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Full Length Research Paper

Impact of HIV/Aids on Human Capital and Economic Growth In Nigeria

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Abstract

Economic growth is such as fundamental and desirable phenomenon in the development process that every developing nation or even developed nations strive to achieve and maintain. From historical perspectives, economic growth has never and will never occur on its own (WHO, 2001). In addition to healthy manpower, it requires other stimulating factors such as strong capital formation, real investment, technical progress, and discipline. Equally, the high level presence of factors like Human Immune- Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), poverty and corruption among others, not only suppress, but retard the levels of actual and potential economic growth in a country. In summary, the effect of HIV/AIDS on human capital and economic development are multifaceted. What is required is a re-examination of many of the channels through which changes in the stock of human capital affect production and livelihoods.

Abstract: HIV/AIDS, Nigeria, environment.

INTRODUCTION

Background to the Study

At the heart of sustainable development lies the integration and balancing of social, economic and environmental priorities. In a world where pockets of privilege exist amid vast deprivation, such a quest fundamentally requires improving the well-being of those who are poor, marginalized or excluded, and sustaining those improvements. None of this is possible unless human resources are placed at the center of sustainable development. Despite welcome progress in many respects since the end of the Cold War, the world remains cleaved by grave inequalities, deep deprivation and continuing environmental degradation. Those features are hardening in the ever-larger areas of the world that find themselves in the grip of the HIV/AIDS

epidemic. Hard-hit parts of the world are seeing socio-economic progress wane and, in some cases, reverse. By robbing communities and nations of their greatest wealth their people AIDS drains the human and institutional capacities that fuel sustainable development (Hunter, 2000).

These are not just temporary setbacks. AIDS is sapping vital components and attributes of potentially successful development strategies. By draining human resources, the epidemic distorts labor markets, disrupts production and consumption, and ultimately diminishes the national wealth. Some countries bearing the brunt of such effects now face the prospect of 'un-developing'—of seeing their development achievements dissolve in the

wake of the epidemic (Hunter, 2000). Allowed to spread unchecked, HIV/AIDS weakens the capacity of households, communities, institutions and nations to cope with the social and economic effects of the epidemic. Productive capacities—including in the informal sector—are eroded as workers and managers fall prey to the disease. Flagging consumption, along with the loss of skills and capacities, in turn drains public revenue and undermines the State's ability to serve the common interest of development and human well-being (Smith, 2000).

Since its discovery in the early 1980s, HIV/AIDS has become a pandemic on a global scale. It is no longer only a health issue, but a substantial threat to economic growth and development, imposing a heavy burden first on families, then on communities and eventually economies. The impact of the pandemic is already being felt in most counties of the world. An estimate of 11 persons became infected every minute representing some 15,000 new infections every day or more than 5.4 million for the entire year (WHO, 2000). Similarly, the Joint United Nations Program on HIV/AIDS (UNAIDS) estimated that as of 2003, about 38 million persons were HIV positive worldwide and almost 26 million were workers between 15 and 49 years, and of the 2.9 million HIV/AIDS related deaths in 2003, 2.2 million were from Sub-Saharan Africa. While the Sub-Saharan African region contains only 10 percent of the world's population, it accounts for 60 percent of the worldwide HIV/AIDS cases (UNAIDS Africa Fact Sheet, 2004). This implies that the most productive age group is mostly affected and this has implications for families and economies in terms of income, employment and labor market changes (UNAIDS, 2004).

Nigeria, the most populous country in Africa with a population estimate of about 140 million in 2006 (NPC, 2007), is fast gaining its share of the HIV/AIDS scourge. Nigeria has the highest prevalence rate in West African Sub-region and the third highest prevalence of any country in the world with a five percent population prevalence rate, that is, over 3.6 million people (UNAIDS/WHO, 2004).

The widespread and rising HIV/AIDS is a problem that could be affecting the growth of the Nigerian economy, which, led to compounding poverty, low standard of living, low productivity, increased unemployment, morbidity and mortality rates and ultimately obstruct development efforts. Thus, with the alarming growth of the disease within the country, the study is concerned with the possible effects of HIV/AIDS on economic growth in Nigeria and the extent to which various policies can alter them.

The objective of this study is to assess the impact of HIV/AIDS on human capital and economic growth and development in Nigerian. Specifically, the study will try to determine to what extent does changes in HIV/AIDS prevalence rate bring about changes in the rate of

economic growth and development. It will also look at the effects of the epidemic on savings and standard of living. And lastly, it will proffer, based on the findings, policy recommendations to appropriate authorities.

Statement of the Problem

There is no doubt that HIV/AIDS is a reality in Nigeria and its widespread and existence as well as magnitudes pose a real threat to the country's economic growth. It's been established that economic growth as well as human capital development cannot thrive in the mist of unhealthy workforce. Cuddington (1993) categorized the effect of HIV/AIDS into those associated with rising morbidity and those associated with rising mortality rates for particular age cohorts, especially sexually active adults and children infected at birth. He maintained that the rise in morbidity will have two immediate effects: a negative labor productivity effect and a positive health care expenditure effect. With its global reach, HIV /AIDS is blocking progress towards the Millennium Development Goals that the international community has committed to reach by 2015. In heavily-affected countries, the epidemic is erasing hard-earned gains—a sign of what potential lies in store for other countries that fail to prevent or control such a dynamic epidemic.

As HIV prevalence levels rise, poverty deepens. HIV/AIDS undermines food security. In combination with other setbacks, AIDS can trigger food crises, even famine. As many as 13 million people face possible starvation in southern Africa in 2002. This is causing this is a mix of adverse weather conditions, policy mistakes, environmental degradation and AIDS. Each of the affected countries is in the midst of a long-standing, severe HIV/AIDS epidemic, with prevalence rates exceeding 10%. The epidemic stands squarely in the path of achieving education for all. Schooling is suffering as enrollment rates drop, poor families remove their children from school, and teachers and support staff succumb to the epidemic. A cornerstone of development education is being undermined. An estimated 330 000 children under the age of five died of AIDS in sub-Saharan Africa in 1999. That toll has risen in subsequent years. Vertical transmission of HIV/AIDS from mother to child is further increasing maternal and child mortality rates, causing the goals set in these areas to slip further from reach. These effects, in turn, may alter savings behavior as well as investment in education.

The negative labor productivity effect will arise because sick or worried workers are less productive than healthy, happy workers. The positive health care expenditure effect refers to increased expenditures by households and the public or private health care system to assist HIV/AIDS patients and their families in coping with their deteriorating health.

The gradual rise in mortality rates caused by AIDS will first lead to a negative population growth rate effect

because the fertility rate may change as more women alter their childbearing behavior due to rise in HIV/AIDS. However, it's in the light of the above problem posed by HIV/AIDS, that the rest of this paper will focus on exploring the impact of the syndrome on human capital development and economic growth, and ways of ameliorating the scourge in order to improve human capital, economic growth and development.

Objectives of the Study

This study is mainly carried out with a view to unraveling the impact of HIV/AIDS on human capital and economic growth in Nigeria, however the specific objectives includes:

- i). To explore the etymology and growth of HIV/AIDS
- ii). To examine the damages/effects the syndrome has caused the nation in terms of human capital and economic development.
- iii). To appraise the roles and efforts of the federal government through national action for the control of AIDS (NACA) in combating the problem.
- iv). To examine the effort of the international agency and the millennium development goal (MDGS) in ameliorating the ailment in Africa, with special focus in Nigeria.

Research Questions

- i). What are the causes of increased spread of HIV/AIDS in Nigeria?
- ii). What are the economic implications of the HIV/AIDS in Nigeria?
- iii). What are the impacts of HIV/AIDS on human capital development in Nigeria?
- iv). What are the roles of government in achieving a sustainable workforce and economic development through a healthy nation?

Research Hypothesis

The research is guided by the following hypotheses:

H1: The spread of HIV/AIDS has led to the poor growth rate of human capital and economic growth in Nigeria.

H0: The spread of HIV/AIDS has not led to the poor growth rate of human capital and economic growth in Nigeria.

