

# HIV/AIDS and Conservation: Impacts and Ways to Reduce Them

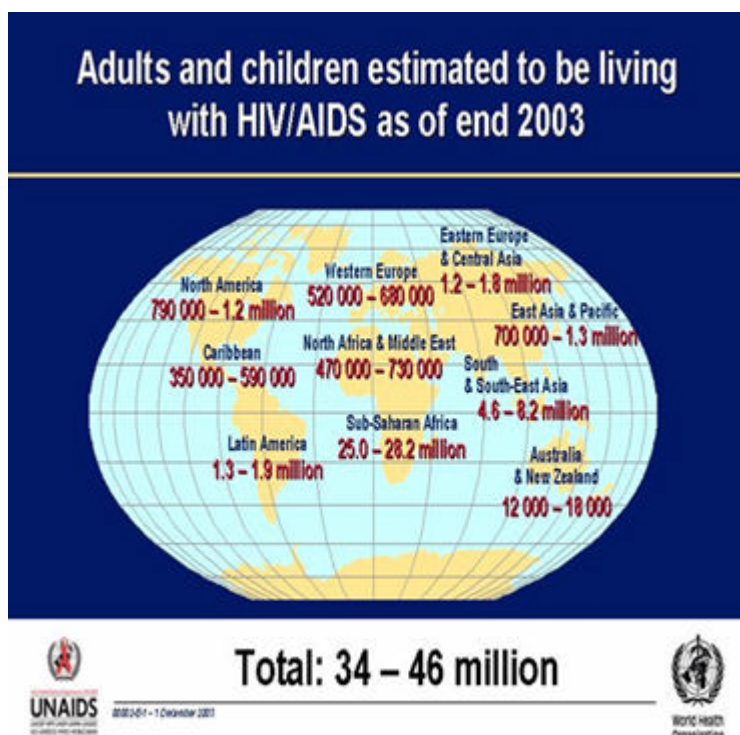
## Fact Sheet for the Conservation Community



### The problem

*Loss of human capacity to AIDS is seriously affecting conservation, including protected areas and community-based natural resource management.*

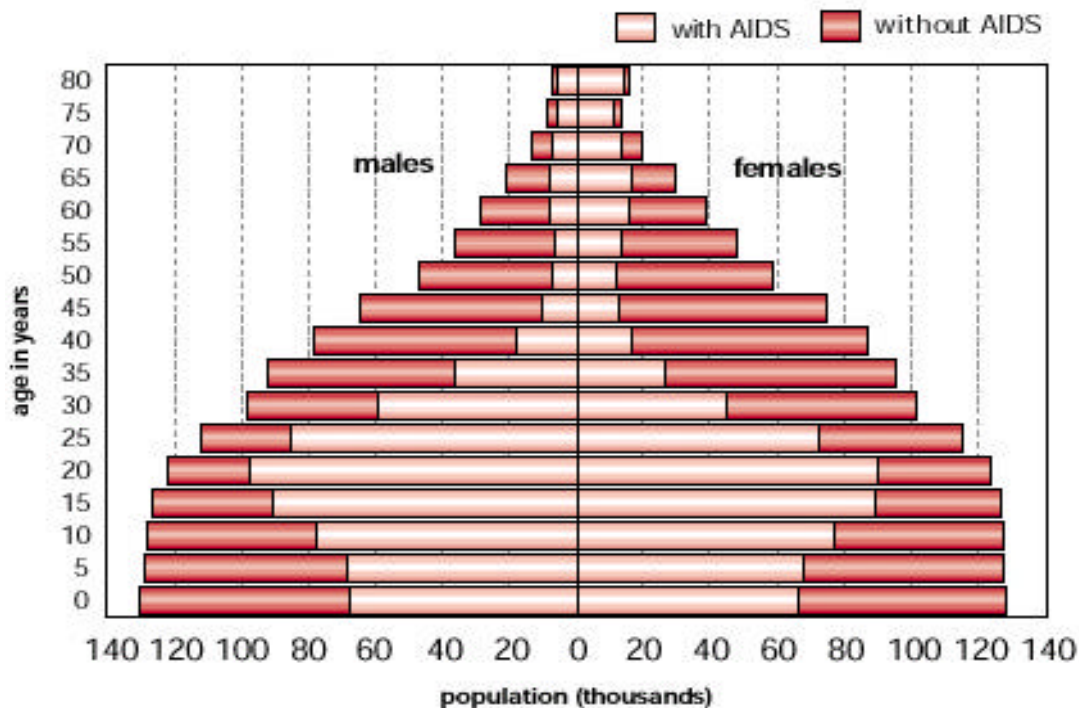
AIDS (Acquired Immuno-Deficiency Syndrome) is the late stage of infection caused by the HIV or Human Immunodeficiency Virus. Between 34 and 46 million people around the world are living with HIV/AIDS. Of these, 25-28 million are in Africa. In 2003, 2.3-3.5 million AIDS-related deaths occurred globally. HIV prevalence rates continue to rise in many countries, especially in Africa, parts of Eastern Europe, South, South-east, Central and East Asia, and the Caribbean. The most economically active age group is affected: 15-49 years.



