hinges on a potential link between HIV and poverty. Some leaders, including South African President Thabo Mbeki, have argued that AIDS is a consequence of poverty; devote funds to cure poverty and you effectively cure AIDS. Other leaders, many from the medical profession, argue that there is no correlation. In Africa AIDS equally afflicts rich and poor nations; funds should go toward treatment and at-

The Unforeseen Factor: When Gods Miscalculate

ully grasping the complex relationship between death rates and water demand may require a guick explanation. After initial disdain, I'd grown to deeply respect the way government water planners perform one of the world's most delicate tasks. Their job resembles, but is arguably far more daunting and important than, Alan Greenspan's setting of U.S. interest rates. In truth, releasing stored currents from federal reservoir dams is akin to releasing stored currency from Federal Reserve banks.

The planners' role is god-like. Like economists or bankers who monitor abstract patterns of saving and spending, stagnation and inflation, water planners must closely track the intricate relationship between all-too-tangible pressures. On the wet side of their ledger are assets: the availability of seasonally fluctuating runoff - rainfall that does not transpire, infiltrate or evaporate. On the dry side are liabilities: the annually growing human demand for water. Like Greenspan, they try to account for every drop, in a balancing act that reads and determines everything in a feedback loop, ranging from the price of irrigated crops to industrial output to fisheries-breeding in estuaries to, say, how long you can take a shower without feeling guilty. The difference is that without money, economies founder; people go bankrupt. Without water, people die.

But even the gods can miscalculate. Africa's water planners sweat out long-term estimates based on current and projected needs, and must start scheduling dams ten to fifteen years before they're actually needed. When planners like Ninham Shand conceived of the Highlands dams back in the 1950s, and when water officials signed the binding agreement in 1986, they looked at population-growth figures that in turn drove demographic data, economic needs and agricultural output in the region, and asserted with confidence: "We need this four-phase water supply project."

Based on their figures, they did. But by the time Katse was completed in 1998, Aids was already starting to infect and kill off millions of African water consumers. Taking a second look at the projected numbers, they realized that the virus was spreading faster than anticipated and was proving more deadly than expected. Mohale was by then already underway, but would no longer need to generate electricity. Again, the demand just wasn't there. In addition to a plunge in domestic consumption, the industrial economy was contracting due to Aids eating into the work force at every level.

To be sure, war, disease, famine, pestilence and other die-offs courtesy of Africa's Four Horsemen of the Apocalypse had not previously set back projections of rising water demand. Aids was different. Rather than pare off the very old, very young, very weak, or very poor, HIV targets the healthiest, most sexually active and economically productive core-population segment, leading to fewer births to rich and poor. The birth rate dropped both among infected adults (because they sickened and died) as well as healthy adults (because the population gradually recognized-albeit the hard way-that the virus was transmitted through sexual intercourse, so couples used condoms or abstained). During breaks with the all-male Working for Water mountain crew, the subject of girlfriends and wives came up. I often heard the refrain "safe sex is no sex." While anecdotal, it reflects a pervasive value shift with profound implications.

tacking the virus, which only exacerbates the misery of poverty.

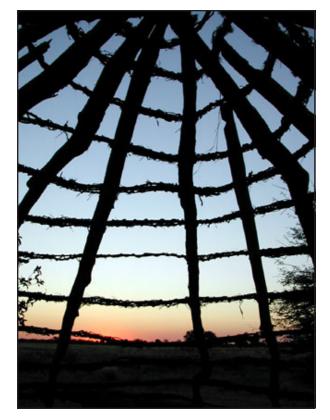
Dams and other water-supply projects throw a monkey wrench into this debate. Access to clean water helps alleviate poverty. It also provides critical help for people suffering from AIDS who require increased access to water because of their need for much higher levels of hygiene than those who are HIV negative. But the dams and water projects also, simultaneously, help spread and concentrate the virus, as we have seen. Thus water projects remain a two-edged razor; they resemble the Asian-trade cargo ships centuries earlier that, upon docking in Europe, helped develop the continent but concurrently helped introduce and spread Bubonic Plague.

Like thousands of others I have been looking at the data and maps of sero-prevalence, wondering why certain places and countries are more afflicted than others. Most likely, there is no single reason. But comparing the same statistics, crunched numbers and charts makes me wonder (at the risk of sounding more kooky and issueobsessed than certain African Presidents) whether there might be a possible link, however remote, between HIV rates and water stress?

