

Keynote Lecture
Stephen Lewis, UN Special Envoy, HIV/AIDS in Africa
at the 11th Conference on Retroviruses and Opportunistic Infections
February 8, 2004
San Francisco, CA

Mr. Chairperson, Ladies and Gentlemen: I want you all to know how much I appreciate the invitation to speak to this auspicious gathering, even though I stand before you with no scientific credentials whatsoever.

Allow me to set the stage for my remarks in this fashion: last Monday night, in London, I was privileged to attend a preview showing for the United Kingdom of the film *Angels in America*. Doubtless there are those in this audience who have seen it; it's a brilliant piece of film-making. It deals, as you know, with the early days of AIDS in America, and the dehumanizing process of death of one of the male leads, mid-way through the movie, is as harrowing and numbing an episode of horror as I've ever seen in the cinema. The audience was laid waste. It was of course a faithful rendering of the way death from AIDS used to be in this country, and is no longer. But I must say that I sat in the theatre, emotionally clobbered, and thought to myself "That's the way people die in Africa, now, at this very moment, day upon day upon day". How do we get the world to understand?

I've been in the UN Envoy role now for something more than two and a half years. You will understand when I say that to visit Africa repeatedly, and to observe the unraveling of so much of the continent, is heartbreaking. There are simply no words, in the lexicon of non-fiction, to describe the human carnage. I have heard, from African leaders and social commentators alike, language that startles and terrifies: 'holocaust', 'genocide', 'extermination', 'annihilation', and I want to say that on the ground, at community level, watching the agony, the language is not hyperbolic. And what makes it even worse is the tremendous resilience and courage and effort and compassion with which the entire population, especially the women, attempt to withstand the pandemic.

The individual and collective work, therefore, of people attending this conference, is truly invaluable. That's not a flippant or gratuitous remark: it's important for everyone here to recognize that you're part of the most significant battle against a disease that has ever been waged in human history ... and when you're consumed in your laboratories, or wrestling with the esoterica of science, at the end of that long exploratory road there lies the whole fabric of the human family fighting for survival, searching, desperately, for hope. The grieving villages, the funerals, the hospital wards, the orphans, the women at the clinics; it's an hallucinatory nightmare; it should never have come to this. Your work can bring it to an end.

What I want to try to do in these remarks is to flag the signals of hope as we enter 2004, and to look at some other related issues as well. The items are six in number; I shall deal with some elaborately, and others more briefly.

First, the single most dramatic development that has happened in years around HIV/AIDS is the decision, by the World Health Organization, in conjunction with UNAIDS, to achieve the goal of three million people in treatment by the year 2005: “3 by 5” as it’s colloquially known. It has the potential to revolutionize the struggle against the pandemic. Up until now, large numbers of people have resisted testing for the obvious reason that confirmation of a fatal disease, without any promise that the information would improve or prolong life, made no sense, had no appeal. Finding out that you were HIV positive simply intensified, for many, the risk of depression and stigma. A prognosis of death, without hope, is hardly an inducement to seek the prognosis. All of that is about to change. Give people hope through treatment, and with well-designed programmes, they will seek to get tested in ever greater numbers. And if stigma proves so powerful as to limit the uptake of testing, there is always the alternative of doing what Botswana is now doing until testing becomes de rigueur: require routine testing for HIV whenever someone presents at a medical facility, with the option of course to opt out.

The new leadership of WHO, under Dr. J. W. Lee, is absolutely bound and determined to pull off “3 by 5”. It’s amazing to see the depth of commitment; it’s as though WHO had undergone some religious metamorphosis, they are collectively possessed. I almost expected to see flashing iridescent lights and hear celestial thunder when I visited WHO headquarters in Geneva ten days ago.

