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HIV/AIDS and its implications – a global long-wave threat that medicine alone cannot cure

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Abstract

During the last twenty-five years we have learned how the human immunodeficiency virus (HIV) causes AIDS, how it spreads and how it does not. We have also watched as AIDS has destroyed whole populations, and observed which responses appear most efficacious. One of the most alarming characteristics of HIV is that it typically strikes healthy young people. Yet most of the people who have HIV still do not know it. Efforts to confront the epidemic are further stymied by contentious differences about how best to do so, compounded by a persistent stigmatisation of and discrimination against people living with HIV/AIDS.

There are some 4.1 million new cases every year, and though the recent rapid expansion of antiretroviral treatment will prolong the lives of millions, there is no immediate prospect of a vaccine or cure. Thus, though still at an early stage, the pandemic is often described as ‘a long-wave event’, with ramifications that will persist for decades.

In this article, we review the relationship between HIV/AIDS and development, social stability and security. After considering the societal implications of HIV/AIDS control – with special attention to gender issues, human rights and the involvement of civil society – we conclude by discussing both Europe’s responsibility and role as well as HIV/AIDS as a long-wave event, drawing some parallels with global climate change.

It is of the greatest importance that we do not fall into the trap of ascribing to such long-wave events short-term significance – such as in the case of HIV/AIDS and security. This would be inappropriate because it links to contemporary moral and political panics when the real concerns have to do with much longer-term problems of common human well-being and security.

In June 1981, the Centers for Disease Control in the US identified a peculiar new phenomenon. A previously rare disease, *Pneumocystis carinii* pneumonia, was appearing inexplicably among young homosexual men, who also exhibited signs of failing immune systems. In the quarter of a century since, HIV/AIDS has become the biggest infectious disease epidemic since the Black Death of the Middle Ages and the “Spanish” influenza of

1917–18. Still at an early stage, the pandemic is often described as “a long-wave event”, with ramifications that will persist for decade (Barnett and Blaikie 1992).

One of the most alarming characteristics of HIV is that it typically strikes healthy young people. It continually appears in new guises and populations, popping up in blood supplies, remote villages and crowded cities, infecting and affecting entire societies and countries. There are some 4.1 million new cases every year, and though the recent rapid expansion of antiretroviral treatment will prolong the lives of millions, there is no immediate prospect of a vaccine or cure.

We have learned an enormous amount about HIV since 1981: how the virus causes AIDS, how it spreads and how it does not. We have also watched as AIDS has ravaged whole populations, and observed which responses appear most efficacious. Yet most of the people who have HIV still do not know it as the latent phase of an infection that may last many years. Efforts to confront the epidemic are further stymied by contentious differences about how best to do so, compounded by a persistent stigmatization of and discrimination against people living with HIV/AIDS.

In this article, we review the relationship between HIV/AIDS and development, social stability and security. After considering the societal implications of HIV/AIDS control – with special attention to gender issues, human rights and the involvement of civil society – we conclude by discussing both Europe’s responsibility and role as well as HIV/AIDS as a long-wave event, drawing some parallels with that other long-wave event of our age: global climate change.

CURRENT STATUS OF THE HIV/AIDS PANDEMIC

HIV/AIDS is now found in every country. In the African situation in the early stages of the epidemic process it was often male labour migrant workers who spread the disease – and concurrent sexual partnering appears to be a key factor in transmission. In other circumstances, for example in the former Soviet Union, the epidemic may spread from a focal point around injecting drug users, into the general population. If transmission is not controlled when infection is still concentrated in such groups, it may develop into a generalised epidemic, as in parts of Africa.

