

limitations of delivery systems (28). Finally, it would work to build global support for new investment in AIDS treatment. After all, the public will support spending more money—but only if convinced that something can indeed be done (29).

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### VIEWPOINT

## Scaling Up HIV/AIDS Programs to National Coverage

Hans P. Binswanger

The most important issue in the fight against HIV/AIDS is how to scale up existing programs that are only reaching small numbers of people to the national level. Here, I present suggestions on how to tackle the daunting challenge of building truly national HIV/AIDS programs, based on insights gained from participatory, decentralized rural development experiences and from HIV/AIDS programs.

In most of Africa, there are examples of excellent HIV/AIDS prevention, mitigation, and care projects. However, these projects reach only a small fraction of the population. Like expensive boutiques, they are only available to a lucky few.

A shocking example of limited reach is the Kagera Region of Tanzania, the first region hit by HIV/AIDS 16 years ago. The region has been studied by many scholars and experts. An estimated 200,000 of the region's 1.9 million

inhabitants are AIDS orphans. In addition to health posts and hospitals, some 10 nongovernmental organizations (NGOs) provide HIV/AIDS services. They are staffed by dedicated volunteers, but they are dramatically underfunded. The NGO leaders pointed out that they operate mainly in two out of five districts, leaving the other three with virtually no services. In the two districts on which they concentrate, they reach not more than 5% of the population with any of the HIV/AIDS services (counseling and testing, care of opportunistic infections, home-based care, support to orphans, etc.).

Extremely low coverage characterizes most of sub-Saharan Africa. In the Ivory Coast, only two out of eight regions have any programs in rural areas, and the services are confined to prevention; only a very small percentage of the estimated 6.3 million Ivorians living in rural areas are being served. In most other countries in Africa, HIV/AIDS services are only available in the largest cities, and even there the reach is limited. For example, in Mutare, the third largest city of Zimbabwe with a population of some 200,000, only 3% of patients classified as bed-bound or housebound (and who might qualify for inclusion in a home-care program) were being visited by any agency within the city (1).

African countries cannot afford a strategy of gradual expansion of the "boutiques"—which seems an appropriate way to characterize the existing AIDS projects and programs—to include more patients than just the lucky few and

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cover all areas of a country. Such an approach would make services available quickly in only the towns and villages where expansion occurs early. For years it would leave the majority of the population without access to counseling and care. Many more millions would be needlessly infected, and millions of orphans would grow up without any support. It is crucial for us to determine, therefore, how to scale up existing small programs to the national level (2). This problem has received little attention in the literature, but we cannot continue to sweep it under the rug.

A national HIV/AIDS program has many components that are executed by different actors, who belong to different sectors. The components include prevention, orphan care, the cleaning of the blood supply, and the reduction of risk of mother-to-child transmission. Some components require collaboration of several sectors, such as the health, education, communication, agriculture, and military communities. For example, seven ministries are involved in the AIDS prevention activities of the Population and AIDS Control Project in Chad. Cleaning the blood supply, on the other hand, involves only the health sector. Even when only a single sector is involved, there may be several actors, such as a government service, an NGO (like the Red Cross), and a private sector laboratory. The challenge is to provide all the actors in the multiple sectors with the training, financial resources, and other inputs needed so that they can act in a reasonably coordinated manner.

Programs that have reached truly national coverage have focused on relatively simple goals. The 100% condom program of Thailand, for example, involved only two sectors: the health and the police departments (3). Of course, 100% condom use in commercial sex remains a necessary component of any program. But it is simply no longer sufficient. An adequate response to the HIV/AIDS crisis must include many components, multiple sectors, and many different actors. However, such complex programs are difficult to scale up, as has been shown by the failure of integrated rural development projects of the 1970s and 1980s (4).

### Lessons from Rural Development

The integrated rural development projects of the 1970s and 1980s, carried out in a large number of developing countries, relied on central sectoral agencies (such as agriculture, infrastructure, education, health) for the planning and execution of the multiple components of the programs. Neither private enterprises nor NGOs were heavily involved. Beneficiary populations were at best consulted during project preparation, but participated little in the planning, design, and execution. The resulting coordination problem was very difficult to overcome. Sector agencies rarely were willing or

able to implement what had been agreed on. The fundamental lesson is that it is impossible to scale up multisector programs by relying on central sector agencies for implementation.