The epidemic has devastating and tragic impacts on families and communities. It is affecting local and national economies, social structures and institutions. It is also affecting the environment through impacts on **human capacity, natural resource management, and land use**. There are very close linkages between HIV/AIDS, rural livelihoods, human capacity and conservation. This fact sheet outlines impacts, and actions the conservation community can take to reduce them.

*The conservation community cannot rely purely on the health sector for solutions to HIV/AIDS: it needs to engage actively with partners in a multi-sectoral approach to reduce impacts.*

## Projected population structure with and without the AIDS epidemic, Botswana, 2020



Source: U.S. Census Bureau. World Population Profile, 2000.

### Impacts on conservation organization capacity

**Loss of human capacity:** conservation organizations and projects are losing staff members to AIDS in the most seriously affected countries. For example, a local non-governmental organization in Malawi has reported deaths of 14% of its staff. Conservation staff are particularly vulnerable if they spend time away from their families, where they are more likely to practice risky behavior. This applies to:

- staff of many protected areas in remote locations
- staff who travel frequently such as drivers
- staff on temporary assignment away from home (e.g. on training programs).

Loss of staff at this scale seriously affects institutional memory and continuity of programs and operations, and can greatly reduce organizations' ability to achieve conservation goals.

**Loss of investment in training:** many conservation organizations have lost highly trained staff to the disease. This is particularly serious in Africa, where conservation capacity is already limited. There is a huge financial cost in lost investment.

**Loss of staff time:** there is increased absence from work when staff care for family members with AIDS and attend funerals of relatives, friends and colleagues.

**Diversion of conservation funds for AIDS costs:** many conservation organizations are having to cover the costs of medical expenses, sick leave, terminal benefits, funeral costs, and additional training expenses for new staff. This reduces the budget available for conservation work, and often has to be covered from scarce core funds.

**Decline in morale:** successive bereavements sap morale and enthusiasm for work in even the most committed employees, affecting productivity.

## **Impacts on natural resource management**

**Increased use of natural resources:** as AIDS-affected rural households lose salary earners and agricultural labor, many are turning to natural resources as the ultimate safety net. Activities such as hunting, fishing and charcoal making are increasing as families seek alternative livelihood means. Medicinal plant harvesting has increased to treat side effects of AIDS, and timber logging has accelerated in many areas to supply to growing coffin industry. These widely reported increases in resource use are often not sustainable and pose a long-term threat to community and ecological wellbeing.

**Loss of leadership and capacity for community-based natural resource management:** community-based natural resource management (CBNRM) becomes increasingly vulnerable as communities lose leadership and capacity, and HIV/AIDS-related issues such as caring for the sick or adapting family livelihoods take priority.

**Loss of traditional knowledge:** the middle generation is most active in land and resource management. When these adults die their traditional knowledge of natural resource management and local farming systems is often lost, and land and resources are used in less appropriate ways.

## **Changes in land use**

**Changes in farming practices:** when agricultural labor is lost and household incomes decline, households often farm more extensively with fewer inputs. This can result in more environmentally damaging techniques including increased use of fire.

**Problems with land tenure and land grabbing:** when the male head of a household dies, in some societies widows and orphans cannot inherit land (either legally or customarily). Land-grabbing results in loss of livelihood base for the immediate surviving family members. Sometimes incomers do not have detailed knowledge of the area and of resource management, and use the land and resources less appropriately.

**Future insecurity and mining of resources:** as AIDS orphans grow up they often have little indigenous knowledge, weak attachment to land and resources, and poor education. They and other disenfranchised people may turn to unsustainable fishing, poaching, logging and charcoal making on a large scale, with serious environmental impacts.

A large number of young adults in the population with no sound livelihood base may threaten peace and security of an area or country. At the same time, police forces are losing capacity to AIDS and have less ability to maintain law and order. Armies are also seriously affected in many countries. This combination of factors could lead to civil unrest, often with serious consequences for conservation.