Among the areas hit hardest is sub-Saharan Africa, where disease and death may bring social disruption in its train. In Botswana, Lesotho, Namibia, South Africa, Swaziland and Zimbabwe, well over 20% of pregnant women are infected (UNAIDS 2005). And while the spread of HIV may have been earlier overestimated¹ in parts of Africa, we now know that the Great Lakes region of Africa suffered heavily from HIV/AIDS even before the disease was identified in 1981 – and for the most part, the situation does not appear to be improving. In the words of Kofi Annan in 2000 at the Special UN Security Council Session on AIDS in Africa:

¹ In the 2006 report on the global AIDS epidemic (Geneva, UNAIDS 2006), UNAIDS states that due to more accurate data, estimates for 2005 are lower than those previously published in spite of including infected people over the age of 50 for the first time. They stress that the latest estimates cannot be compared directly with estimates published earlier and nor should they be compared directly to those to be published in the years to come, as this will lead to “misleading conclusions”.

The impact of AIDS in [southern and eastern Africa] is no less destructive than that of warfare itself . . . By overwhelming the continent's health services, by creating millions of orphans and by decimating health workers and teachers, AIDS is causing social and economic crises which in turn threaten political stability . . . In already unstable societies, this cocktail of disasters is a sure recipe for more conflict. And conflict, in turn, provides fertile ground for further infections.

However, the heavy toll of HIV/AIDS is not confined to Africa. In India, China and south-east Asian countries such as Cambodia, Thailand, Viet Nam and especially Myanmar, there are worrying signs which include the spread of new HIV clades (varieties or subgroups) (Garrett 2005). In these countries, there appears to be a clear potential for a rapid increase in new HIV and AIDS cases – the former due to low public awareness and poor prevention, the latter to limited treatment access. In parts of the former Soviet Union, HIV/AIDS is now widespread among injecting drug users, and in Estonia, the Russian Federation and Ukraine, an estimated 1% of the adult population is already living with HIV. It remains to be seen if the virus in these countries will move into the general population or not.

In the Caribbean, the second most affected region in the world, the rapid spread of HIV during the last ten years does not seem to be easing. However, treatment coverage has increased in parts of Latin America, such as hard-hit Brazil. This is largely due to government efforts to stave off the development of AIDS and AIDS deaths by producing generic drugs for prevention and treatment. Meanwhile, in high-income areas such as western Europe and Australia, HIV/AIDS is still concentrated in certain groups. But the situation in neighbouring areas (e.g. eastern Europe and the Pacific island nations, respectively), coupled with high HIV prevalence among migrants and foreign nationals, means that these regions need to revise their prevention and treatment strategies.

Even in rich countries, there is no indication that we are close to overcoming HIV/AIDS – in spite of the advent of effective treatment, evidence of successful interventions and 25 years' experience of trying to control it. It is worth noting that according to the Centers for Disease Control and Prevention (as it is now known), 480 000 people in the US need antiretroviral therapy, but only 268 000 of them (approximately 56%) are receiving it (Chase 2006). The global battle against one major opportunistic infection associated with AIDS, tuberculosis, is telling. Despite concerted national and international efforts, tuberculosis in many countries is worse now than it was 10 or 20 years ago.

Given this state of affairs, it is clear that the HIV/AIDS pandemic could play an increasingly influential role in future development, social stability and security.

IMPACT ON DEVELOPMENT, SOCIAL STABILITY AND SECURITY

In July 2000, UN Security Council Resolution 1308 labelled HIV/AIDS a security threat (United Nations Security Council 2000). The resolution stresses the disease's potential for devastating societies, and suggests it "may pose a risk to stability and security". These propositions merit closer examination.