The centralized approaches have now been replaced with decentralized and participatory mechanisms of planning and execution, including a much broader range of actors. Local governments or development committees plan and execute their own projects, using locally available labor and materials and matching grants from donors or their own governments (5). They obtain training and technical services from government agencies, the private sector, and NGOs. At the local level, what needs to be done and how to do it are readily apparent, and the cross-sectoral coordination problems are reduced significantly. Moreover, accountability of service providers and contractors to local populations is easier to achieve than with distant agencies.

The need for strong central coordination does not disappear, but the role shifts to the setting of policies and program parameters, cofinancing of the programs, facilitation and training, monitoring, and evaluation.

### How to Scale Up

The following suggestions borrow insights from new rural development programs and from the lessons learned in the HIV/AIDS programs. For any country, the suggestions would have to be adapted to the national conditions.

*Build on available models to achieve behavioral changes.* The boutiques have had time to develop culturally adapted best practices. Their staffs and volunteers can train all those involved in scaling up. An example is a USAID-financed NGO in Guinea on which the subsequent rural HIV/AIDS prevention campaign was built. In the Katete District in Zambia, community AIDS care committees support about 1500 orphaned children. This program was established in 1994 after the hospital AIDS team had carried out a survey to assess the magnitude of the problem.

*Involve all those who are willing to help.* Staff and elected officers of local or district governments and services, private firms, persons living with HIV/AIDS, community-based organizations such as churches or mosques, producer associations, local chambers of commerce, and NGOs (to name a few) should all be active participants. For example, in the Lusaka Diocese in Zambia, church members are being mobilized as care supporters. About 100 such supporters have been recruited; they help families of terminally ill patients with anything from gathering firewood to administering medicines. Over 3000 families have been or are being served this way (6).

*Rely on community participation and local coordination* (Fig. 1). There are enormous variations in needs and capabilities across

communities and districts. Only local stakeholders will be able to know these local conditions and put the required programs in place (7-9). The Abengourou case discussed below provides an example.

*Start with existing capacities, and build them through "learning by doing."* Local programs must build on existing capacities, even if they are weak. Their improvement becomes one of the goals of the program. In the state of Kano in Nigeria, an action plan for the September to December 1999 period included the training of 30 agricultural extension agents, who in turn would work with 12 NGOs, who in turn would help create village volunteer groups to train an estimated 30,000 individuals.

*Focus financing on essential supplemental inputs.* Most participants in the program will have to use their own resources, such as donated time and management capacity. Schoolteachers, agricultural extension agents, religious leaders, and private sector employees can devote a fraction of their time to AIDS education and mobilization. However, they will need incremental inputs, which include their own training, materials such as condoms, gloves, teaching materials, money for transportation, test kits and drugs for sexually transmitted diseases (STDs) and opportunistic infections, etc. Government workers will also need an enabling decree from the government permitting them to use their work time for helping the national HIV/AIDS program.

*Treat prevention as first priority.* To receive funds, any district committee would have to demonstrate that it is planning and implementing a well-targeted prevention program.

*Information, education, and communication are not sufficient to produce behavior change.* Intensive and highly participatory approaches are needed. The conclusion from the TANESA (Tanzania Netherlands Support on AIDS) program in Tanzania is typical: "Interventions aiming at awareness and higher knowledge levels can be organized in a top-down manner, but behavior change interventions must involve the targeted populations themselves. The people who are at risk must participate in identifying risk behaviors and risk situations, in analyzing gender-specific risk factors, and in planning, implementing, monitoring, and evaluating intervention activities" (7).

*Allow for earmarking of HIV/AIDS funding.* Denial and fear are active forces in Africa, and local and national decision-makers do not allocate funding to something about which they cannot talk.

*Make funds available locally and do not allocate them to predefined categories.* Local HIV/AIDS committees will need to have direct access to the incremental resources. These should be deposited into local bank accounts over which the committees have full control. Committees must be able to allocate

the resources to participating organizations or community groups, and therefore be able to transfer funds directly to them. Procurement mechanisms must be extremely simple, allowing for local shopping by the committees or participating organizations to whom funds are transferred. Only by giving local committees all these flexibilities will they be able to translate their action plans into rapid results.

**Promote accountability.** Accountability must be ensured to users of the services through transparent budgeting, disbursement, and accounting procedures. Upward accountability to government and donors will be strengthened by these procedures as well.