I’m not going to go into detail of “3 by 5” - there are handbooks and monographs available - but it is worth emphasizing that WHO sees the entire initiative as “the antiretroviral treatment gap emergency”; that emergency teams are already evaluating needs in high prevalence countries; that WHO is working with multiple partners, for example partnering with those doing the Prevention of Mother to Child Transmission Plus, where the “Plus” represents treatment for the woman and her family; that the improvement of health systems and human capacity is a *sine qua non* of the goal; that the logistics of drug distribution and delivery are very much a part of implementation; that the principle of equity of access will be determinedly followed, women-men, rural-urban, rich and poor; that a secure supply of medicines and diagnostics will be pursued; and that this is just the beginning. In its publication on “3 by 5”, titled “*Making it Happen*”, WHO writes: “This Initiative does not end in 2005. Antiretroviral therapy does not cure infection and must be taken for life ... withdrawing or ending treatment will lead to the recurrences of illness and with it the inevitability of premature death. Lifelong provision of therapy must be guaranteed to everyone who has started antiretroviral therapy. Thus, “3 by 5” is just the beginning of antiretroviral therapy scale-up and strengthening of health systems”.

And so it must surely be. On the continent of Africa, it is estimated that 4.1 million people need treatment now - ie, their CD4 counts are below 200 - and approximately 70,000 to 100,000 are actually in treatment, or roughly two per cent. Quite frankly, that’s an abomination. The total number of people worldwide who should be in treatment measures six million. In other words, even if the target of “3 by 5” is reached, some three million people - fifty per cent of those eligible - will continue to be in desperate straits

come 2005, with the numbers growing daily. What I was reminded of today, at an earlier press conference, by Dr. Alex Coutinho of Uganda, is that tens of millions more, who are now infected, will inevitably require treatment at some point in the future. When we talk of “3 by 5” then, it’s the signal of what’s to come. It’s also the symbol of the untold numbers of children, whose parents will remain alive, and who will therefore not be prematurely orphaned.

That’s why the WHO initiative is of such enormous import. It has unleashed huge expectations, great hope, and it’s based on the recognition that prevention is profoundly strengthened when treatment takes hold. It cannot be allowed to fail. I repeat: it cannot fail, or we will have given the pandemic a license of unbridled human decimation greater even than that which presently exists. To those sentiments should be added the lead words of the handbook, under the heading “*Guiding principles*”. They read: “Immediate action is needed to avert millions of needless deaths”.

There is, to be sure, a certain other-worldly, Ionesco quality to all of this. We have all the will and money in the world to fight the war against terrorism; what happened to the will and the money to fight the war against AIDS? Why conflict and not compassion? We’re over twenty million dead, and counting.

With that in mind, there are four issues related to “3 by 5” which I’d like to address.

1. The World Health Organization needs up to \$200 million, centrally, over and above its existing budget, to implement 3 by 5. They need it for 2004 and 2005. They need it now. They need to train 100,000 people at country level; they need to hire teams of experts and dispatch them to the field, they need to put the whole elaborate logistical mechanism of drugs, capacity and infrastructure in place; they need to be the technical assistance providers of first resort. They will not succeed without the money. They don’t have it. And though they have tried, they can’t seem to get it.

Frankly, I don’t really care where the money comes from; it just must come. The obvious and appropriate source would be individual donor governments. There’s just no way around it: rich countries should provide the funds, and frankly, \$200 million is a laughable pittance when compared to what the world spends its money on these days. If for perverse reasons, that doesn’t prove possible, then the Global Fund on AIDS, Tuberculosis and Malaria, becomes an alternative conduit. It would differ from what the Global Fund has done up till now, but it’s clearly an integral part of everything for which the Global Fund was created. But whatever the ultimate nature of the bank account, if WHO does not get the resources, it constitutes an unimaginable setback in the battle against AIDS.

2. What clearly makes the best sense, if “3 by 5” is to succeed, is the WHO pre-qualified triple fixed-dose combination; one pill taken twice a day, available only from generic manufacturers. It’s noteworthy that Medecins Sans Frontieres uses this drug with several thousand clients, in twenty countries, with excellent therapeutic results and excellent adherence rates. In order for us to find the money to put huge numbers of

people into treatment, and scale up dramatically, this is the drug regimen of first-line choice. It is surely of significance that the Clinton Foundation has negotiated, in India, a reduction in the price of this fixed dose combination to \$132 per person per year. No one would have thought that possible, even six months ago.