The countries with the *highest* per-capita AIDS incidence — Botswana, Swaziland, Lesotho, South Africa, Zimbabwe, Namibia, and Malawi in that order — are also those with the *lowest* per-capita water available — Botswana, Namibia, South Africa, Malawi, Zimbabwe, Lesotho, Swaziland, also in that order. This may be pure coincidence, of course. But there may be a correlation.

Whatever their shortcomings, African tribal communities adapted their peoples' development needs to the limits of water in a geographical place. To modernize and develop, however, arid nations have in recent decades done exactly the reverse. They've constructed artificially engineered institutions and infrastructure to adapt their water to the needs of people. This modern socioeconomic development concentrates the population and breaks up traditional ties.

By way of comparison (though it is a long way from the Lesotho Highlands Water Project) I reflected on one other microcosm, in top-ranked Botswana, of the Kalahari Bushmen. Botswana is the most stable, the richest, bestdeveloped and most Western country in Africa. Yet it also has the highest sero-prevalence. I'm no doctor or health worker, and have no answer why this is. I do know that the Bushmen, when dispersed in traditional clans, had very little dependable supplies of water, but they also had no AIDS. Those still living voluntarily in the Kalahari, by traditional means, still have no signs of the virus, and their life expectancy is arguably the highest in Africa. When Bushmen resettled around boreholes drilled next to mining or cattle areas, or were relocated to pumped water and boreholes at the end of a paved road, they got all the water they needed; HIV spread exponentially and life expectancy plummeted. For this reason the San began call-



No water, no HIV? When dispersed in traditional clans, Bushmen had very little dependable supplies of water, but they also had no AIDS. Those still living voluntarily in the Kalahari, by traditional means, still show no signs of the virus, and their life expectancy is among the highest in Africa.

ing the government's well-watered resettlements "places of death."

* * *

Soliloquy: To feel or not to feel? At this point in my study into the relationship between HIV and H₂O I had grown despondent, overwhelmed by the dismal statistics, depressed by the outlook. Worse, I had approached the disease only through eyes of a cold, detached observer. I saw it as both a cause and consequence of change, as both a political problem and, alleviating pressure on scarce water, a grim solution. On that value-free, slippery slope, detachment leads to neglect to triage. To genocide.

"It is difficult not to read into the current situation a certain feeling of inevitability," wrote James Clarke, the Johannesburg Star's longtime environmental correspondent. "A reason why the international community remained cynically unconcerned about AIDS in Africa for much of the 1990s was that it sees it as some sort of natural retribution. Many had been wondering how nature would reduce rocketing human population growth. Mass starvation? Nuclear war? Who would have thought of a virus, transmitted through sexual intercourse, which seeks out and destroys man's defenses against all diseases?"

Clarke could as easily have substituted 'white and elite African' for 'international community.' Indeed,

many I spoke with expressed the equivalent of 'funeral fatigue' among blacks as simply 'AIDS fatigue' among whites. After a decade the latter were tired of reading and hearing more about what was, to many, a 'black disease' with roots in shadowy sexual networks and practices.

"After all this I must say I don't know, and doubt I will ever know, anyone with AIDS," a white journalist recently (and bravely) ventured in print. He was accused of being an elitist and racist, but he had simply expressed what many educated Africans seem to feel but express only in private. I witnessed a similar dynamic a decade ago when a journalist wrote *The myth of heterosexual AIDS in America* and was denounced by gays as a homophobe (because they felt he had implicitly isolated and thus condoned the spread of AIDS among gay men). The difference, for me at least, is that my former co-workers in America who are HIV-positive are, thanks to antiretroviral cocktails, now quite likely to live long, happy and productive lives.

Not so in Africa, where AIDS is far more devastating and lethal and mutable. And here, amidst plague, I didn't know anyone with the virus. This may be due to my limited circle of acquaintances, or due to Africans' reticence, shame, and practice of shunting diseased relatives back to rural homelands to die quietly, wretchedly, alone and out of sight. I'd come up against what some now call the "third AIDS epidemic." Following 1) the undetected spread of HIV itself and 2) the steady rise of AIDS illness while millions of deaths were attributed to other causes, this 3) current epidemic is a social rather than medical infection that requires a political rather than medicinal reaction. It challenges our judgment and our compassion.

Until recent months Mbeki had infamously failed that challenge. Following his lead, Peter Mokaba, Deputy Health Minister, belligerently refused to acknowledge that there was any such thing as AIDS. "HIV? It doesn't exist," he said earlier this year. "The kind of stories that they tell that people are dying in droves? It's not true." Months later he succumbed to something suspiciously like AIDS, aged 44.