Scope of the Study

This project study will cover the impact of HIV/AIDS on human capital development as well as economic growth and development.

Limitations of the Study

The limitation of this research work is as follows:

Time constraint

The time within which to submit this project necessitates the adoption of the sampling in the research. This will limit the researcher from gathering all the necessary material and information for this study.

Inadequate finance

There are several issues relating to economic development as it affected by HIV/AIDS, so any attempt to cover and gather all materials relating to it in this research would entail heavy financial commitment which the researcher does not have. Such a random sampling was adopted.

Significance of the Study

The study is of great significance in that economic growth and human capital development cannot take place in a vacuum, it requires a vibrant and healthy workforce, for it to be achieved. As such the essence of this study cannot be overemphasized. In Nigeria, the HIV prevalence rate among adults ages 15–49 is 0.9 percent. Nigeria has the second-largest number of people living with HIV (WHO, 2009).

The HIV epidemic in Nigeria is complex and varies widely by region. In some states, the epidemic is more concentrated and driven by high-risk behaviors, while other states have more generalized epidemics that are sustained primarily by multiple sexual partnerships in the general population. Youth and young adults in Nigeria are particularly vulnerable to HIV, with young women at higher risk than young men.

There are many risk factors that contribute to the spread of HIV, including prostitution, high-risk practices among itinerant workers, high prevalence of sexually transmitted infections (STI), clandestine high-risk heterosexual and homosexual practices, international trafficking of women, and irregular blood screening etc. since the active population are those who are mostly affected by this scourge, the study will provide practical solutions on way forward in combating the syndrome.

Operational Definition of Terms

HIV: Human Immune- Deficiency Virus

Economic growth: This refers to the increases in per capital income of a person over a period of time.

AIDS: Acquired Immune Deficiency Syndrome

Human capital: This is the population of countries which are willing to work and are employable.

MDGS: Millennium development goals

UNAIDS: Joint United Nations Program on HIV/AIDS

NACA: National action for the control of AIDS

Maternal mortality rate: The rate at which mother or child dies during childbirth.

Organization of the Study

This study consists of five chapters, chapter one includes the background to the study, part of the study, the statement of research problem, research hypothesis, objectives of the study, the scope and limitations of the study, the significance of the study and operational definition of terms. Chapter two is the literature review and theoretical framework. This includes the concept of human capital development and economic growth, macro-economic impact of HIV/AIDS, efforts by the federal government through NACA in combating HIV/AIDS, the role of international agencies in combating HIV/AIDS, as well as the way forward, and finally theoretical framework.

Chapter three deals with the research methodology which contains introduction, source of data, population of sample size and sampling technique, method of data collection and method of data analysis. Chapter four involves data presentation and analysis, test of hypothesis, and discussion of findings. Chapter five contains summary, conclusion, recommendations.

Literature Review and Theoretical Framework

Historically, economic growth has almost always been a fundamental and desirable goal, particularly when one views it from the following dimension: The necessity of growth for increasing the standard of living; its role in facilitating the maintenance of full employment, and its effect on poverty reduction. Simon (1971) defined a country's economic growth as "a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands". Gylfason (2004) in his explanation of economic growth viewed a country's economic growth in terms of efficiency through technical change. He further explained that efficiency allows us to squeeze out more output from a given input, and that is what growth entails. Ansel *et al.*, (2002) explained economic growth as "a long-run process that results from compounding economic events over time, and, to measure economic growth, economists generally examine the rate of change in real GDP from one year to the next". In one of the early economic literatures, Smith (1776) in his monumental work "Wealth of Nations" visualized that economic growth results from specialization of labor, application of new technology as

well as through international trade.

The hard fact is that the global HIV/AIDS epidemic is still in its early stages. In countries that are currently hardest hit, the epidemic and its effects will churn on for many years. Those countries have had the misfortune of encountering the early advance of AIDS. But, in many dozens more, including some of the most populous in the world, HIV/AIDS now also demonstrates its ability to rapidly adapt and spread in new settings. In our increasingly interdependent world, the widening spread and cumulative impact of the AIDS epidemic mean that development everywhere is threatened. It's in the light of the above that the rest of the study aims at examining the impact of HIV/AIDS on economic growth in Nigeria.

Overview of HIV/AIDS in Africa

The disease strikes the poor harder, more than 95% of people living with HIV/AIDS are in low-income countries, and 70% of them are in sub-Saharan Africa. In high-income countries, poor and marginalized groups account for an increasing share of new infections. Women and young girls are increasingly affected, reflecting persistent and glaring gender inequalities, despite political commitments to the contrary (NPC, 2006). New data compiled in UNAIDS' Report on the Global HIV/AIDS Epidemic, 2002 [www.unaids.org] highlight troubling trends:

- 1). The global epidemic is still in its early stages. It is growing further, including in countries that, to date, have been spared the brunt of its impact (NPC, 2006).
- 2). HIV prevalence is climbing higher than previously believed possible in the worst-affected countries. In some, more than one-third of the adult population is HIV-infected (NPC, 2006).
- 3). The epidemic is spreading rapidly into new populations and areas in Africa, Asia, the Caribbean and Eastern Europe (especially in countries of the former Soviet Union) (NPC, 2006). In parts of the world where the epidemic had appeared relatively stable, new data show sudden, rapid increases in prevalence.
- 4). In parts of Western and Central Africa, where HIV infection rates have been high but relatively stable, there is now evidence of rapidly accelerating HIV spread. In Cameroon, for example, the adult prevalence rate, which remained in the low single digits from 1988 through 1996, now stands at almost 12%. Some states in Nigeria, Africa's most populous nation, are already experiencing prevalence rates as high as those now found in Cameroon (Cohen, 1999).

Some of the world's most populous countries, such as China and Indonesia, are examples of just how suddenly an epidemic can emerge, even if, initially, it might take years for HIV spread to become apparent. In such cases, even a relatively low HIV prevalence rate would mean

many millions of people are infected (Cohen, 1999):

- In China, where almost all cases of HIV/AIDS were previously transmitted through injecting drug use and unsafe blood practices, the epidemic is increasingly spreading through heterosexual contact. Countrywide, reported HIV infections rose nearly 70% in just the first six months of 2001 (Cohen, 1999: 17).

- Indonesia, hardly saw HIV for more than a decade. Infection rates are now rising steeply among injecting drug users and sex workers, and among blood donors (a sign of HIV spread in the wider population).

- And in India, already home to almost 4 million people living with HIV/AIDS, the virus is spreading beyond high-risk groups into the wider population (Cohen, 1999: 19).

Several countries that have undergone dramatic political and economic changes (such as those in Eastern Europe and in the former Soviet Union) are now home to the world's fastest-growing HIV/AIDS epidemics (Cohen, 1999:19).

- The cumulative number of reported cases in the Russian Federation has increased more than 15-fold in just three years (from 11 000 in 1998 to 177 000 at the end of 2001). In Estonia, reported infections have soared from 12 in 1999 to 1474 in 2001 (Hartha, 2008: 11).

- HIV has begun spreading swiftly in the countries of central Asia, including in Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. In conflict zones in Africa, a rise in HIV prevalence is being detected (Hartha, 2008: 11).

- HIV prevalence is rising in urban areas of Angola, for example, and there is reason to fear a similar trend in the Great Lakes region, where the massive displacement of people and disruption of social structures and governance worsen people's vulnerability to the epidemic. No region is being left unscathed (Hartha, 2008: 17).

- Some Caribbean countries have infection rates second only to those in Africa. In Haiti, adult HIV prevalence exceeds 6%, and in the Bahamas it is almost 4%. In 10 other countries in Latin America and the Caribbean, at least 1% of the adult population is estimated to be living with HIV (Hartha, 2008: 17).

- In the Middle East and North Africa (where 500 000 people were living with HIV/AIDS at the end of 2001), HIV infection rates are increasing.

- In many high-income countries, prevention efforts are stalling and the epidemic is moving into disadvantaged communities, with women making up a larger proportion of new infections than before (Hartha, 2008: 19).