The international community, through the World Health Assembly, has bestowed upon WHO the responsibility for approving, and providing guidance in safety and efficacy for a vast array of medications. They do so with consummate science, fidelity and integrity. Fundamentally, evaluations carried out by the WHO pre-qualification team provide assurance that international quality standards obtain. One of the great strengths of multilateralism is that we have the World Health Organization to do this work. There may be individual countries who wish to pursue a different tack. But when WHO has identified and pre-qualified generic drugs, at low cost, to prolong millions of lives, that's the route the international community, without caveats, should follow.

As a Canadian, I'm particularly sensitive to this reality. The Government of Canada - deserving of both recognition and plaudits - is about to amend patent legislation, in relation to AIDS and other diseases, to permit the manufacture and export of generic drugs, consistent with the WTO agreement reached August 30th, last. The Government of Canada will undoubtedly accept the purview of the World Health Organization.

3. If there's one thing we've learned about testing and treatment, it's that the involvement of the community is decisive. If "3 by 5" is to make the intended impact, it must call on the community for help, and jettison the lip-service to which so many are addicted. And the key element of the community are the People Living With HIV/AIDS, who are the real experts, and must be acknowledged as such. They should be consulted on every aspect of the treatment process, and they should be seen as helping to mobilize the community to work, in an equal partnership, with the medical facility dispensing the treatment. Wherever this formula has been genuinely applied, testing increases exponentially, stigma and discrimination drop significantly, and adherence rates are generally higher - I repeat, higher - than they are in this city of San Francisco.

4. Finally, you can't achieve equity in "3 by 5" without opening the doors to women. I'll have more to say about that shortly, but at this stage let me simply point out that the disproportionate numbers of women infected in Africa, requires a similarly disproportionate access to treatment. It is matter of bewildering shame that even an insatiable pandemic, malevolently targeting women, has failed to demonstrate, once and for all, the size of the gender gap, and the deadly risk we run by failing to close it.

That brings me to my second omnibus point. Any discussion of treatment necessarily focuses, in large measure, on funding, and funding inevitably leads to the Global Fund on AIDS, Tuberculosis and Malaria. So allow me to deal with it.

It's time for the world to embrace the Fund, without all the carping to which it has been - often mindlessly - subject. No one pretends the Fund is perfect, including its own Secretariat. But it is emerging as one of the most inspired multilateral financial

instruments that the world has latterly fashioned. And I, for one, am nonplussed by the refusal to fund the Fund at levels which would save and prolong millions of lives. There's something nuts about holding out a begging bowl for an organization dedicated to confronting and subduing the AIDS pandemic. I am reminded of the 1980s, when members of the international community were reduced to groveling on behalf of financing the United Nations, in order for the world body to function in the interests of humankind. Where would we be without it today - you'll note that there seem to be countries who suddenly need it - if its capacity for intervention had been eroded by the Scrooges of the planet?

The Global Fund is largely past the inevitable hiccups associated with launching a new and complex international mechanism. It has sophisticated and useful processes in place. The innovations of the so-called CCM - the country coordinating mechanism - and the Technical Review panels are working pretty effectively at country level and at the centre. The Board, with its unique representative nature, is functioning well, and the Fund is now disbursing money rather more quickly than certain other international financial institutions that have been around forever.

This isn't some blanket apologia. I myself have occasionally been critical of the Global Fund and have raised with them some of the frustrations felt by recipient countries. But let's keep perspective here. In barely more than two years, we have an entirely new international construct up and running, admirably serving the interests for which it was intended, and getting money to the grass-roots of AIDS-plagued countries where it is so desperately needed. That's one of the most admirable things about the Fund: because the proposals come from the bottom, the money can get to the bottom.

The Fund was the brain-child of the Secretary-General of the United Nations. It was an excellent cerebral birth. It can become the kind of international coordinating body which we must have to defeat the three communicable diseases that constitute its mandate. I have nothing but regard for the work of the Clinton Foundation in the four countries where it is most in evidence: Tanzania, Rwanda, Mozambique and South Africa. And I'm delighted by the prospect of President Bush's enterprise bringing hefty resources into twelve of the countries of Africa. But what of the countries that are left out of those initiatives? What of Swaziland and Lesotho and Zimbabwe and Malawi, whose collective prevalence rates range from fifteen to nearly forty per cent? It's the Global Fund that stands ready to be called upon. With "3 by 5", the presence of a coherent and rational funding body, for all regions of the world, is surely vital.