HIV/AIDS and Social Instability

In sub-Saharan Africa, the causal linkage between HIV/AIDS and poverty is often assumed although the precise relationship is not at all well understood (Tldai 2006, Barnett and Whiteside 2002). It is not solely poverty that exposes people to infection, rather it is poverty plus – and the precise plusses vary from place to place but appear to include gender inequality, degrees of social cohesion, distribution of wealth and income, and possibly, above all, livelihood strategies which necessitate various forms of labour migration and/or transactional sex. All of these appear likely to increase the probability of concurrent sexual partnerships, a pattern which for sound epidemiological reasons (May and Anderson 1991) results in an increased reproductive rate for the virus. While this relationship is undoubtedly complex, it is generally the case that the poorest are most vulnerable to the disease, and the infected are the most vulnerable to destitution. In fact, these connections are now apparent in almost every country of the world (Rivers et al 2006, Mishra 2006, Yamano 2004, Ainsworth and Semali 1998, Filmer 1996, Kipp et al 1995). For low-income countries, however, HIV/AIDS is making it all but impossible to address poverty. In turn, continuing poverty contributes to the persistence of other societal problems, many of which have global consequences. These include high fertility rates, illegal migration, violence and environmental unsustainability. And while international efforts to provide antiretroviral treatment for everyone who needs it are laudable, they risk depleting international and domestic development aid that could have been used for other pressing and often related problems.

It is important to note that the widespread notion that AIDS might help harness global population growth is totally unfounded. On the contrary, one major prerequisite in reducing high fertility – child survival – is not improving in the countries hardest hit by AIDS. In this equation, high child mortality should be understood as a disincentive for families to regulate fertility and have fewer children.

While it may be clear that AIDS exacerbates poverty and poverty destabilises society, the disease also weakens stability through other less obvious mechanisms. In some countries, for instance, HIV/AIDS is associated with brain drain, capital flight and a reduction in the skilled workforce, all drawing off resources in key areas such as management, infrastructure, education, health care, the armed forces and research. Further, as some families and communities are able to grow less food and increasing amounts of land lie fallow, food security becomes even more compromised and malnutrition and urbanisation are just some of the effects (Gillespie 2006).

One of the most serious consequences of AIDS is the growing number of orphans it creates. Although the global orphan population is declining – standing now at 143 million, or 1 of every 13 children in the world – the number of children who have lost a mother or father to AIDS is rising. This figure is estimated to be 15 million, and with 80% of them in sub-Saharan Africa, the burden weighs heaviest on those countries already among the poorest (UNICEF 2005). The loss of a parent to AIDS exacerbates the plight of the destitute and orphans have a greater risk for higher levels of anxiety, depression and anger (Atwine et al 2005).

HIV/AIDS and security

In his foreword to the work *HIV/AIDS and national security – where are the links?* the president of the Council on Foreign Relations expresses concern that

“While few seriously argue against defining HIV as a threat to the security of highly affected states such as those in sub-Saharan Africa . . . there continues to be considerable reluctance toward viewing the pandemic in terms of the security priorities of less-affected nations, particularly the EU, Japan, and the United States” (Haass 2005).

This may be for a very good reason: as yet there has been no empirical evidence to suggest that HIV/AIDS has actually led to an increased risk of armed conflict or civil disorder anywhere in the world. However, proponents of the “poverty fuels conflict” school of thought have employed the causal linkages between HIV/AIDS and poverty or economic downturn in their arguments, citing a small but robust association (de Waal in McInnes 2006). In the African context, Alex de Waal argues: “the epidemic does not threaten the continent’s rulers – democratic or otherwise” (de Waal 2006). Another possible link to security issues are the accusations of deliberately spreading HIV that some national governments level at minority groups or foreign nationals, using these claims to foment ethnic hatred. There is some evidence for this practice, such as the recent Libyan accusations directed at Bulgaria and the US.

But securitizing HIV/AIDS raises serious ethical concerns. As one of the present authors recently pointed out:

... when [AIDS] is associated with a security agenda, it accretes another level of threat which may inadvertently associate it with another aspect of the security agenda, “the war on terror”. The combination of AIDS, orphans and terror begins to take on an independent life, perhaps regardless of either the strength of the evidence or the precise value of the parallel (Barnett 2006).