Contrary to earlier expectations, the epidemic is not yet 'leveling off' in heavily affected countries, with severe consequences for their demographic structures.

Macroeconomic Effect of HIV/AIDS

Cuddington (1993) categorized the effect of HIV/AIDS into those associated with rising morbidity and those

associated with rising mortality rates for particular age cohorts, especially sexually active adults and children infected at birth. He maintained that the rise in morbidity will have two immediate effects: a negative labor productivity effect and a positive health care expenditure effect. These effects, in turn, may alter savings behavior as well as investment in education. The negative labor productivity effect will arise because sick or worried workers are less productive than healthy, happy workers. The positive health care expenditure effect refers to increased expenditures by households and the public or private health care system to assist HIV/AIDS patients and their families in coping with their deteriorating health. The gradual rise in mortality rates caused by AIDS will first lead to a negative population growth rate effect because the fertility rate may change as more women alter their childbearing behavior due to rise in HIV/AIDS.

Cuddington and Hancock (1995), used a neoclassical one sector, two factor growth model to predict economic growth in Tanzania and Malawi. They found that over the period 1985-2010, average annual G.D.P, growth would be reduced by 1.1 percentage points in Tanzania and 1.5 percentage points in Malawi. Also, should AIDS treatment costs be entirely financed from savings, the AIDS epidemic would reduce per capita G.D.P,s growth by 0.3 percentage points and 0.1 percentage points in Malawi and Tanzania respectively. The study is important as it developed a simple but tractable framework for analyzing the effects of HIV/AIDS on the growth paths of potential gross domestic product and per capita G.D.P.

Similarly, in Southern African Countries, rates of population growth have already decreased by between 0.6% and 1.5% by 2000. By the year 2010, rates of population growth are expected to decline by up to 3 percent for the worst affected countries, reflecting rising mortality, reduced fertility rates of HIV infected women, and declining birth rates (U.S. Bureau of the Census, 2000). Kambou *et al.*, (1992) investigated the impact of AIDS in Cameroon, applying an eleven-sector computable general equilibrium (CGE) model for the period 1986-1991. They conclude that over the period, the loss of an urban worker had seven times the negative impact on production as would the loss of a rural worker, and GDP growth rate was reduced by 1.9 percent per year. Daudu *et al.*, (2003) investigated the effect of HIV/AIDS on Farm Families in Makurdi L.G. using frequency distribution, percentages and Chi-square. They basically used primary data, and conclude that HIV/AIDS has serious adverse effect on the productivity, farm income and standard of living of the affected farm families. Education of rural households on the danger of HIV/AIDS and ways of preventing or minimizing its spread is recommended by the study.

Impact On Health

Vital in its own right, the improvement of human resources

is essential for development. In particular, improved health and educational levels become pathways for moving out of poverty and cementing long-term economic growth. But the added demands for 30 000 Africans who were receiving antiretroviral therapy in early 2002. An estimated 6 million people in developing countries are in urgent need of antiretroviral treatment. WHO estimates that it should be feasible to provide that treatment to about 3 million people by 2005. With antiretroviral drug prices having dropped from US\$10 000 treatment and care are putting health budgets and systems under huge strain, just when the epidemic is claiming its heaviest toll among health workers and related resources (WHO, 2005).

In hard-hit countries, many hospitals are reporting a shortage of beds, for example, which means that people tend to be admitted only in the later stages of illness, putting their recovery in jeopardy. Rising rates of HIV infection among health workers lead to more absenteeism, reduced productivity and higher training and recruitment costs. Some countries have been experiencing five-to-six-fold increases in health-worker illness and death rates. The increased workloads and stress might further spur the departure of health workers into the private sector or even abroad. The quality of care suffers, as does the capacity to provide essential HIV/AIDS services, such as voluntary counseling and testing (WHO, 2009).

Beyond the increased strain on hospitals and health-care facilities, the cost of providing basic health care soars as the epidemic expands. Partially in response to that reality, African governments committed themselves in Abuja in April 2001 to increase their health spending to 15% of government revenue.

Even reaching that target (a long haul for many countries) would not match the needs generated by the epidemic, especially if treatment access is to expand beyond the mere to around US\$300 (for a year's treatment), treatment should be reaching many, many more people.

Treatment access is not only human rights imperative. It prolongs a healthy life and enables people living with HIV to remain productive, thereby reducing the stigma and discrimination to which people are so frequently exposed.

Treatment access is an investment in human development for the broader good of society. In some countries, nongovernmental organizations deliver a significant proportion of accessible care and support for HIV-infected and affected populations. Community-rooted home-care initiatives, often organized by people living with HIV/AIDS themselves, have become an outstanding feature of the epidemic.

But if home-based care is to be sustainable, it requires support from formal health, welfare and other social sectors.

Impact On Education Systems

Not only do higher education levels improve access to employment and income security, boost the status of women and lead to improved health indicators, they also feature prominently in the fight against AIDS. But the epidemic creates a double-jeopardy situation. On the one hand, it reduces the quality of training and education that can be provided by institutions. On the other, it leaves fewer people able to receive the benefits of learning. AIDS is depleting societies' overall stock of human capital in some cases, in conjunction with a serious brain drain of professionals Gylfason (2004).

Already, school enrolment is shrinking in some countries; children are being taken out of school to care for parents and family members and to avoid unaffordable schooling costs. AIDS-related infertility, resulting in a decline in the birth rate, is further depleting family resources. More and more children and young people are themselves infected and do not survive their schooling years. In some countries in Africa, school enrolment though, can be the same: a slump in the quality of teaching and learning.

Equipping young people with the knowledge, skills and capacity to protect them against HIV/AIDS is a prerequisite for turning the epidemic around. There is evidence that greater educational achievements correlate strongly to reduced risky behavior in places where the epidemic is well entrenched. Yet, as schooling deteriorates, an ideal venue for prevention programs that reach young people and put them at the center of the response can be lost also. With their formal education cut short, boys and girls may have to resort to survival strategies that include sexual transactions that expose them to higher risks of HIV transmission.

The level of literacy rate is reported to have fallen by 20–36% due to AIDS and orphan hood, with girls most affected. These discriminatory effects of the epidemic on the poor, and especially on girls, in terms of enrolment and completion of schooling, can be countered with special incentives for example, subsidies or the waiving of fees Gylfason (2004). AIDS is also undermining the ability of education systems to perform their basic social mandates, as more teachers and administrative staff are lost to the disease.

The implications can be dramatic in rural areas, where schools can depend heavily on one or two teachers, the loss of whom can deprive an entire community of students of their schooling. In developing countries, the education sector can rarely cope with the additional costs associated with training and replacing teachers. So, budgets tend to be reshuffled by cutting spending on maintenance of buildings and infrastructure, or learning materials and teaching aids, for example. The effect, Advance human resource planning is vital to prevent such collapse (UNDP, 2009).

Just as important as training more teachers is the need to prevent and, where necessary, replace the sudden losses of experience and institutional memory by, for example, expanding access to HIV/AIDS medicines that can keep teachers alive and productive, and by re-enlisting retired teachers.

The Impact On Households

Households are the first social safety net in all societies. They demonstrate remarkably strong resilience in the face of setbacks. But to expect households to cope with HIV/AIDS without support from the broader society is unrealistic (Smith 1776). The loss of family breadwinners to HIV and AIDS strips households of hard-earned income and assets. Available resources are spent on care, funerals and sustaining a bare minimum of standard of living. Deeper debt for a while slows the slide towards destitution. Without support, poor households eventually risk imploding.

Studies in AIDS-affected countries in Africa and Asia indicate that income in AIDS-affected households can be less than half that of the average household. The sale of land—one of the prime assets of poor rural households is particularly frequent in such situations, as is chronic debt. Once deprived of their productive assets, such as land and livestock, households battle to recuperate sustainable livelihoods.

The transition from relative well-being to extreme poverty can be quite rapid in AIDS-affected households. Botswana provides an example of a country where, as a result of HIV/AIDS, per capita household income for the poorest quarter of households is projected to drop by 13% this decade (Smith, 1776).