## **What can be done? Ways to reduce impacts**

*Conservation organizations can take action to protect their staff, the communities we work with, and the resources we aim to conserve. We can't stop the HIV/AIDS epidemic, but we can play an important role to reduce impacts.*

The following pages outline possible conservation sector approaches. Different approaches are relevant in different situations; select the most appropriate ones for your situation.

## **Institutional policies and procedures**

**Develop institutional HIV/AIDS policies:** institutional policies on HIV/AIDS help both employers and employees in conservation organizations. They can be developed for government departments, non-government organizations, training institutions, donor agencies, and private sector companies. They normally:

- Set a foundation for HIV/AIDS awareness, prevention and care programs
- Offer a framework for consistency of practices within the organization
- Express standards of behavior expected of all employees (e.g. on stigma, discrimination and appropriate behavior towards colleagues)
- Inform all employees of what assistance is available through work
- Ensure confidentiality
- Guide supervisors and managers on how to manage HIV/AIDS in their jobs
- Assure consistency with relevant legislation and regulations
- Seek advice from health and labor sectors to develop a sound policy
- Mainstream HIV/AIDS into conservation activities.

**Overcome stigma and avoid discrimination:** open discussion about HIV/AIDS is an important first step to dealing with it. Often it takes a champion in an organization to promote discussion and overcome stigma. Conservation organizations need to learn from each other and from the health sector, and take action as early as possible. There are several HIV/AIDS-conservation champions in Africa who have identified and implemented coping strategies and have shared their approaches and information through open discussion. Their leadership is a great model for addressing HIV/AIDS issues affecting conservation, and their efforts should be rewarded and duplicated.

**Promote HIV/AIDS awareness and prevention education:** it is important that all staff understand how HIV is and is not transmitted, and how to prevent transmission. They should know the organization's HIV/AIDS policy if there is one, procedures for handling HIV/AIDS concerns, employee benefits, and where to go for help. This education should ideally be provided by someone from the health sector who can relate to the circumstances of the conservation organization. The education is often best done in focus groups. Appointment of peer educators within an organization can be very effective; if possible they should receive training from health organizations. When organizing workshops away from home remind staff and other participants of HIV risk (e.g. with strategic leaflets); make condoms available discreetly.

**Provide HIV prevention support:** develop a condom distribution system, e.g. through peer educators and/or by placing supplies of condoms at convenient locations at work including in vehicles and remote stations. Supplies must be replenished as needed. They may be available free from local health organizations or AIDS programs. Include rubber gloves in first aid kits at work and in vehicles in case employees have to provide first aid.

**Encourage voluntary HIV counseling and testing:** encourage employees to have HIV tests, with pre- and post-counseling so they understand the nature of the test and its implications. People are more likely to have tests if they can have access to treatment if needed. It is important that tests are voluntary. Mandatory testing as a requirement for recruitment, employment or retention is discriminatory, violates human rights principles, and is illegal in some countries.

**Promote wellness programs:** work with the health sector to promote wellness programs at work. This includes prevention and treatment of sexually transmitted infections that both increase the possibility of HIV transmission during sexual intercourse, and a person's susceptibility to HIV. Prevention and treatment of opportunistic infections is also important: HIV positive people are more susceptible to

diseases such as tuberculosis because their immune system is weakened. Some large conservation organizations have hired occupational nurses to help with staff health care.

In some cases it may be possible to help employees to access anti-retroviral (ARV) drugs. However, access to good health infrastructure is needed to ensure follow-up care. Decisions have to be made about offering treatment to HIV-positive spouses and children, and a commitment should be made to continue treatment for the life of the employee (and not just for the life of a project or funding cycle).

**Transfer affected staff to less labor-intensive positions:** when staff whose jobs involve physical exertion (e.g. game scouts) develop early stages of AIDS and are less able to work, transition them to less labor-intensive positions such as desk jobs or part-time jobs.

**Avoid posting staff away from their families:**

*wherever possible post staff with their families so they are less likely to practice risky behavior.*

This may require construction of new staff housing, or redesigning protected area management systems from a decentralized law enforcement system with remote outposts to a more centralized, mobile system. When staff travel for training, consider paying for spouses to accompany them.

**Encourage staff to make wills:** existence of a will in many countries enables surviving family members to inherit property more easily, and to allocate any pension etc. benefits if appropriate.

**Try to maintain institutional memory:** document important decisions, meetings, management systems, research and monitoring results etc, and ensure that more than one staff has good working knowledge of plans, programs, projects, systems, donor relations etc. This reduces the impact if a key member of staff is lost.