It is our view that political actors should not view HIV/AIDS as a national or international security issue, but as a health and development crisis. By virtue of its long-wave and destabilising nature, HIV/AIDS differs from classic geopolitical security threats, although language such as “a war on HIV/AIDS” is frequently employed. As the president of Botswana – a country where HIV prevalence among pregnant women is estimated to exceed 30% – put it: “The impact of HIV/AIDS on the population, the economy, and the very fabric of our society undermines not only development, but poses a serious threat to our security and life as we know it. . . . Let us divert resources from military expenditure to fighting the HIV epidemic” (Mogae 2000).

Still, there are many reasons why HIV/AIDS continues to be cited as a security concern. It has, for example, been likened to “playing a trump at cards, for at once it leapfrogs other issues in priority” (Prins 2004). However, participants in the debate on HIV/AIDS should be aware that the language of security draws the debate about the disease away from civil society and towards the military (Elbe 2006, Barnett and Prins 2006). This has potentially serious implications.

Such a security framework often overrides public health and development approaches to the pandemic. In spite of this, there are at least three other concerns that lead commentators to securitize HIV/AIDS. They are the HIV transmission rates in conflict situations; the assumed contribution of the disease to the deterioration of failed states such as Somalia, Sierra Leone and Liberia; and HIV infection among armed forces and peacekeeping troops. First, although it is obvious that systematic rape typically found in conjunction with ethnic cleansing accelerates the spread of HIV, current evidence indicates that post-conflict situations facilitate transmission even more. One way it does so is through restoration of free travel within a country coupled with post-war elation, as was observed in Mozambique in the early 1990s after the ceasefire or when the Ethiopian/Eritrean war ended. Second, conditions in fragile post-conflict or long-conflict states like Somalia or Sierra Leone do not permit basic health care provision, not to mention effective HIV/AIDS control, which contributes even more to their inability to function properly and highlights the need to focus on public health issues.

And third, armed forces, with their high degree of mobility, are hardly immune to HIV. Earlier, this point was often stressed as a national security concern and many countries reported very high HIV prevalence levels among the armed forces. However, there is now strong evidence that some countries have taken successful action to prevent the spread of HIV in the military (McInnes 2006). It is, nevertheless, particularly embarrassing to the international community that UN peacekeeping bodies and NGO post-conflict teams are sometimes disgraced by a few individuals who perpetrate sexual crimes on civilians, with the risk of spreading HIV and other sexually transmitted infections among the very people they are supposed to help.

KEY SOCIETAL DIMENSIONS

To determine what can be done to combat HIV/AIDS, it is first important to understand the ways that gender inequity² and relations among men fuel the epidemic, the human rights and legal issues involved in HIV/AIDS control and the potential role of civil society.

Earlier in the epidemic, gay men, especially in the US and western Europe, were ostracised as transmitters of the disease: a “risk group”, where the precise epidemiological meaning of that term became translated in popular understanding to the more stigmatising idea of a “threat group”. AIDS was initially called both GRID (gay-related immune deficiency) and gay cancer, and those suspected of having it faced severe discrimination. Later, it was sex workers and injecting drug users, followed by certain migrant groups (such as black Africans in western Europe), who were accused of bearing and transmitting the virus. Anti-migrant sentiments have caused some countries to deny entry to people with HIV/AIDS or to consider mandatory testing policies. Such actions threaten the interaction of already marginalised people, particularly illegal residents, with national health

² The UN defines gender equity as meaning “fairness in the treatment for women and men, according to their respective needs. It may include equal treatment or treatment that is different but considered equivalent in terms of rights, benefits, obligations and opportunities”. In the development context, a gender equity goal often requires built-in measures to compensate for the historical and social disadvantages of women.

care systems. Not only are there serious ethical and practical objections to such coercive and discriminatory policies, but they also serve to drive the disease further underground. Moreover, this has international ramifications as the laws of one country often have a push–pull effect on others (Bröring et al 2003, Coker 2004).