Typically, women are saddled with most of the coping burden, as demand increases for their income-earning labor, household maintenance, child-care and nursing work. Because of this dependency, worsening female mortality undermines the well-being of households and communities. A survey in Zambia in 2000 revealed that 65% of households disintegrated and dispersed after losing a key adult female family member. Women represent a growing proportion of people living with HIV/AIDS and new infections are disproportionately concentrated among poor and illiterate young women. In the era of HIV/AIDS, promoting gender equality and empowering women are more vital than ever (UNDP, 2011).

In already impoverished settings, the vestiges of family- and community-based social safety nets fray further. Many of the millions of orphans left in the epidemic's wake are deprived of the parental emotional and physical security so vital in the formative years of childhood. As the graph below shows, young teenagers who have lost both parents are also more likely to be deprived of an education than peers who have not lost a parent.

The Impact On Rural Livelihoods

In a world of plenty, some 800 million people are undernourished and thousands die of hunger every day. These numbers are rising as the food crisis in southern Africa escalates, and the AIDS epidemic is further aggravating this situation (UNFPA, 2008). The Food and Agriculture Organization (FAO) has estimated that, since the early days of the AIDS epidemic, seven million farm workers have died from the disease. Another 16 million may die in the next 20 years if effective HIV/AIDS responses are not implemented. The agricultural output of community-based farming so vital to food security in many developing countries and the supplementary incomes from wage labor cannot be sustained if AIDS is allowed to rage unabated.

Illness and death in farming households leave fewer people available to work in the fields. When one or two key crops must be planted and harvested at specific times of the year, losing even a few workers during the crucial planting and harvesting periods can scuttle production. As extension workers and other staff fall ill, a breakdown in agricultural support services exacerbates the problem. As the availability of labor lessens, a smaller range of crops is grown on smaller plots of land, with the remainder surrendered to the elements and degradation. Maintenance work suffers on irrigation ditches, tree planting, drainage run-offs or fencing causing the farming operation to become less sustainable. As people die or are forced to abandon rural communities, valuable local knowledge (about soils, local fauna, climatic patterns, ways to improvise in times of hardship, etc.) is lost. The effects on rural economies and food security can be severe and long-lasting.

Fleeing hunger and insecurity, people face new adversities among them the heightened risk of HIV transmission. Women, in particular, may find themselves in circumstances where they are more susceptible to HIV transmission, as a result of sexual violence, or having to trade sex for food and other basic necessities. Whether and how people cope depends on the distribution of power, assets and income. In many regions, women are the linchpins of rural economies, both as farmers and wage-earners. Yet, access to productive resources, such as land, credit, knowledge and skills, training and technology, is typically determined along gender lines. Usually, women lose out. The death of a husband might leave a widow in even more precarious circumstances deprived of access to the land, house, livestock and other assets she helped develop and maintain. A rights-based approach to HIV/AIDS must address these and other forms of discrimination, which worsen poverty. Other opportunities for action include:

- Developing AIDS-awareness programs that are tailored for rural communities

- Introducing microcredit schemes that can help sustain female-headed households
- Equipping agricultural extension workers with HIV/AIDS knowledge and skills
- Ensuring that farming and other essential life skills are passed on to young people
- Strengthening rural cooperatives
- Supporting home- and community-based care in rural areas

Also shaping the interplay between AIDS and food insecurity are broader factors, such as international trade relations and other economic policies. The new round of trade negotiations agreed to in Doha in November 2001 represents one opportunity to rectify such imbalances. Moves that remedy these inequalities can go a long way towards safeguarding rural livelihoods and bringing the AIDS epidemic to heel. Fairer access to global markets for low- and middle-income countries is one obvious corrective. Boosting sound environmental practices is another.

The Impact On Enterprises And Workplaces

A thriving production and trade sector is the engine of sustained economic growth. That, in turn, can be a boon for human development. The business sector itself is recognizing that AIDS takes a huge toll on workers and managers of enterprises formal and informal and that it can ruin efforts to achieve growth. The epidemic:

- cuts the supply of labor and skills
- Increases business costs
- Disrupts production and undermines productivity
- cuts incomes and reduces the market for goods and services
- Erodes savings and discourages investment
- Reduces revenue from taxation, just as spending on health and social services needs to increase (Simon, 1971).

HIV/AIDS affects productivity mainly through increased absenteeism, disrupted production, weakened workforce morale and the loss of skills and organizational memory, all of which forces costs up and drives productivity down. Comparative studies of East African businesses have shown that absenteeism due to HIV and AIDS can account for as much as 25-54% of company costs (Simon, 1971). In small and medium-sized companies, typically the backbone of local economies in many developing countries, these kinds of effects become amplified. Even in high- unemployment areas (with an apparently bottomless pool of un or semi-skilled labor), the drain on skills and knowledge is considerable.

Losing supervisory workers can be especially damaging. A general shortage of skilled workers and management-level staff in areas hard hit by the epidemic

means that positions stay unfilled for long periods at significant cost in terms of productivity. The effects can be particularly harsh on young workers who lose the opportunity to benefit from the skills and experience of more experienced colleagues. Investing in prevention programs in the workplace, and ensuring the greater involvement of people living with HIV/AIDS, makes good business and developmental sense. So, too, does provision of treatment and care. The fact that migrant and mobile workers can be at special risk of infection calls for special steps, built on solid research and understanding, to protect them against the epidemic.

Enterprises and workers can now draw on comprehensive guidelines for acting against HIV/AIDS in the workplace, developed by the International Labor Organization (ILO). Based on international standards, this Code of Practice on HIV/AIDS and the World of Work outlines the rights and responsibilities of governments, employers and workers in responding to the HIV/AIDS epidemic. Rights-based, it applies to a wide range of settings, including international partnerships, national action plans, enterprise agreements and work in the informal economy. As a voluntary instrument, it can be adapted to the needs of specific situations, sectors and regions (www.ilo.org). Through its combined impact on the labor force, households, communities, institutions and enterprises, HIV/AIDS can become a powerful brake on economic growth and sustainable development.

For those countries where national HIV/AIDS prevalence rates exceed 20%, annual gross domestic product growth has been estimated to drop by an average 2.6 percentage points. Sub-Saharan Africa's growth rate is estimated to have fallen by 2-4% as a result of AIDS. There are concerns that, in areas with rapidly expanding epidemics, such as the Russian Federation, economic output might also shrink as a result of HIV/AIDS, while the demand for greater public expenditure swells. In the Caribbean, another area with high prevalence, GDP in 2005 could be around 4.2% lower than it would be in the absence of the epidemic (Simon, 1971). Economic powerhouses are not escaping this fallout. By the beginning of the next decade, South Africa, which represents about 40% of Africa's economic output, faces a real GDP 17% lower than it would have been without AIDS. Studies also indicate that, for some high-prevalence countries, AIDS will discourage foreign and domestic investments that are vital as countries embark on sustainable development strategies (Simon, 1971).

It is important to distinguish the role AIDS plays in weakening economies from other negative factors such as declining terms of trade, debt burdens, volatile capital movements, weak governance systems, political instability, and violent conflict. But it might be that current modeling underestimates the impact on economic growth. It is still difficult, for example, to capture the interplay between economic growth and dysfunction in

public institutions, or the long-term economic effects when the supply and distribution of know-ledge and skills become severely distorted. More research is needed to probe more deeply the complex interplay between HIV/AIDS and sustainable development. More generous support for such research and analysis could help countries hone their understandings of the epidemic, and contribute to sound development planning, effective governance and a wider appreciation of the merits of investing in prevention, care, treatment and support.

The Impact On Institutions

The quality and range of public services and regulatory functions (from education, health and the justice system, to water and sanitation, telecommunications and transport) depend on flows of finance, and on the stock of public employees with the requisite skills and expertise. The AIDS epidemic threatens to eat away at all these assets (Simon, 1971). A recent study, in one badly affected country, provides a snapshot of the impact on the public sector. Total annual attrition in 1999–2000 rose almost six-fold in the period under review. Death was the highest cause of attrition. Across the public sector, mortality increased by a factor of 10 during the period of the study, with deaths disproportionately high among young adults of both sexes—a sign that HIV/AIDS is primarily responsible.