**Improve fiscal sustainability by additional national and local resource mobilization.** In a district with 300,000 people and an HIV prevalence of 5 to 10%, a comprehensive HIV prevention program with STD control, intensive health education, youth activities, condom promotion and distribution, training of health workers, and maintenance of a safe blood supply could cost \$350,000 (or \$1.16 per person; \$3.50 per sexually active adult) (9). This estimate does not include capital costs or time of government employees and volunteers. Whatever the limited resources in a district may be, these should be prioritized and spent in a way to realize maximum benefits. In the search for financial sustainability, cost recovery needs to be considered. In particular, condoms should be sold, private sector firms should finance programs for their workforce, and NGOs need to seek donations. Widespread ownership and accountability to users of the programs is important.

**Start by covering an entire district or region.** A program that can cover an entire district or region can be scaled up to the national level. Partial coverage with an AIDS prevention and other components has been achieved by TANESA in the Magu district in the Mwanza region in Tanzania (9). The successful example of Abengourou is discussed below.

**Replicate the district or regional model across the country.** This sequence was used in the condom program of Thailand (3), and a recent initiative in Guinea is discussed below.

### Scaling Up to a Region: Abengourou

In the Abengourou region of the Ivory Coast, which has a population of about 444,000, Belgium is supporting a health project with a significant HIV/AIDS component. A regional HIV/AIDS committee, led by Dr. Karamoko Touré from the Regional Tuberculosis Center, is coordinating the regional HIV/AIDS program that includes prevention and care components. The program has most of the characteristics discussed above: (i) HIV/AIDS committees involving different sectors and actors are staffed by about 100 volunteers from health, education, NGOs, private enterprises, etc. They exist at the district and cantonal level. (ii) The program has obtained strong buy-in from Chris-

tian and Muslim religious leaders and from traditional chiefs. (iii) The district committee receives proposals from the cantonal committees and other voluntary committees in schools or elsewhere. (iv) After approval, the money (about US\$70,000 per year) is disbursed to the committees, and they are free to use it for all their programmed activities without further approvals. (v) The committees buy stocks of condoms and other materials in the market or from the district committees. (vi) Committees must account for their expenses to the district HIV/AIDS committee. (vii) Policies are set by the national HIV/AIDS program.

Why has the successful Abengourou example not been replicated so far in the Ivory Coast? Multisectoral committees exist in all regions, but do not receive funds and materials because of excessively centralized and malfunctioning procurement and disbursement systems of governments and donors. (The flexible procedures of the Belgian donor system are a rare exception.) These problems are highly reminiscent of the failed integrated rural development projects. Elsewhere, such as in Tanzania, the scaling up of successful district-wide approaches has been held back by similar factors.

### Scaling Up a Multisectoral Program to National Coverage: The Guinean Approach

Based on the known risk factors in Guinea, models of the epidemic now project a prevalence rate as high as 6% for Guinea. The history of the epidemic in other countries suggests that prevalence rises exponentially after such a prevalence rate has been reached. Thus, reaching national coverage is of the highest urgency.

Over the last 12 months, the national HIV/AIDS program has made impressive gains. It has greatly improved its advocacy at national, sectoral, and regional levels, which has translated into greater awareness of HIV/AIDS even in rural areas. It is collaborating with 23 NGOs. It has accelerated prevention programs in the military, the schools, and in the programs supported by the Ministry of Youth. It has trained 65% of the health sector staff in syndromic STD diagnosis and treatment, and the required medication is now more available. It has trained all 1300 agricultural extension workers to assist in the dissemination of HIV/AIDS knowledge, a coverage equaled only in Cameroon. It has cleaned up the blood supply. And it is catching up with the verification of the HIV tests, which had been lagging behind.

However, most of the population has only fragmentary knowledge about AIDS transmission, and there have yet been few changes in risky behavior. To reach the entire population quickly, other resources have been identified by the national HIV/AIDS program and the government services involved in rural development: (i) several thousand traditional healers; (ii) several thousand birth attendants; (iii) about 15,000 community-based livestock helpers, who were chosen by the communities and then trained in livestock health and husbandry by the government livestock service; (iv) several thousand elected officials; (v) thousands of religious leaders (Many have already started to teach the population about HIV/AIDS. Involvement of religious leaders, thus, is another area where Guinea is in the lead.); and (vi) thousands of teachers.