Many experts state unequivocally that the pandemic cannot be controlled without addressing gender inequality³. It is clear, first of all, that restricting the legal rights of women – to own property, to run a business, to sign a contract and to inherit land and money – helps entrench poverty in many low-income countries. Other patriarchal practices also serve to rob women of power, contributing to the feminisation of both poverty and HIV: the pervasiveness of poverty and powerlessness among women, particularly young women, is a breeding ground for HIV. A poor woman who needs to fend for herself and her children without the support of the law will have very limited sexual negotiating power in any situation. She will have difficulty in controlling when and with whom to have sex and in demanding safer sex practices. The “ABC” approach to prevention – meaning abstinence, being faithful and condom use, in that order – ignores two facts. First, abstinence is not an option for many women due to social norms, coercion or simple economic despair. And second, female fidelity is no guarantee of male fidelity (Barnett and Parkhurst 2005).

The HIV/AIDS pandemic is also linked to human rights issues in other important ways. As set out in the Universal Declaration of Human Rights, the right to health includes a right to access adequate health care and other health services. It now means, as set out in the first worldwide pledge to address HIV (United Nations 2001) that everyone who has HIV has the right to adequate counselling, support, basic health care and even antiretroviral treatment. Since the epidemic is fuelled by risk behaviours like needle sharing and unprotected sex, it is crucial to focus prevention efforts on risk groups, even when an epidemic has moved to the general population. Yet in many countries, homosexuality, injecting drug use and sex work remain illegal or heavily restricted, blocking the preventative interventions that have been shown to work best: sex education, needle and syringe exchanges and personal counselling (Rhodes 2002). Instead of being supported in changing risky behaviours, these groups are stigmatised, persecuted, subjected to police violence and incarcerated, often in crowded prisons that actually boost transmission rates. In eastern Europe, for example, HIV prevalence in prisons is often five-fold that of the general populations. And in many countries, such as the Russian Federation and Ukraine, pregnant HIV-positive women with a history of injecting drugs are often encouraged to abort, or no interventions are made to reduce mother-to-child transmission for members of this stigmatised group.

Following the commitment by G8 members and, subsequently, governments at the 2005 UN World Summit, the latest and most visionary of the many often fragmented approaches to the epidemic is to provide universal access to HIV/AIDS prevention, treatment, care and

³ The UN defines gender equality, as distinguished from gender equity (see footnote 2), as entailing the concept that all human beings, both men and women, should be free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles or prejudices. It means that the different behaviours, aspirations and needs of women and men are considered, valued and favoured equally. It does not mean that women and men have to become the same, but that their rights, responsibilities and opportunities will not depend on whether they are born male or female (ABC of Women Worker's Rights and Gender Equality, Geneva: ILO, 2000).

support services by 2010⁴. For coverage to be universal, it will have to be equitable and reach the marginalised groups who are most vulnerable to the disease. Otherwise, the effort will only widen prevalence gaps and fan the flames of the pandemic, as the people who need services most are the ones who can do the most to retard – or expand – transmission.

Those who are already infected hold the second key to controlling the pandemic. Since the early 1980s, people living with HIV/AIDS (PLWHA) have taken the lead in combating the disease, both individually and in groups (known as community-based organisations). In 1988, when WHO had only registered 75 000 AIDS cases worldwide, Vito Russo from the AIDS Coalition to Unleash Power (ACT UP) likened the situation to “living through a war happening only for those in the trenches. Every time a shell explodes, you look around and you discover that you’ve lost more of your friends, but nobody else notices, it isn’t happening to them.” Since then, organisations representing those infected and those at risk have lobbied governments, taken the lead in peer education efforts and developed and promoted the concept of safer sex. Today, community-based organisations are also not only working to encourage PLWHA to enrol in and adhere to antiretroviral therapy but also addressing their sexual and reproductive health needs, including having children. To stigmatise and deny services to these people on the front lines is tantamount to sabotaging the entire war on HIV/AIDS.