Enter an avenging hero. Just when many thought that frail old Nelson Mandela was shuffling into history, that his greatness was waning, he blazed back into the limelight. He was photographed embracing AIDS patients and HIV-positive children to de-stigmatize them, then openly rebuked his own party on AIDS policy. "While I support you" he said in March (just before the African National Congress announced it wouldn't need more Lesotho megadams due to AIDS deaths) "we must deal with the perception, rightly or wrongly, that we are insensitive to thousands of babies dying every month. This is a war."

My heart thrilled, just as it did in 1990 when I watched his release. Mandela's recent gesture, a simple short em-

brace, seemed cut from the same cloth of bravery as his long walk to freedom. We each believe ourselves to be like Mandela. Yet after more than a year in southern Africa, I realized my outlook more closely resembled Mbeki's. I could not excuse his AIDS denials. But I could calculate the cost of AZT treatment — \$500 per year, \$5,000 per patient-life, 10 million patients and thus \$50 billion, or twice the national budget for this drug alone — and so perhaps grasp his motives behind denial.

It is hard to explain such motives without sounding as though you approve of them. In the politics of both HIV and H₂O, arid Africa's plight calls to mind the classic 'lifeboat' analogy used in political science: Do you nobly keep everyone on board, even those too sick, too young, or too old to row, and risk sinking the boat before it reaches shore, drowning all thanks to misguided compassion? Or do you coldly throw overboard anyone who can't put their back into the oar, thus saving the Darwinian few and fit? The analogy is not merely a metaphor. While you and I and Mandela and doctors and humanrights activists shake with outrage, we ultimately don't face the bleak decisions Mbeki must make. That's not a defense of him, but an admission of me; I was becoming, like many, comfortably numbed by AIDS. All judgment, little feeling.

I even began to weigh motives behind government policies toward Africa's most innocent in the lifeboat. If the H_2O -negative wild card is the rising number of HIVpositive cases, the HIV-positive wild card is the rising population of orphans. Last year Africa reportedly had 34 million orphans under 15; that's the equivalent of California plus New York City filled with kids lacking mothers and fathers. By 2010 the number will reach 42 million, half of whom will be orphaned by AIDS. By the time Mbeki's successor takes over, a third of South African 18year-olds will have no mother.

Not all HIV-positive mothers infect their babies.



Why is this man smiling? It is hard to excuse President Thabo Mbeki's position on Aids, but facing \$30-\$50 billion for treatment alone, one may grasp conscious or unconscious motives behind the long denial.

Many do. Either way, HIV-positive mothers will die, leaving behind orphans. Those HIV-positive orphans rarely live more than several years. HIV-negative orphans live a tad longer, into their teens or early 20s, but according to studies they will be far more apt to skip school, get sick, sell their bodies, steal, vandalize, carjack, spread disease, and become both perpetrators and victims of violent crime. Traumatized and shunned, they cling together in packs; anticipating short lifespans, they risk more for quick thrills; lacking parental role models, they are more likely to rape or take up arms. In my short time here I have watched their clusters multiplying around intersections in Maseru, Johannesburg, Gaborone and Cape Town, where I've seen them sniff glue, beg, 'guard' cars, smash-and-grab through windows, and hustle cash in ATM-machine scams. Those are the misdemeanors. Others see these future orphans armed as teens manipulated as Zimbabwe's false 'war veterans' or as the entirely real war veterans in Liberia and Congo.

Given this outlook I could understand, if not quite choke down, the government's stand on nevirapine. In January 2002, in KwaZulu-Natal province, that drug scored a 100-percent success rate in preventing HIV transmissions from mother to child. Unlike AZT, it was affordable (even free with donor subsidies), it was available and it functioned like a vaccine in protecting babies from the virus. Hallelujah. So why fight its free distribution? Several sources, some of them pro-government, said that reluctance from the top reflected a desire to avert a nation imploding with AIDS orphans. Motherless babies become victims of triage, effectively cast overboard at the moment of birth, in order for the nation stay afloat.⁵

Denouement. It is easier to let people be cast overboard if you don't know them. And so it was that on the morning of December 25, 2002 I found myself parking outside Sarah Fox children's 'convalescent' hospital where, upon entering, I knew I would encounter dozens of sick, abandoned and orphaned infants and children who sleep and eat and recover or worsen and play and cry and wait to live or die in the company of strangers. I hesitated to enter.