It's been a heavy blow, then, to see how inadequately-funded the Global Fund has been. In fact, I think I should stop pulling my words: in my respectful submission the Global Fund has been abysmally resourced. You might think that the industrial nations would compensate for a decade of financial abstinence by embracing the Global Fund as the obvious vehicle for resource-constrained countries. But that hasn't been the case. At this moment in time, the Fund is several hundred million dollars short for this year, and almost three billion short for next. Nor are the omens auspicious. The administration of the United States has asked for only \$200 million for the Fund for 2005, some \$350

million less than 2004, and a billion short of what many active observers feel would be an equitable contribution. The rule of thumb, based on gross world product, is one-third from the United States, one-third from Europe and one-third from everyone else - everyone else comprising vast powers like Japan to sweetly diminutive states like Canada. In 2005, the Fund will need a minimum of \$3.6 billion, hence \$1.2 billion from the United States. This is not higher calculus: the arithmetic is clear. And let me add a footnote: of the \$3.6 billion required for 2005, \$1.6 billion represents money needed to extend existing programmes, that is, those that were approved in years one and two. If that money is not forthcoming, the programmes cannot be extended, and people who have been put on treatment with that money will have their regimen severed, posing serious mortal risk.

On the other hand, it must be said that no country, my own included, is paying an adequate share based on any reasonable formula. And that, quite simply, is shocking. Worse, it deters developing countries from asking for what they truly need because they don't believe they can get it. People are dying at a rate of three million a year, and we have the capacity to keep them alive, and we can't summon sufficient resources. Overall, some \$4.7 billion was spent in the global response to AIDS in 2003. UNAIDS says a minimum of \$10.5 billion is required by 2005, and \$15.5 billion by 2007. Where will the dollars come from?

Third, this constant struggle for funding bedevils everything, including the critical quest for a microbicide. But before I address the question of microbicides, allow me to make a simple point. The developed world has endorsed time and time again, at conference after conference ad nauseam, the target of .7 per cent of GNP - seven-tenths of one per cent of GNP - for foreign aid. The only countries that have regularly reached or surpassed it are, predictably, Norway, Denmark, Sweden and the Netherlands. Our present annual official development assistance, from the OECD countries, approximates \$57 billion. According to Columbia University's Dr. Jeffrey Sachs in his study on *Macroeconomics and Health*, were we to reach an average of .7% of GNP, we would be at \$175 billion now, and \$200 billion by 2007. The only figures I've recently seen comparable to those are the cumulative expenditures for Afghanistan and Iraq. Was there ever a double standard more visible and egregious? People are dying in Malthusian numbers for heaven's sake; people are dying.

And the majority of those people are now women. Hence the scientific search for a microbicide. Women must somehow be given control over a way to protect themselves from HIV, and that way is microbicides.

As more and more research is done on the particular vulnerability of women to infection, we're learning more about the situations in which risk is paramount. And extraordinarily enough, according to UNAIDS, the risk is particularly high in apparently monogamous marriages and partnerships. Ironically, and lethally, in the age of AIDS in Africa, marriage can be dangerous to women's health.

In the situation of intimate partners, condom use is very low. Nor can it be demanded. In representative surveys of women in 14 African countries, it was found that only 7% reported condom use in the last sex act with their regular partner. The prevailing assumption is that commercial or casual sex is the primary way in which women are infected. The assumption is wrong. There is a growing body of evidence to show that a significant number of infected women in Africa have been infected by their husbands or intimate partners. There is virtually no defence against that reality: the power imbalance in marriage is too great to permit or to request the regular use of condoms.

Thus it is that the classic “ABC” intervention doesn’t work in the one place where the risk for the woman may be greatest. Marriage without sex is not realistic, nor is it desirable. Abstinence in marriage is not possible; Being faithful is assumed; Condom use is irregular at best.

A way must be found to allow the woman to protect herself, independent of male hegemony. Female condoms are one possibility, but they are very expensive, and they require partner consent. And of course they act as barriers to conception. The most exciting prospect that we have on the scientific and social horizon is a microbicide.