In the country's Ministry of Agriculture, the study found excess mortality in all occupational categories, with the rate highest among professional and junior technical staff. Many of the posts remained unfilled for long periods, with vacancies higher in rural than in urban areas—a sign that the epidemic's impact on public services is worse in rural areas, which are often already under-serviced.

By loading more pressure on national budgets and by weakening public institutions, the epidemic makes it even more difficult for States to perform their primary duties protecting citizens against human suffering, including hunger, disease and destitution. As the provision of essential services falters, the poor and most vulnerable households endure the worst of the consequences. The impact on social protection systems (such as public sector pensions and social security) can be significant. As fewer public sector employees reach retirement age, contributions by employers decline. At the same time, expenditures on sickness and death-related benefits and pensions for surviving dependents increase as a share of the government wage bill. What has proved crucial is the mobilization of all sectors across the State, civil society and business amid the consistent and visible commitment of leaders. The public and private sectors need to lead from the front (NACA, 2011).

In many countries, too, the epidemic is provoking new forms of mobilization as social Successful development

also requires that citizens trust the rule of law, that they believe the State protects their most basic interests, and that they can anticipate improved standards of living for themselves and their children. The AIDS epidemic weakens these and many other pillars of social cohesion. This is especially important in light of the fact that many countries in both the region with the fastest-growing epidemic (Eastern Europe) and the region with the highest national HIV prevalence rates (sub-Saharan Africa) are fledgling democracies, where governments are trying to foster the trust of citizens. The AIDS crisis has the potential to stymie these democratic transitions. networks and organizations emerge to confront AIDS, and this, in turn, is invigorating civil society. Community-based support networks are mobilizing, and social rights groups are advocating treatment access, human rights-protection and improved socioeconomic conditions. The activism and advocacy work of people living with HIV/AIDS has been central to boosting political commitments to fight the epidemic, and is a cornerstone of an effective response to AIDS(UNDP, 2009).

Way forward

The impact of HIV/AIDS whether global, societal, familial or individual is primarily a human impact. Fighting AIDS successfully is a people-centered quest, with solid human resource development as one of its key elements. Success in bringing the global AIDS epidemic under control occurs when policies, resource allocation and action reflect this essential fact: the fight against AIDS is inseparable from the broader agenda of realizing people's rights, safeguarding human resources and moving towards sustainable development. Countries on the brink of serious AIDS epidemics have to be able to prevent further HIV spread and to provide adequate treatment and care for those already infected. Countries already in the grip of serious epidemics face an even greater challenge: they have to bring the epidemic under control, while mitigating its impact. Paramount in all cases is the need to protect and build human resources in line with the principle of non-discrimination.

This requires tracking and assessing the impact of the epidemic on workforces, planning ahead to avert or compensate for the toll AIDS takes on institutions and workplaces, and setting in place treatment and care programs for those infected. Wider public health and development strategies can considerably enhance the impact of prevention. When buttressed by well-supported community responses that include people living with HIV/AIDS, religious groups, and traditional and trusted leaders, the positive impact is even greater.

The basic principles In Fighting HIV/AIDS

The way forward is to promote a three-pronged approach:

- Drastically reduce the number of new infections (and thus reverse the epidemic's spread)
- Expand access to treatment and care to all who need it
- Reduce the impact of AIDS on social and economic development.

These endeavors are interlinked. Underpinning them all are five priorities Ansel *et al.*, 2002:

1). Leadership commitment

Mobilizing high-level support is essential—not just in political circles but among business, religious, cultural, sports and entertainment luminaries, too. These leaders bear a special responsibility to set examples that spur others into action. Their consistent commitment is needed if national plans are to operate effectively and if sufficient resources are to be channeled into AIDS responses. Growing political leadership is becoming evident in the lengthening list of national HIV/AIDS strategies, which have been developed in almost 100 countries, and in the almost three dozen countries where heads of government or their deputies now head national AIDS commissions (UNDP, 2005).

2). Community mobilization

Initiatives mounted by community and popular forces and supported by the State and private sector have proved critical in those countries that are making headway against the epidemic. The best of them closely involve people living with HIV/AIDS, and pay special attention to the roles and needs of young people and women. In many countries, new forms of mobilization, such as social networks and organizations, have emerged to confront AIDS and invigorate civil society. When civil society organizations have been able to participate in policy making, AIDS strategies and activities have generally benefited Ansel *et al.*, 2002.

3). Involve people living with HIV/AIDS

The involvement of people living with HIV/AIDS is an indispensable part of an effective response. Through example and activism, those living with HIV/AIDS have spearheaded many of the successes achieved against the epidemic. Their courage has inspired countless similar efforts to counter the epidemic and its effects. In countries around the world, people living with HIV/AIDS have helped draft national plans and ensured that they match grass-roots realities. Their involvement is vital, too, in overcoming the barriers of stigma, discrimination and denial. But if they are to choose candor over secrecy, people living with the virus need to have an environment that protects them and safeguards their human rights Ansel *et al.*, 2002.

4). Overcome stigma and discrimination

Stigma, discrimination and human rights violations form a vicious circle, reinforcing and perpetuating each other. They increase people's vulnerability and, by isolating people and depriving them of treatment, care and support, worsen the impact of infection which is why the 2002–2003 World AIDS Campaign is focusing worldwide efforts on removing those barriers. Some key steps? Urge leaders at all levels, and in all walks of life, to visibly challenge HIV-related discrimination, spearhead public action and act against the many other forms of discrimination that people face in relation to HIV/AIDS. Create an appropriate legal environment for fighting discrimination and other human rights violations, and ensure that prevention, treatment, care and support services are accessible to all Ansel *et al.*, 2002.

5). Protect women and young people

If it is to be effective, an AIDS response (in terms of prevention, treatment, care and support) has to benefit those who are most vulnerable, particularly women and young people. And special care is needed to shield them against the impact of the epidemic. Orphans and children with HIV-infected relatives need access to education, health care and other social services. More intensive prevention activities are needed, and they should reach young people before the latter become sexually active. Efforts to reverse women's low economic and social status need to be redoubled. Income-generation schemes, improving women's employment opportunities and microfinance schemes are among the potential options. A rule of thumb? Experience shows that programs are more likely to succeed when women and young people are closely involved in designing and implementing them Ansel *et al.*, 2002. There is ample evidence in countries around the world that these approaches can be turned into reality. The following are some concrete suggestions for developing effective HIV/AIDS responses.

Broadening the scope of prevention programs

If human resources are to be safeguarded and developed, people must be protected against HIV infection. Despite the progress of recent years, there are still huge gaps on the prevention front (NACA, 2009):

- Fewer than one in five people at risk of HIV infection receive even basic prevention services proof that prevention programs are not being mounted on a broad enough scale.
- New research shows that the vast majority of the world's young people have no idea how HIV/AIDS is transmitted or how to protect themselves from the disease.

- It is estimated that there will be up to 45 million new HIV infections by 2010 in low- and middle-income countries if the world fails to mount a drastically expanded, global prevention effort.
- The heavy toll can be avoided. Implementation of a full prevention package by 2005 could cut the number of new infections by 29 million (63%), lowering the number of adults infected each year in low- and middle-income countries from about 4 million, currently, to approximately 1.5 million.
- The target of reducing HIV prevalence levels among young people by 25% by 2010 (set in the Declaration of Commitment on HIV/AIDS) can therefore be met. The course of the epidemic can be drastically changed. But even a three-year delay in implementing a full prevention package could slash the potential gains by half.
- Preventing HIV transmission requires also that people's susceptibility to infection be reduced. Fighting poverty and exclusion—and safeguarding human rights are powerful elements of successful prevention programs Ansel *et al.*, 2002.