EUROPE AND HIV STABILITY AND SECURITY

The HIV/AIDS pandemic is already hindering development, particularly in low-income countries where prevalence is high. But it is difficult to imagine the social disruption that these countries will experience in the next fifteen to twenty-five years, and their long-term effects on global stability. What should the EU and its member states do? Five key areas of action suggest themselves.

Firstly, as described in the EU policy framework for combating HIV/AIDS abroad, (Commission of the European Communities 2004) prevention and treatment should be emphasised in all development work. The EU and its members contribute roughly 55% of the world’s foreign development aid, thus holding in their grasp a unique opportunity to ensure that essential HIV/AIDS issues are incorporated into all development efforts. While this now implies working towards universal access to prevention, treatment and care, it also requires measures to ensure that health care personnel in low-income countries are not recruited to work in western Europe without proper compensation to the country.

Secondly, the EU and its member states should also continue to stress evidence-based approaches to HIV control, such as condom use, comprehensive harm reduction programmes and even male circumcision. All too often, religion, culture or politics obstructs the implementation of proven interventions, as experienced during the UN five-year review of the Declaration of Commitment on HIV/AIDS in May/June 2006. The key elements of an effective strategy are to work multisectorally, to target high-risk

4 For the General Assembly document (24 March 2006), see http://data.unaids.org/pub/Information_Note/2006/20060324_HLM_GA_A60737_en.pdf. For WHO’s contribution to “Universal access by 2010” see <http://www.who.int/hiv/universalaccess2010/en/>.

groups at every epidemiological stage, to address gender-related issues head on, to employ community-based organisations wherever possible, to recognise the need for locally relevant interventions, and to tackle the basic human rights issues.

Thirdly, in accordance with principles articulated by the European Commission (Commission of the European Communities 2005), the various European strategies need to be harmonised, both internally and externally. Aligning HIV/AIDS control strategies will facilitate cooperation and improve efficacy, and exchanging experiences with counterparts abroad can be mutually beneficial. Public health issues may not be very high on the EU agenda today, but the rapid spread of HIV in eastern Europe and failure to reduce HIV incidence in western Europe demand immediate action.

Fourthly, European governments need to provide better public health research support. As the number of infected people proliferates and new approaches (like the current “experiment” of rolling out antiretroviral treatment for millions of people) are tried, many new economic, social and epidemiological questions arise. EU funding is vital in pursuing the answers to these questions, though it is also notoriously complicated to obtain and the amounts pale in comparison to funding for biotechnology research.

Finally, while some EU member states are among the world’s largest donors to HIV/AIDS efforts, others’ contributions fall short of honouring international commitments and meeting funding needs. At the same time, the EU needs to fill in the funding gap experienced by organisations that have turned their back on US support from PEPFAR (President’s Emergency Plan to Fund AIDS Relief). PEPFAR stipulates that none of its money be used to buy sterile needles or syringes for injecting drug users, and that a third of its prevention and education funds be spent on abstinence-promoting programmes. The EU also needs to continue providing countries with the technical assistance necessary to make optimal use of their resources.

EU countries include the world’s largest funders of HIV/AIDS prevention and treatment, and they recognise its importance to the global development agenda, as evidenced by its inclusion as one of the eight Millennium Development Goals⁵. Yet today, the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that 38.6 million [33.4 million–46.0 million] people are living with HIV/AIDS. Most of them live in Africa, though the fastest increases in new cases are found in parts of Europe, particularly the Baltic States, Ukraine and western Russia. In the end, issues related to how HIV/AIDS is linked to social stability and national or international security must remain secondary to the undisputed human cost of the epidemic: 25 million deaths in 25 years, untold suffering and long-term impairment of the world’s economic and social development. These stark figures are far more important than any assumed (or claimed and un-evidenced) link between HIV/AIDS and “security” – where that word means national security rather than the broader and more pressing issue of human security in its most general sense. Furthermore, the real lessons to be learned from the HIV/AIDS epidemic revolve around the following fundamental issues in relation to our thinking about HIV/AIDS and other long-wave events such as climate change.