Blame it on reading too much Nietzche or Ayn Rand at an early age, but I've been too much of an egoist to open myself, my wallet, or my schedule even to the most deserving causes. Until getting immersed in the implications of AIDS, I could rarely see or, more importantly, feel the link between charity and enlightened self-interest. Now it was unavoidable; I had to follow the twisted interwoven course of HIV/ H_2O from origins to its release, taking notes, breathing it in, and not entirely looking forward to the experience.

There are ironies I could cite as explanation on this

day. Blasphemous comparisons with innocent bastards born long ago to broke, sickly and troubled mothers 'when there was no room at the inn.' Neglected sons later asking an absent father, Why have you forsaken me? Or I could note other children of a certain age slaughtered long ago by command of Herod (in the expedient political triage of his day?). Then there's the matter that this is the first December I've spent away from my family and loved ones, a 'pseudo orphan' to go hold, and play with, the real ones. Coming here today would seem the "Christian thing to do," I suppose, were I not a lifelong atheist. But mainly I came in order to connect with the plague as more than statistic-ridden study. To internalize it. To feel.

I entered so quickly that I didn't have time back out, or to prepare thoughts or emotions or questions, announcing myself to whomever might be near the door to greet me. Her name was Mariette, a petite, large eyed woman who gave me a whirlwind tour. There is no formal system. No doctors permanently on duty, she explained. There are only nurses, about four of them, overworked, who double as cooks. Within a few minutes, called off, she left me alone in the rooms facing dozens of eyes looking up expectantly.

The chemical smell reminded me of old people's convalescent hospitals where I once delivered newspapers. The stale odor of rooms rarely visited; doors kept closed,



Street orphans: Homeless and relatively harmless now, but many worry whether or how 40 million like them will find a future on the HIV-positive continent.

⁵A UCT economist made front page headlines by arguing that letting Aids orphans die might cost the government more, in the long run, than helping them live and training them with job skills to earn a living later down the road. She was called on the carpet and challenged by the government. I can't discuss the findings at length, but raise this just to show how calculating the debate has grown.



The bright eyes, smiles and laughter and energy of Africa's youth is a cliché, but it takes a painful twist when a nearly third of teenagers have lost parents to AIDS.

windows not ventilated. I was assured that not all the children had been abandoned permanently; but I was the only visitor and it was never made clear how long 'permanently' meant. And, reflecting the New South African outlook, none of the patients or orphans had been 'segregated' by race or disease. They were grouped together mostly by age, looking after each other.

The kids spoke different languages, more Afrikaans than English, with some Xhosa thrown in here and there. They understood each other's words, or if not, their body language. I picked some of them up and carried them around. They loved to be held, lifted over the shoulders, sat on the knee. They gurgled and smiled and the eyes, the eyes. Their eyes did not look away. Mine did. One fell asleep against my chest until I returned her to her crib.

Eventually I sat down with some of the older ones, and we played game after game of dominoes, and they rolled their eyes at my exaggerated weeping when I lost or had no blocks left to match. I'd brought no gifts, but wore a cheap Santa Claus hat, bright red and white and fluffy, and designated it 'the prize'; whoever won got to wear it. The games grew competitive.

For the most part, though, they were quiet. Whatever demons roamed inside, they appeared, superficially, as well- or better-behaved than kids (myself included) who grew up with parents. They revealed much as I watched; they knew each other's moods and hot buttons. A boy lurched up as a monster to scare a younger girl, then hugged her as tears threatened to surface. I noticed that pattern often: a brief struggle for a toy, a ball, a broken plastic scooter; shrieks; then accommodation either by embrace or exchange. They were learning to share by default, with no one else around, no parental approval to seek or compete for, nowhere else to go. Here they had food and a bed and shelter and each other. Pretty soon, however, I knew they would only have each other.

If they survive to that point, adolescence, they can't remain here. They then head out on the streets, looking for food, for money, for jobs, for security, for attention and affection from the opposite sex. I'd previously read too many recent studies, and the statistics kept intruding. I see these kids and think how 90 percent of the world's HIV-positive children are here in southern Africa. I watch a five-year-old boy and recall that in ten years he (orphan or otherwise) faces a four-in-five chance of dying of AIDS.

I'd also read too much classic literature, and Dickens' *Christmas Carol*

inevitably came to mind as I watched a crippled orphan quietly lower himself from wheelchair to floor. I recalled the once-stingy, calculating Scrooge ("Are there no prisons? Are there no workhouses?") suddenly worry: "Will Tiny Tim live?" desperately pleading with The Ghost of Christmas Yet To Come to tell whether that crutch in the empty corner must foretell of the child's early grave. He then wakes up on Christmas Day, as I did, with a renewed desire to open his heart to connect with those ravaged by disease and to embrace orphans for the rest of his life.