Expanding treatment, care and support

As with prevention, access to adequate treatment and care is both a moral necessity and a precondition for building human resources and reviving development progress. The Declaration of Commitment on HIV/AIDS thus regards access to treatment as a fundamental step towards achieving the right of everyone to the highest possible standard of physical and mental health. Yet, huge gaps remain in treatment and care (NACA, 2009):

- Antiretroviral and other drugs are now much cheaper in many countries, but they remain unaffordable for the majority of people living with HIV/AIDS. As a result, only a small fraction of those in need of HIV/AIDS medications currently receive them. Prices, though, do not represent the same barrier to expanded treatment access as they did two years ago. As the World Health Organization's Scaling Up Antiretroviral Therapy in Resource-Limited Settings shows, considerable expansion of treatment access is feasible (see www.who.int/).
- More effort is needed to ensure that essential medicines are available to low-income countries at near-production cost, and that countries' health systems are capable of delivering these treatments to people in need.
- Antiretroviral treatment generates powerful collateral benefits, not least for the health system. Each HIV-infected person who does not progress to AIDS acquires extra years of good-quality and productive life, and saves the health system several hundred dollars per patient-year in averted palliative and opportunistic infection care.
- Greater availability of treatment can boost prevention efforts. Thus, more people are likely to come forward for voluntary counseling and testing, which could bring about

behavioral change among those already infected.

Unequal access to life-saving HIV/AIDS treatments is a glaring human rights issue. It also helps keep stigma alive, since HIV/AIDS-related stigma and discrimination are fuelled largely by the fact that HIV/AIDS is so closely associated with ailing health and early death. Increasing access to medication therefore not only helps in the realization of the right to health and in overcoming inequities due to poverty, it also changes attitudes.

Protecting global public goods

An effective response to HIV/AIDS, and other diseases that particularly affect the poor, requires substantial investments in global public goods—services and products that potentially benefit people everywhere:

- The fruits of research and development aimed at diseases that predominate in developing countries are a global public good. Yet the quest for such medicines is rare in the handful of high-income countries where most pharmaceutical R&D is concentrated. A mix of financial incentives and regulatory guidelines, along with other mechanisms, could help ensure that the priorities and products of that research answer to the principle of global equity.
- A key challenge is to ensure that the guarantees of the Doha Declaration on TRIPS (the Agreement on Trade Related Aspects of Intellectual Property Rights) in November 2001 are respected. Concerted action might be needed to ensure that countries have the knowledge and capacity to invoke their right to respond to public health emergencies, as stipulated in this declaration.
- World Trade Organization (WTO) member governments can also move to ensure that countries that lack local pharmaceutical production capacity (and therefore cannot directly benefit from compulsory licensing arrangements) are, in emergencies, allowed to import essential medicines from a low-cost producer in a third country.
- Vaccine research needs to address the entire range of HIV subtypes spreading in different parts of the world. Recent initiatives mounted by low- and middle-income countries are valuable steps in that direction. Once available, vaccines need to be accessible to all who need them.
- Expanded surveillance programs are required, together with strengthened epidemiological data collection and analysis. Though highly valuable, sound research into health economics and health systems and policies is seldom available to low-income countries.

The challenge of governance

How well countries govern, manage and coordinate their national responses will determine whether they achieve success against the epidemic and preserve their human

resources:

- In a world of AIDS, one of the indicators of good governance is the willingness of leaders and governments to visibly promote the fight against the epidemic. Thus, the successes in Brazil, Thailand and Uganda drew heavily on their respective governments' visionary and courageous leadership in the early stages of the epidemic. This created the ideal conditions for the mobilization of government, communities, businesses, and other civil society groups.
- The twin goals of struggling for development and fighting against HIV/AIDS are more likely to be achieved in settings where States are accountable to their citizens, and are capable of safeguarding their human rights and providing them with the conditions for secure livelihoods, with basic services. These, ultimately, are the truest yardsticks of good governance.
- Governance needs to be inclusive and democratic. Social dialogue with civil society is an indispensable aspect of democratic governance and a fundamental part of an effective HIV/AIDS strategy. A hallmark of success to date has been the strong roles played by civil society organizations from grass-roots community groups to national NGOs and research institutions. Incorporating the experiences and insights of community responses into policies has proved especially valuable.
- The principles of sound governance not least those of transparency and accountability extend also to relations between donor countries and multilateral institutions, on the one hand, and low-income countries on the other.

Reviving the public sector

In many low-income countries, the eroded capacity of the public sector has seriously undermined the sector's ability to rise to the dual challenge of fighting AIDS and fulfilling its pivotal role of enhancing and safeguarding human resources and development:

- The impact of HIV/AIDS on public services must be taken into account and addressed in ways that anticipate the epidemic's effects. The ability to replace skilled professionals is a top priority, especially in low-income countries where governments depend heavily on a small number of policy-makers and managers for public management and core social services.
- Human resource planning needs to take account of an advancing and long-term epidemic. Crucially, time frames have to reflect the inexorable manner in which HIV/AIDS can spread, and the initially imperceptible ways in which its effects accumulate in society.
- Donor-imposed limits on public sector spending need not pit fiscal responsibility against the need for sustained investment in an AIDS response. Stronger, responsible public investment in line with a cogent HIV/AIDS strategy

will reap huge long-term benefits—not just in steeling society against the epidemic, but also in spurring development processes.

- It is not enough to have sufficiently large budget allocations. Services and interventions must reach all who need them. Especially where the public sector has been sapped by cutbacks, institutional capacity needs to be replenished.
- In some cases, national capacities for management and implementation need to be boosted. Sound budgeting systems and strong accountability frameworks are important if funding is to be disbursed smoothly. Equally important is the capacity for accurate monitoring and evaluation.

Integrating HIV/AIDS into wider development strategies

A step forward occurs when the HIV/AIDS response is made everybody's business. AIDS-alertness should be part of the remit of public institutions, nongovernmental organizations and private companies if human resources are to be protected from the epidemic. Just as mobilization around environmental concerns has made environmental impact assessments a key part of policy-making, AIDS impact assessments need to become commonplace. Persistent and, in many cases, deepening poverty has revived the emphasis on poverty reduction, with donor countries now focusing aid and debt relief on countries with good poverty reduction strategies, and solid systems of governance. Poverty reduction strategies are more likely to yield lasting benefits if they also include specific commitments and targets that relate to HIV prevention, care and impact mitigation:

- Poverty-reduction strategies also hold the potential for better aligning economic policies with the broader imperatives of reducing poverty, boosting equity and fighting AIDS. Especially for countries badly affected by AIDS, macroeconomic policies can be geared more acutely towards reducing deprivation, enhancing access to productive resources for wider segments of populations, improving public provision of essential services, and strengthening infrastructures. These are not new issues, but AIDS certainly makes them more urgent.
- Pro-poor policies can strengthen community organizations, which, in turn, can help reduce social exclusion. When these organizations operate along genuinely representative and participatory lines, they can help ensure that resources and skills reach poor households all valuable elements of long-term success against the epidemic.
- Keeping or introducing cost-recovery measures in the education system needs to be weighed against the effects of such measures on AIDS prevention efforts and

the long-term vulnerability of communities.

- Programs to promote basic education, for example, need to ensure that orphans benefit. Those aimed at widening access to health services need to target youth and members of households who are affected by the epidemic.
- Steps that promote gender equality and that counter the overlapping forms of legal, economic and social discrimination that marginalize groups (such as minorities, migrants, displaced persons and refugees) are as valuable in the fight against HIV/AIDS as they are in the struggle for sustainable development.

Forging new partnerships

One of the best ways to enhance human resources is to harness them in the form of partnerships:

- A strong case exists for molding social compacts around the dual challenge of countering the AIDS epidemic and achieving sustainable development. Countries that have expanded their responses to include all fields of economic and social life have seen their national response bolstered. An important role for governments is to pave the way for all sectors of society to contribute to the response.
- The strongest responses have been achieved when a broad network of partnerships has been forged involving people living with HIV/AIDS, community-based organizations, nongovernmental organizations, faith based organizations, businesses, the media, and sports and cultural bodies.
- AIDS also represents an ideal opportunity for combining the strengths of the government, trade unions and the private sector. Labor ministries, for example, have a central role to play, both in gauging and addressing the effects of the epidemic on the labor market and in ensuring that workplace programs become widespread realities. Unions and businesses share those responsibilities.
- Despite progress, too many businesses still shirk such duties, too many unions allow AIDS to slip off their agenda, and too many governments (despite claims to the contrary) still handle AIDS mainly as a public health issue. As a result, in many places, the impact of a potentially powerful social partnership is not being felt.