The following program designed by the national HIV/AIDS program and the sectors will train all these people by 31 December



Fig. 1. The importance of community involvement.

2000. Training will last about 1 or 2 weeks and will involve topics such as general knowledge of HIV/AIDS and of its progression, prevention, mitigation, and care of HIV/AIDS patients. Approximately six teams of HIV/AIDS experts from various services and the AIDS service organizations would be formed. The training teams would set up multisectoral training camps at the level of each prefecture and of each large urban section. The leaders of the different frontline services and associations would invite their respective members to participate in these training programs. The trainees would receive reimbursement of their travel costs, a small per diem for the training, and would be housed and fed during the week.

During the last 2 days of the workshop, the trainees from each rural or urban municipality (the commune) would form a local committee. They would prepare their own multisectoral action plans to train their local population and to start the process of behavior change. The committee would then be given a small budget in cash or by check to finance incidental costs of their respective program for the first 6 months.

The initial objective in training of the population would be to provide 80% of the rural population and 90% of the urban population with basic knowledge about HIV/AIDS and its prevention. The program should lead to a de-stigmatization of HIV/AIDS victims and to a rapid start in behavior change. During the early part of 2001, a random sample of the population would be given a small test about their knowledge of HIV/AIDS to see whether the target of 80 or 90% coverage had been achieved. The use of prevention techniques would also be measured.

During 2001, training camps at the prefecture level would evaluate the results, deepen the training and focus more sharply on participatory methods for behavior change and on mitigation, treatment, and support to caregivers, survivors, and orphans. Successful committees would prepare more comprehensive action plans, which would also be funded on the spot.

### Building on These Experiences

As suggested by the examples discussed above, it is possible to cover entire local government areas or districts with HIV/AIDS programs that include several components, multiple sectors, and many actors. Once a single district can be covered, the approach can be scaled up quickly to national levels. But this will only happen if governments, multilateral institutions, and bilateral donors are willing to empower communities and local and sectoral HIV/AIDS committees with financial resources and enlist those people who have struggled for years in the small, underfunded boutiques to train and guide the large numbers of locally credible volunteers needed to reach the entire population.

As part of the Intensified Action for Africa of the UNAIDS partners, the World Bank can help national AIDS programs to improve the financial architecture of their programs and to radically simplify their disbursement and procurement procedures for the small amounts involved at the level of each committee. In this way, the many actors in multiple sectors who have to implement the different components of a national HIV/AIDS program can be properly trained and funded. The World Bank will complement the domestic resource mobilization efforts and grants

from external donors by acting as the lender of last resort for any unfunded component of national HIV/AIDS programs. Other UNAIDS partners, NGOs, and bilateral donors can then better focus their support on their respective areas of expertise.

The task of building truly national HIV/AIDS programs is daunting and risky, but feasible. Only by starting quickly and learning by doing can the risks of such a complex program be mastered. Waiting any longer for fear of making some mistakes will only further increase suffering and death, beyond the unspeakable levels they have already reached.

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### VIEWPOINT

## Global AIDS Epidemic: Time to Turn the Tide

Peter Piot

HIV/AIDS is catastrophic both from a public health perspective and in terms of its impact on economic and social stability in many of the most severely affected nations, including virtually all of southern Africa. A public health response alone is insufficient to address this devastating epidemic. Political leadership at the highest levels is needed to mobilize a multisectoral response to the impact of HIV/AIDS on educational systems, industry, agriculture, the military, and other sectors. With a few notable exceptions, political response was slow to mobilize in the early years of the epidemic, but response has dramatically improved in the past 18 months. The Joint United Nations Programme on HIV/AIDS (UNAIDS) is involved in ongoing efforts to encourage political leaders to make a multisectoral response to the epidemic a major focus of their national plans.

The AIDS epidemic is not only pushing biomedical research to its frontiers but is also taking public health into uncharted territories

in the national and global political arenas. It is sometimes argued that AIDS is treated unnecessarily as a special issue rather than as

another disease added to the long list of old and new health problems plaguing the developing world. Such a view does not take into account the full extent and nature of the pandemic.

1) In contrast to most health problems, it primarily affects young adults. This age factor results in at least two of the major consequences of HIV/AIDS, including the unusually high impact on the economy through lost productivity and the large number of orphans left behind, creating a generation of desocialized youth- and child-headed households.

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