**Integrate HIV/AIDS in funding proposals:** some donors are increasingly willing to cover costs of integrating HIV/AIDS into conservation programs (e.g. into community conservation programs); they may also be willing to cover direct institutional costs of HIV/AIDS that would otherwise have to be covered by core funds.

**Mainstream HIV/AIDS into all organizational activities:** HIV/AIDS needs to be tackled on all fronts ranging from awareness, prevention, treatment and wellness, staff housing, work assignments, training, working with local communities on CBNRM, design of conservation programs and activities, to land policy initiatives. Undertake an assessment of existing and likely future impacts, and develop a strategy for action.

*The earlier HIV/AIDS is tackled, the easier it is to reduce impacts.*

## **Training strategies**

**Adapt conservation training programs to reduce risk of HIV transmission:** incorporate awareness and prevention education early on in programs at training institutions to protect students; foster open discussion of risks; remind students regularly to protect themselves; and supply condoms.

**Use innovative training approaches and more short courses:** adapt training approaches to reduce HIV transmission during training. This includes new, innovative and cost-effective training approaches such as distance learning, web training, and email courses that enable people to study in their home environment where they are less likely to practice risky behavior. This type of training is

often cheap and quick, and may be extended to a larger number of people. Distance learning also allows staff to learn while continuing to perform their jobs.

**Provide pre-departure training:** when sending employees away from home for training, provide training on HIV/AIDS prevention and provide condoms.

**Train more people:** if possible increase the number of people trained to broaden individual skills bases in case they have to take on new responsibilities.

**Support rapidly promoted staff:** train junior staff in leadership skills so they are prepared to take on expanded responsibilities, and mentor them when they first take them on.

**Use training to rebuild local conservation capacity:** capacity building efforts should also focus on different subsets of communities including training and mentoring of HIV/AIDS-impacted orphans, youth, elderly, women, and men. Activities need to be flexible in order to deal with the new social structures caused by HIV/AIDS in communities.

**Integrate HIV/AIDS in training curricula:** incorporate HIV/AIDS aspects in training curricula for natural resource managers, including impacts and mitigation strategies. Provide condoms discreetly in training facilities.

## **Community resource management**

**Promote community prevention and wellness programs:** integrate HIV/AIDS awareness, prevention and wellness activities into community conservation programs in remote areas, if communities have poor access to health services. This provides a very important social service and helps to maintain community capacity for conservation. It may also increase community buy-in to conservation programs. It is best done with a health partner. In areas with high human fertility rates and poor access to family planning, HIV/AIDS programs can be combined with family planning using the same service delivery. Improvement of kitchen gardens can significantly improve household diets, an important factor for people living with AIDS.

**Seek alternatives to unsustainable resource use:** work with communities to find alternatives, e.g. alternative materials for coffins if timber is scarce. Promote sustainable use of medicinal plants including sound harvesting and more efficient extraction of active ingredients. Where use is very heavy, encourage cultivation of species that can be grown domestically.

**Develop sustainable natural resource-based micro-enterprises:** seek opportunities with low labor requirements to relieve environmental pressures and support AIDS-affected communities (e.g. honey production, agroforestry, ecotourism). It may be difficult to single out AIDS-affected households for these enterprises, but it is important to ensure that they benefit from them and are not excluded by more powerful community members.

**Conserve indigenous knowledge:** document indigenous knowledge of local land and resource use. Mentor youth who apply the knowledge, if there is no older generation to do this.

**Support survivors to stay on their land:** encourage adults to make wills where appropriate, so widows and orphans can inherit property and land. Promote education for all children including girls and AIDS orphans, so that they have better opportunities when adult.

**Establish community funds to promote alternative livelihoods:** provide small grants or revolving funds for communities to tackle HIV/AIDS, develop small-scale enterprises, and develop demonstration projects.

## **Research, communication and advocacy**

**Encourage champions to speak out about HIV/AIDS:** often a little initial support produces really strong champions. Peer champions are very effective in influencing others.

**Pilot new approaches to reduce conservation impacts:** try out promising ideas; we are still learning about best approaches and where to focus most effectively.

**Share experiences and best practices:** communicate what works, and also what has not worked so well on the linkages between HIV/AIDS and conservation. Share interest and coping strategies by participating in a newly developing community of practice on HIV/AIDS and conservation ([www.abcg.org](http://www.abcg.org)).

**Collaborate with other sectors:** collaborate with the health, development, agriculture and labor sectors. The conservation community cannot and should not fight this battle alone; we need to take part in a multi-sectoral approach to reduce impacts of HIV/AIDS on conservation.