Good policies make the difference

The fight to preserve human resources against AIDS could benefit from a wider rethink of policy choices, too:

- At the heart of a quest for sustainable development lie often-difficult economic policy choices that, in complex ways, might mesh with the HIV/AIDS epidemic. Measures that enable countries to reduce the impact of the epidemic

at all levels can dramatically enhance their development prospects. Likewise, policies that end up narrowing people's access to secure employment, incomes and essential services policies that exacerbate human poverty, in other words can help ingrain the conditions of insecurity in which the epidemic thrives.

- Under the Declaration of Commitment, governments agreed to evaluate, by 2003, the economic and social impact of the epidemic and develop strategies at all levels for reducing that impact. Steps could include poverty eradication strategies and development policies to counter the impact of HIV/AIDS on economic growth, economic services, labor, government revenues and public resources.
- Equally important are policies and programs that reflect the importance and value of social cohesion and equity. This implies approaches that are rights-based and that actively counter discrimination and social exclusion.
- By analyzing more closely the linkages between policy shifts and the socioeconomic conditions in which the epidemic thrives, countries can more finely hone their AIDS responses. There is considerable scope for further research and deeper analysis on this front.
- More research is needed, for example: to assess the impact on basic service access if certain public services are shifted into poorly regulated private control; to test whether moves towards deeper trade liberalization reinforce or sap the livelihoods of the poor; to assess the outcome of a particular policies on the financial and social status of women; and to probe the effects of cost-recovery mechanisms on the provision of health care and education available to the poor.
- Steps are needed also to protect health care and other social services against economic shocks and subsequent budgetary cuts. Particularly important are pre-emptive efforts to protect the poor in such situations.
- As the debates around TRIPS have shown, a strong case exists for ensuring that trade and other agreements struck at the international level do not impede States' efforts to fulfill their essential mandates such as safeguarding public health or protecting human security. For example, the possible effects on health-care provision and other basic services of new rounds of negotiations to liberalize trade in services deserve scrutiny.

Paying The Bills

Strong commitment, sound governance, lucid strategies and policies, and inventive partnerships all help make an HIV/AIDS response effective. But these efforts come to naught if sufficient funding is not available. Where could the funding come from? A calculation of the estimated total financial need in low- and middle-income countries for HIV/AIDS, done by an international team convened by UNAIDS, has shown that, by 2005, US\$10 billion will be

required to mount a minimum, credible response. (These projections are based on conservative estimates of expansion costs for each of 18 prevention, treatment and care interventions used in the calculations of overall resource needs, and do not include costs for building up infrastructure.)

The amount is several times larger than the spending projections for 2002 in low-and middle-income countries. A sustained increase of 50% annually in total funding for HIV/AIDS programs has to be achieved. This is a modest amount. The additional funding needs to come from five main sources, each of which brings its own advantages to a comprehensive human resource centered HIV/AIDS response.

1). The affected countries themselves have a special responsibility

- Increasing health spending is one way of slowing the spread of the epidemic and reducing its impact as African governments showed in April 2001 by agreeing to increase their health outlays to 15% of total budget spending.
- Increased public investment should be considered, including for programs aimed at eradicating extreme poverty, improving the status of women, and boosting the education and livelihood prospects of young people, among others.
- More countries (including some of the poorest) are devoting significant funds towards combating the epidemic. But the most commonplace reality is that many interventions do not reach the poor. A weak public sector, and consequent mismanagement, is only partly to blame. The poor lack the financial resources to access these services, and their governments lack the resources to provide the necessary coverage.

2). International assistance must increase exponentially

- Even with more efficient allocation, the levels of funding necessary to cover essential health services hover far beyond the reach of poor countries and of many middle-income countries with high HIV prevalence rates. Bridging the shortfall is a duty that rests with the international community.
- Stronger commitment from bilateral donors would be one valuable move. Their comparative advantage lies in being able to draw on domestic technical resources (for example, within their universities and national programs), and their capacity to build solidarity directly between their own communities at home and those in the recipient countries (for example, through networks of non-profit organizations).
- Greater donor assistance is needed, particularly to boost public investments that help overcome poverty, improve health and other public services, and mitigate

the effects of the epidemic. As the Commission on Macroeconomics and Health (2001) has stressed, a lack of donor funds should not be the factor that limits the capacity to provide health services to the world's poorest people.

- Not only have Official Development Assistance (ODA) flows been thinning significantly, but ODA flows to the 28 countries most seriously affected by AIDS (countries where HIV adult prevalence exceeds 4%) have fallen by a third since 1992 (from US\$12.8 billion to US\$8.4 billion).
- Recent steps by the United States of America and the European Union, announced at the Monterrey Conference on Financing for Development in March 2002, point in the right direction. At the conference, they raised their ODA levels by US\$12 billion in total over several years. The Organization for Economic Cooperation and Development (OECD) and the Development Assistance Committee (DAC) estimate that (calculating an average growth in donor countries of 2.5%) an increase from the present ODA level of some 0.2% to the 0.3% level of some years ago could raise the overall aid resources by US\$46 billion annually.
- Debt relief needs to reach a lot deeper. Half of the 26 countries receiving debt relief under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative were still spending 15% or more of government revenue on debt repayments in early 2002, 'crowding out' vital public investments in health, education and other areas.
- Debt relief also needs to extend much wider. Ineligible for debt relief under the HIPC Initiative are 16 countries where adult HIV prevalence exceeded 1.5% in 2001, including several sub-Saharan African countries where HIV prevalence exceeded 20%.
- Given the multiple difficulties experienced by many low-and middle-income countries not least those facing serious HIV/AIDS epidemics a case exists for relaxing the eligibility criteria for debt relief in their favor.

3). Multilateral channels should be expanded

- Multilateral organizations are well placed to ensure that internationally accepted scientific and technical standards are applied, and to help harmonize approaches to complex social issues. United Nations agencies, in particular the eight Cosponsors of UNAIDS, are making valuable contributions towards the protection of human resources against the epidemic.
- The United Nations Children's Fund (UNICEF) works extensively on protecting vulnerable children, including orphans, against HIV/AIDS. Incorporating HIV/AIDS into broader development strategies has become a focus of UNDP's work against the epidemic, while the United Nations Population Fund (UNFPA) has taken the lead on condom provision and reproductive health programs for young people. The United Nations International Drug Control Program (UNDCP) is acting to break the link

between injecting drug use and the epidemic, while the ILO's international guideline for workplace programs reflects its focus on AIDS and the world of work.

- Meanwhile, the United Nations Educational, Scientific and Cultural Organization (UNESCO) is marshalling strong efforts in the education and culture sectors. The World Health Organization (WHO) lays special emphasis on strengthening health-care systems' responses to HIV/AIDS, and provides normative guidance for health interventions. Along with supporting donor agencies and national governments in their bids to counter the epidemic, the World Bank provides concessional funding, including US\$1 billion under the Multi-country HIV/AIDS Program (MAP) for Africa.

4). The Global Fund to Fight AIDS, Tuberculosis and Malaria requires sustained support

- Operating since January 2002, the Global Fund to Fight AIDS, Tuberculosis and Malaria adds the comparative advantage of focusing new resources on programs in countries with the greatest need.
- Total pledges to the Global Fund stood at more than US\$2 billion in August 2002, and UNAIDS estimates that a considerable share of the funding will go towards AIDS. Were that figure to grow significantly, many countries would have a better chance of preventing the epidemic from spreading and of providing citizens with the treatment, care and support they need. This funding should be additional and new, and not have been diverted from other valuable development activities.