I recognize that this is an audience of vast and copious knowledge, but let me simply say, for exposition’s sake, that a microbicide can be formulated as a topical gel, film, sponge, lubricant, time-released suppository, or intra-vaginal ring that could be used for months at a time. It would restore to the woman the power to protect herself from HIV in the absence of a condom. It would reduce, geometrically, the incidence of infection.

Alas, we’re still at least five years away from a first-generation microbicide. But with government support and financing, there are enough products in the testing pipeline now to achieve the breakthrough in that timespan. The Rockefeller Foundation, deeply committed to the development of a microbicide, estimates that the cost required is in the vicinity of \$775 million. At the end of 2002, research and development funding totaled \$343 million. Thus the shortfall is in the vicinity of \$400 million. It may be higher. In May of 2003, the Global HIV Prevention Working Group recommended an additional \$1 billion of public sector spending. But whether it’s three-quarters of a billion, or a billion, it’s peanuts in the vast panorama of international financial architecture.

Using mathematical models, researchers at the London School of Hygiene and Tropical Medicine found that a microbicide, of even 60% effectiveness, used by only 20% of women in contact with local health services, could reduce the numbers of infections by millions. Millions. It’s breathtaking.

Some of the products under development are likely to be contraceptive as well as microbicidal; others will be non-contraceptive for disease prevention. As we meet, eleven potential microbicides have advanced into human safety trials, and some may well enter large-scale Phase II/III trials in 2004. Obviously, there’s a long way to go, but it’s not without hope.

But we must have the money. The amount is so relatively modest - all the amounts related to HIV and tuberculosis and malaria are relatively modest in the grand scheme of things-- that you have to ask yourself what kind of warped dementia has crept into the political process of assessing human priorities. Were we to pull out all the stops, and get microbicides of various types, and various levels of protection, to the market, we could give a significant measure of sexual autonomy to the women of Africa and prevent millions of HIV infections, and the millions of premature deaths that follow, and the millions of orphans left behind.

Can anyone in this illustrious gathering explain to me why that shouldn't be one of the greatest of political priorities?

Which brings me logically to the fourth item: is not the same true for a vaccine? It's interesting to me how the search for an AIDS vaccine is also struggling around issues of funding, and is often eclipsed, in public debate, by the preoccupations of care and prevention and treatment. Perhaps this is inevitable. It's tough for the world to fix on a vaccine, when millions of people are understandably clamouring for treatment. But just because a vaccine is a long-term proposition, and obviously very tough science, it cannot, it must not be depreciated.

These various aspects of the pandemic are not mutually exclusive. There will be limitations to vaccines as there will be limitations to microbicides, but a vaccine, as the ultimate answer to the catastrophe, must be pursued with an almost supernatural fervour. There should not be the slightest equivocation around funding. The rule of thumb suggests that roughly ten per cent of the resources allocated in the battle against AIDS should go to vaccines and microbicides. That's not happening. Yet, the greater the number of vaccine trials, assuming plausible candidates, the greater the prospect of discovery. If ever a Nobel Prize lay in waiting, it's for an AIDS vaccine.

Vaccines, of course, are part of a continuum of work, stretching from the basic science and research done by so many in this room, through to product development and moving the products forward. And it must focus on the needs of the developing world, embracing developing world scientists and sites, and planning determinedly, in advance, how access for all will be secured when a vaccine is finally found. It's important to note that there are more potential vaccines in the pipeline than ever before, and that trials are underway on six continents. Much of this is driven by IAVI, the International AIDS Vaccine Initiative, artfully using public-private partnerships. But we need more, much more, from NIH, from big pharma - only Merck is appreciably involved - from biotech companies and from IAVI.

I recall chatting with Seth Berkeley, the CEO of IAVI, not long ago. He was making the point - and, incidentally, regretting that it was not widely understood - that a vaccine is also a women's issue. A fully effective vaccine, indeed, to some extent, even a partially effective vaccine, would give to women the ultimate protection from HIV infection without the male partner, intimate or casual, having any involvement whatsoever. The

best prospect of course for women, is to have access to both a microbicide and vaccine, the one complementing the other.