My original destination was appropriately named 'Nazareth House,' where only the most desperate AIDS infants and orphans lingered before dying. I was politely turned away. That hospital screens its volunteers, and accepts only those willing to invest at least a year. Not just the casual novice fly-by like myself. Though I was surprised, I soon grasped the basis for that policy. Kids need consistency in their lives, however short, and a revolving door of changing visitors does not offer that. But they sent me here, where its overflow patients were taken.

I was never as soul-withered as Scrooge before his conversion, nor as big-hearted as he became afterwards. As Christmas Day wore on I grew unsure of having the will to repeat this gesture another day. I admire Dickens, but wondered whether his melodramatic sentiment, like my own, might have drowned in the tide of African AIDS and its orphans.

Still like any singleton, I enjoy children. Other people's children. I've often visited my friends with kids, babysat, played with them, read them bedtime stories, watched them grow up, make startling observations. They were demanding, though. Whenever one inevita-



No room at the Inn? My original Christmas destination, the appropriately named Nazareth House, home to the most desperate dying cases of HIV-positive AIDS orphans, wisely accepts only committed volunteers planning at least a year. I lacked the strength. Those overflow child patients are sent to Sarah Fox hospital.

bly threw a tantrum, or threw up, or emptied bowels into diapers, I was only too ready and happy to quickly turn the lovely creature over to rightful parents. Here of course there was no one to hand them back to.

A toddler named Sipho had gobs of green snot running out of his right nostril and there was, alas, no adult in sight. The overloaded nurses had vanished. I wetted a hand towel in a sink and prepared to wash his face, thinking: At last, a happy interaction between HIV and H_2O , the kind of interaction that requires more water. He made a face but allowed me to wipe his nose clean. Then he opened his eyes wide.

Later I was spending time in the infant's ward. A baby whose name I can't recall reached through the red bars of his crib and wrapped his hand around my index finger. He had a powerful grip for his age. I felt it pulsing. I made a face at him, puffed out my cheeks. He smiled, but after a minute, still didn't let go. Then looking at me he spoke, clear as a bell, "Da-da."

My gut tightened. I stood there listening to him repeat the misnomer, not sure how to answer to this, the most wrenching cliché I have experienced, then turned at a sound behind me. It was Sipho again. He'd learned to walk just a few months ago, and had trundled up carrying a plastic soccer ball. He dropped it, and the ball rolled toward me. With my right foot I trapped it, then gently kicked it slowly back. Buthe watched it roll past then looked back up at me. It was not the ball that he wanted.

Sipho extended his arms from the shoulders, reaching up over his head with the expectation to be lifted and embraced as I had done 12 times already. But to do so now, I'd have to disengage from the baby's grip. I couldn't do both at once.

Perhaps that is the final combination, an internal drama, discovered while tracing the interlocking currents of water and AIDS, as their confluence cascades from rural source to urban mouth. Confronting them both together, we face the banality of our own scarce and finite supplies of hope and love, an aridity of affection that forces us to perform these little acts of triage every single day.

ICWA Letters (**ISSN 1083-429X**) are published by the Institute of Current World Affairs Inc., a 501(c)(3) exempt operating foundation incorporated in New York State with offices located at 4 West Wheelock St., Hanover, NH 03755. The letters are provided free of charge to members of ICWA and are available to libraries and professional researchers by subscription.

Phone: (603) 643-5548 E-Mail: ICWA@valley.net Fax: (603) 643-9599 Web Site: www.icwa.org

Executive Director: Peter Bird Martin Program Assistant: Brent Jacobson Publications Manager: Ellen Kozak

©2003 Institute of Current World Affairs, The Crane-Rogers Foundation. The information contained in this publication may not be reproduced without the writer's permission.

Author: Workman, James G Title: ICWA Letters - Sub-Saharan Africa ISSN: 1083-429X Imprint: Institute of Current World Affairs, Hanover, NH Material Type: Serial Language: English Frequency: Monthly Other Regions: East Asia; South Asia; Mideast/North Africa; Europe/ Russia;The Americas

Institute Fellows are chosen on the basis of character, previous experience and promise. They are young professionals funded to spend a minimum of two years carrying out self-designed programs of study and writing outside the United States. The Fellows are required to report their findings and experiences from the field once a month. They can write on any subject,

as formally or informally as they wish. The result is a unique form of reporting, analysis and periodic assessment of international events and issues.