⁵ The goals, their targets and background material are available at <http://www.developmentgoals.org>, a World Bank site.

LONG-WAVE EVENTS

Both the HIV/AIDS epidemic and climate change fall into the category of “long-wave events”. The following features distinguish such an event: It exceeds the span of a human generation in both gestation and impact, but it touches peoples’ lives intimately here and now. We are usually unaware of its starting point, and by the time we become aware of its presence and effects it takes a long time to slow down the process or to stop it. It demands visionary thinking to engage with its implications and long-term ramifications. A central reason such events are difficult to halt is that it is enormously difficult to get people to recognise them for what they are and to take appropriate action; so managing the consequences of long-wave events makes novel demands and our existing experience is not necessarily a good guide to how we should respond. Within liberal democracies, most political and administrative capacities are too poorly structured and resourced to deal with such events. Civil service and political structures tend to discount the future. Ironically, in less democratic systems, if a ruling elite can be persuaded of the power of the arguments, societal response and mobilisation in response to such events might be easier.

Although HIV/AIDS and global climate change are seldom linked in scientific and policy debates, with the recent exception of Peter Piot, head of UNAIDS (Piot 2006), there are important similarities. Both are major, global events that share some similar features. These include that their originating mechanisms are very specific and are affected by long acting biological/biochemical processes at the microscopic level which then proceed through complex gearing processes to produce very large-scale and long-term effects for human social, economic and cultural life.

In the case of HIV, the mechanism is well-known: a retrovirus with marked tendencies to mutate as the RNA-DNA transcription process occurs, combined with a long life cycle of the virus that results in an epidemic lasting many decades as it is refuelled by new human population cohorts. In the case of climate change, the mechanisms involve human population growth and technology changes, resulting in large-scale releases of carbon into the atmosphere, followed by increased temperature and, via a series of feedback loops, increased soil microbial activity associated with rising temperatures which further increase carbon release into the atmosphere through elevated levels of microbial activity resulting in increased “soil respiration”.

In both cases, these biological/biochemical processes have profound effects when amplified in scale to the level of human populations, in each case with vast spatial coverage over a very long period. Such “long-wave events” are distinct from short wave events both in terms of their long-term repercussions and their initial manifestation. The implications of such a perspective may be summarised as follows:

1. There is a very large gearing/multiplier effect between some specific characteristics of the event originating mechanism and its effects;
2. They extend to many decades and probably well beyond this time span;
3. We are unaware of their precise starting point;
4. Determination of a starting point is subject to debates and judgements as to the nature of appropriate evidence;

5. The use and misuse of evidence resonates very strongly with a variety of often inappropriate political panic agendas – as we have seen in the case of HIV/AIDS and “security”;
6. We become aware of such events by the accumulation of their apparent effects;
7. Once we become aware of its effects the event is already well developed and has established a backlog of effects;
8. Because of the backlog effect such events take a long time to slow down or stop and it may be that neither of these courses is possible;
9. These events fall outside the normal time horizons of politicians and business strategists for whom the “long term” usually means five years;
10. It is hard to get people in positions of authority to recognise such events, to mobilise resources and to take appropriate action;
11. Engagement with their effects requires thinking which differs from that appropriate to short wave events. There is even some evidence that short-term responses using existing frameworks may, rather than mitigating effects, be variously wasteful, neutral or even exacerbate the ongoing processes;
12. In particular, such events are not necessarily amenable to engagement through conventional frameworks of thought such as cost-benefit analysis, mainstreaming and scaling-up.

Thus, it is of the greatest importance that we do not fall into the trap of ascribing to such long-wave events short-term significance – such as in the case of HIV/AIDS and security. This would be inappropriate because it links to contemporary moral and political panics when the real concerns have to do with much longer-term problems of common human well-being and security.

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