We're losing three million people a year. Treatment will slow, but not eliminate the carnage. There are 14,000 new infections daily. If we're five to ten years away from microbicides or vaccines, there's a desperate human toll to be faced between now and then. At least let the world rally to the prospect of bringing this cataclysm to an end sooner than later. And that means working on every front, on emergency footing simultaneously: care, prevention, treatment, microbicides, vaccines. It was Colin Powell, the American Secretary of State who said that HIV/AIDS poses the single greatest threat to the world community. He's right. So where, I ask you, is the world community?

And that brings me to the final two issues I want to raise, which I shall not belabour, because I have dealt with them on innumerable occasions. They flow organically from what has already been said. They are rather more personal than analytic.

There is one factor more than any other that drives me crazy in doing the Envoy job: it's the ferocious assault of the virus on women. We're paying a dreadful and inconsolable price for the refusal of the international community, every member of the community without exception, to embrace gender equality. And in so many parts of the world, gender inequality and AIDS is a preordained equation of death.

There's nothing new in that. It's irrefutably documented in encyclopedic profusion. The culture, the violence, the power, the patriarchy, the male sexual behaviour - it's as though Darwin himself had stirred this Hecate's brew into a potion of death for women.

Just last Monday, February 2nd, 2004, I attended the first meeting, in London, of the newly-constituted Steering Committee of the Global Coalition on Women and AIDS, a Steering committee, I might add, of undisputed intelligence, influence and reach; a Steering Committee, several of whose members are women living with HIV and AIDS. The heading on the press release to stir media interest read: "HIV Prevention and Protection Efforts are Failing Women and Girls ... More young women are becoming infected by husbands and long-term partners --- female-controlled HIV prevention methods urgently needed". And then, during the presentations throughout the day, the ritual ghastly litany of examples defining a socio-economic-cultural gestalt that puts women at deadly risk.

Not in a million years would I challenge either the usefulness or intent of the Global Coalition. My problem, entirely independent of the Coalition, lies in the divide between the analysis and what's happening on the ground. I read the superb studies produced by Human Rights Watch, and I know that the gap between rhetoric and reality can be tolerated no longer. In the last two and a half years, traveling extensively on the African continent, I have seen virtually no improvement in the status of women. Virtually none. It's too painful for words. It makes me feel almost criminally complicit. I have come to the personal conclusion - and I admit it's personal - that it's time, truly and resoundingly, to take off the gloves. It's time for the respected UN community, for example, on the

ground in countries, to join with the indigenous allies and groups fighting for women's rights to demand the visceral changes that are needed. It's time to abandon the fawning diplomatic deference. It's time to swallow the insufferable jargon, like 'mainstreaming gender' which serves to cement inequality by pretending that a process somehow transforms the lives women lead. It's not working. In Africa, of the ten million people living with HIV/AIDS between the ages of 15 and 24, nearly two-thirds are women and girls. Please explain to me what is working.

The time has come to confront Cabinet Ministers openly, and demand that they promulgate or amend the laws on property rights and inheritance rights. It's time to put people in jail, for a good long chunk of life, for property-grabbing. If sexual violence leads to HIV and death, then it's time to use the entire apparatus of the state to enforce laws against rape; to stop putting the onus on the woman to fight off predatory male sexual behaviour, and move in on the oppressor with a vengeance. If male teachers molest young girls, make a spectacle of them. If early marriage is a death sentence, change the age of marriage and enforce it as though life depends on it, because life depends on it.

It's time, in other words, country by country, to make the struggle for gender equality the cause celebre of the land. Give no quarter. Call press conferences, demand audiences with the political and religious authorities, form coalitions, take a tactical lesson from the Treatment Action Campaign in South Africa, demonstrate, boycott, rail, risk the possibility of being declared persona non grata by government, and if it happens, on this issue, wear it as a badge of honour. And should it happen, the cause of women will have been advanced.

It's all too much: too much sickness, too much sadness, too much death. Women are the resilient force that sustains the continent, and they are being eviscerated by a virus. And the world, there and here, largely inert, is watching it happen. Shades of the genocide in Rwanda.

You see, if we can make real gains in "3 by 5", and leverage the money for the Global Fund, and raise the intensity of focus on microbicides and vaccines, and understand that the pandemic has a woman's face, then we can begin to break the back of this appalling scourge. No one has to feel defeated. We just have to feel resolved. Doubtless it will require superhuman intervention: so much the better. It requires that level of magnitude to energize the world.