**Advocate for better policies and strategies:** where appropriate, advocate for better policies, such as inheritance policies for land and resource rights.

**Encourage donors to fund integrated HIV/AIDS activities in conservation programs:** express interest in undertaking integrated programs; encourage donors funding both health and environmental issues to fund multisectoral approaches to HIV/AIDS.

## **Conclusion**

**The HIV/AIDS epidemic is having serious impacts on conservation particularly in Africa. Impacts will also occur in the ‘next-wave’ countries as HIV prevalence increases there. While the conservation community cannot stop the epidemic, we can take measures to try to maintain our capacity, reduce transmission in the areas we work in, and reduce impacts on natural resources and land use. In reality, we cannot afford to ignore HIV/AIDS in these parts of the world, if we are to achieve our long-term conservation goals. And experience has shown that the sooner action is taken, the more effective it is.**

## **Useful materials and websites**

*AIDS Brief: Community-Based Natural Resource Management.* USAID  
<http://www.afr-sd.org/Environment/EnvironmentProducts.htm>

*AIDS Toolkit: HIV/AIDS and Community-Based Natural Resource Management.* USAID  
<http://www.afr-sd.org/Environment/EnvironmentProducts.htm>

*AIDS Epidemic Update.* Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization. Geneva, Switzerland. 2003. [www.unaids.org](http://www.unaids.org)

*FAO, HIV/AIDS and the forestry and wildlife sector.* Food and Agriculture Organization of the United Nations. 2004. [www.fao.org/forestry/hiv-aids](http://www.fao.org/forestry/hiv-aids)

*Effective Responses to AIDS: The Conservation Sector.* Health Economic and HIV/AIDS Research Division, University of KwaZulu-Natal. [www.nu.ac.za/heard](http://www.nu.ac.za/heard)

*HIV/AIDS and Natural Resource Management Linkages.* Proceedings workshop Sept. 2002, Nairobi, Kenya. Africa Biodiversity Collaborative Group. [www.abcg.org](http://www.abcg.org)

*HIV/AIDS and the Public Sector Workforce: An action guide for managers* by Bill Rau. 2004. Family Health International and Futures Group.

*Securing Africa's Future: Biodiversity and Health and HIV/AIDS Workshop.* Proceedings from the Global Biodiversity Forum for Africa. June 2004. Tanzania. UNDP Equator Initiative. <http://www.undp.org/equatorinitiative/docs/BiodiversityandHealthWorkshopProceedings.doc>

*The Trampled Grass: Mitigating the Impacts of Armed Conflict on the Environment* by James Shambaugh, Judy Oglethorpe and Rebecca Ham. 2001. Biodiversity Support Program. [www.bsponline.org](http://www.bsponline.org)

*Uniformed Services Programming Guide: A guide to HIV/AIDS/STI programming options for uniformed services.* 2003. UNAIDS. [www.unaids.org](http://www.unaids.org)

*Workplace Policy Builder.* Free computer software program helping companies develop workplace HIV/AIDS programs. Futures Group. 2004. [www.policyproject.com](http://www.policyproject.com)

*A Workplace Guide for Managers and Labor Leaders: HIV/AIDS policies and programs.* 2004. Smartwork Project, Academy for Educational Development. [www.smartwork.org](http://www.smartwork.org)

Australian Federation of AIDS Organizations [www.afao.org.au](http://www.afao.org.au)

## Authors

**Judy Oglethorpe**, World Wildlife Fund and **Nancy Gelman**, Africa Biodiversity Collaborative Group website [www.abcg.org](http://www.abcg.org); email [ecoregionsupportinfo@wwfus.org](mailto:ecoregionsupportinfo@wwfus.org)

The Africa Biodiversity Collaborative Group (ABCG) comprises U.S.-based international conservation non-governmental organizations with field-based activities in Africa. ABCG organizations include: African Wildlife Foundation, Conservation International, IUCN-The World Conservation Union, Wildlife Conservation Society, World Resources Institute, and World Wildlife Fund. ABCG explores emerging conservation issues, shares lessons learned, and seeks opportunities for collaboration. Recent issues explored by ABCG include: The Linkages between HIV/AIDS and Natural Resource Management; Food Security and Wildlife Conservation in Africa; Health Matters: The Importance of the Interface between Wildlife, Domestic Animal and Human Health for Conservation Success in Africa; Human Migration and Conservation: Issues and Interventions; Compensation for Land Lost for Protected Areas, etc. ABCG has been funded by The John D. and Catherine T. MacArthur Foundation, The Critical Ecosystem Partnership Fund, and the U.S. Agency for International Development.