But even all of that said - and if it came to pass, it would be incredibly exciting - there remains one issue, growing inexorably, that is thus far intractable: the issue of orphans. I don't want to drive the nail through the wall; I've spoken a long time and must wind my way to the end. But it is important to understand that the millions of orphans are perhaps the most vexing inheritance of the pandemic. There are several African countries now, with more than a million orphans: it is without historical precedent; no one quite knows how to handle it.

In the last few months, I've had the enviable opportunity to accompany both Graca Machel and Oprah Winfrey on trips to Africa, primarily to assess the situation of orphans and vulnerable children. Graca Machel, who is seen by everyone as "Mama Africa", and has a formidable understanding of the continent was, I think it fair to say, overwhelmed at times by the sheer numbers and festering predicament of the orphans. Oprah, of whom it would be hard to find someone of greater worldliness, was equally shaken to her core. African communities are struggling valiantly to absorb the orphans as the families fragment and die, but given the levels of impoverishment, it's desperately, indescribably difficult.

And it's all becoming so strange. Now we have, pervasively, this phenomenon which AIDS has brought, of grandparents burying their children, and then living out their impoverished days looking after the orphan grandchildren. I was in Alexandra Township in Johannesburg in December, meeting with a large group of grandmothers heroically networking through their anguish: they had all lost almost all their children. It was a spirited if terribly mournful conversation. There was one grandmother who refused to speak until the end. And then, in a voice of wrenching and unendurable pain, she told us how she had lost all of her adult children, all five of her adult children, between the years 2001 and 2003. Five children in three years. She was left with four grandchildren, all of whom I later learned, are HIV positive. Two generations will disappear in an historical blink.

And where they don't disappear, these millions of orphans wander the landscape of Africa. These lonely youngsters are bewildered, angry, sad, frantically seeking nurture and affection, often hungry, homeless, significant numbers living with grandmothers or in child-headed households, countless numbers unable to go to school, a school being the single most valuable and supportive environment they could possibly have ... unable to go to school because they can't afford the school fees or the uniforms or the books. And when you lose your parents, who then hands down the knowledge and values from generation to generation? The orphan crisis is a crisis without parallel.

Somewhere, somehow, someday, the world has to understand what AIDS hath wrought. The understanding is not yet in evidence.

As I conclude these remarks, I beg you to enter the fray. Admittedly, it's not in your collective terms of reference to mount the barricades. You're trained as scientists or professionals of other exotic disciplines; no one suggested a quotient of advocacy added to everything else you do. But this is a powerful constituency. You're knowledgeable; people listen. Somewhere in the lives you lead, there has to be time carved out to shout from the rooftops, and if my kind of stormy invective is unwholesome, then shout in the muted tones of professional eloquence, but tell the world and its governments, especially the governments of the west, that an apocalypse has unfolded, and it has to be stopped in its tracks before it engulfs us all. If morality is found wanting in the actions of governments, let it be rediscovered in the advocacy of individuals.

There's a true and acrid irony in all of this. We forever call for behaviour change in Africa and so much of the rest of the developing world. It's a valid call, no question. And because nothing is more difficult to change than sexual behaviour, it comes in painfully slow increments. But what about our change in behaviour? It isn't sexual; it's financial, economic, technical, psycho-social. And it progresses in increments even more infinitesimal. How do we get away with it? What is it doing to our collective humanity to deny life to millions? With the money and the will, we can bring the scourge of HIV/AIDS to an end, and everyone here, in the depths of his or her soul, knows it.

I'm really not a Jeremiah. And I don't take Africa off the hook. The silence, denial and palpable immobility of some African leaders over the years, as the pandemic exploded, was entirely unforgiveable. Would that they had mirrored the stirring public voice of President Museveni. Some leaders may still be locked in a nexus of unreality; it's hard to say. Most are now vocal, brutally forthright about matters sexual and fully engaged. But even if all of the leaders of Africa, were to move determinedly against the virus, they just don't have the resources, the capacity or the infrastructure. That's where we come in.

What in Heaven's name are we waiting for?