5). The private sector needs to play its part

- Greater support from businesses is crucial. They are often best placed to reach workers and their communities, not least in the cases of mobile workers. Approximately 7% of the total resource need is for workplace prevention programs, which private enterprises can fund.
- Workplace prevention programs are multiplying, and more businesses are recognizing the value of investing in treatment and care for workers. But the scale and range of business involvement in the fight against AIDS is still only a fraction of its potential. For example, more can be done to harness key business strengths (such as distribution networks and marketing savvy) in HIV/AIDS responses.
- Foundations and philanthropies are becoming increasingly valuable allies as they incorporate HIV/AIDS into the health, education and other development initiatives

they support.

INTERNATIONAL STRUCTURES FOR THE CONTROL AND PREVENTION OF HIV/AIDS

UNICEF

For 56 years, the United Nations Children's Fund (UNICEF) has been working with partners around the world to promote the recognition and fulfillment of children's human rights. This mandate, as established in the Convention on the Rights of the Child, is achieved through partnerships with governments, nongovernmental organizations and individuals in 162 countries, areas and territories. It brings to UNAIDS this extensive network and an effective communication and advocacy capacity. UNICEF's priorities in addressing HIV/AIDS include prevention among young people, reducing mother-to-child transmission, care and protection of orphans and vulnerable children, and care and support for children, young people and parents living with HIV/AIDS.

UNDP

As a development agency with strong country presence, the United Nations Development Program promotes an enabling policy, legislative and resource environment for an effective response to HIV/AIDS. Areas of work include: mobilizing actors and institutions well beyond the health sector to facilitate the social transformation needed to achieve a HIV-free future; promoting strong leadership and capacity for a coordinated and enhanced response; helping governments raise domestic and international resources; placing HIV/AIDS at the centre of national development agendas; and promoting the rights of people living with HIV/AIDS through advocacy and legislation.

UNFPA

The United Nations Population Fund (UNFPA) applies its 30 years' experience in reproductive health to prevent HIV and sexually transmitted infections. As a priority within 150 country programs, UNFPA focuses on HIV prevention among young people, comprehensive condom programs for both male and female condoms, and prevention of infection among pregnant women. UNFPA supports: advocacy efforts; improving access to information and education, including voluntary counseling and testing; strengthening capacity of service providers across sectors; and provision of commodities for the prevention of HIV and sexually transmitted infection, such as STI/HIV test kits, male and female condoms and infection prevention and control supplies.

UNDCP

The United Nations International Drug Control Program (UNDCP) is entrusted with exclusive responsibility for coordinating and providing effective leadership for all United Nations drug control activities. In this context, UNDCP actively supports HIV/AIDS prevention in programs to reduce the demand for illicit drugs. Its primary focus is on youth and high-risk groups. UNDCP operates from its headquarters in Vienna, Austria, as well as from a field network currently serving 121 countries and territories.

ILO

The International Labor Organization (ILO) works to promote social justice and equality, set standards in employment, and improve working conditions. The ILO's particular contribution to UNAIDS includes: its tripartite membership, encouraging the mobilization of governments, employers and workers against HIV/AIDS; direct access to the workplace; long experience in framing international standards to protect the rights of workers; and a global technical cooperation program. The ILO has produced a code of practice on HIV/AIDS and the world of work an international guideline for the development of national and workplace policies and programs.

UNESCO

Within the UN system, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has a special responsibility for education. Since ignorance is a major reason why the AIDS epidemic is out of control, preventive education is at the top of UNESCO's agenda. The need for such education flows from the types of ignorance associated with HIV/AIDS, particularly in the most affected developing countries: most of those infected do not know it; there are widespread misconceptions about possible remedies; and there is sparse and unfounded knowledge about the disease itself, leading to prejudice and discrimination (Jelilov, Gylych; Kachallah Ibrahim, Fatima; Onder, Evren, 2016).

WHO

The World Health Organization (WHO) supports countries in strengthening their health systems' responses to HIV/AIDS and other sexually transmitted infections. WHO promotes partnerships, provides technical and strategic support to countries and regions, and develops normative guidelines and other resources on key health interventions, including prevention of mother-to-child transmission; management of HIV/AIDS, sexually transmitted infections and related conditions,

including use of antiretroviral therapy; blood safety; universal precautions; vaccine development; safe injection; voluntary counseling and testing; and interventions targeting vulnerable populations. WHO also contributes to the global HIV/AIDS knowledge base by supporting monitoring and surveillance, reviewing the evidence for interventions and promoting research.

World Bank

The mandate of the World Bank is to alleviate poverty and improve the quality of life. Between 1986 and early 2002, the World Bank committed nearly US\$2 billion for HIV/AIDS projects worldwide. Most of the resources have been provided on highly concessional terms, including US\$1 billion under the Multi-Country HIV/AIDS Program (MAP) for Africa. To address the devastating consequences of HIV/AIDS on development, the Bank is strengthening its response in partnership with UNAIDS, donor agencies and governments. The Bank's response is comprehensive, encompassing prevention, care, support, treatment, and impact mitigation (Jelilov, Gylych; Onder, Evren, b 2016).

Theoretical Framework

Theoretical analyses of the macroeconomic impact of the epidemic have been based largely upon standard neoclassical growth models. In the context of these theories the epidemic would be expected to reduce productive efficiency, and hence output per worker, reduce the rate of growth of the labor force and lower the savings rate (Jelilov, Gylych; Chidigo, Mary; Onder, Evren, 2016). Cuddington (1993, pp 178-1) demonstrates that in a simple neoclassical growth theory the epidemic may cause per capita income and the capital-labor ratio to either increase or decrease because the labor force and savings rate effects operate in opposite directions. Hence it is arguable that the net impact of the epidemic upon economic growth is an empirical question (Jelilov, Gylych; Muhammad Yakubu, Maimuna, 2015).

Quantitative estimates in the early 1990s were compromised by a lack of appropriate data, and hence to a greater or lesser extent calibrated growth theory were used to derive estimates of the macroeconomic effects of the epidemic. All known studies of this type have examined the impact of HIV/AIDS on individual countries. Over (1992) estimated that between 1990 and 2025 the 10 countries with the most advanced epidemics would see a reduction in growth per capita of around a third of a percentage point compared to a non-AIDS scenario.

Similarly, Cuddington and Hancock (1994) suggest that between 1985 and 2010 Malawi could experience average real GDP growth up to 1.5 percentage points lower, while Cuddington (1993) estimates that in Tanzania per capita GDP could be up to 10% smaller.

More recently two studies have focused on Botswana (BIDPA, 2000; and MacFarlan and Sgherri, 2001), with both using variants of calibrated neoclassical growth models. MacFarlan and Sgherri concluded that GDP growth in Botswana would decline from around 5.5 percent to between 1.5 and 2.5 percent per annum as a result of the epidemic, and would have 'non-negligible' impacts across production sectors, households and labor types while placing substantial burdens on the government budget.

However there have been very few cross-country statistical studies. Bloom and Mahal (1997) concluded, "there is more flash than substance to the claim that AIDS impedes national economic (income) growth." (p 120), while acknowledging that the negative impact on life expectancy may affect development. There are reasons related to the data to doubt the robustness of Bloom and Mahal's results. The theoretical estimates were based on data for the period 1980-92, when prevalence estimates were typically one seventh to one fifth of those now produced. Furthermore, the AIDS epidemic was still in its early stages and hence its impacts upon morbidity and mortality were still relatively restrained.

More recently, Bonnel (2000) concluded, from a cross-country study using African data, that HIV/AIDS on average reduced Africa's per capita growth rate by 0.7 percent points, which is substantial given an average growth rate in the sample of 0.4 percent per annum per capita.

RESEARCH METHODOLOGY

In this chapter, issues that were discussed are as follows: Research design, area of the study, population of the study, sample size and sampling technique, instrument of data collection, validity and reliability of the instrument and method of data analysis.

Research Design

For the purpose of carrying out a good analysis and reaching a reasonable conclusion, data are been collected from various sources either through the primary source and secondary source.

Sources of Data

Data used for this research work were collected mainly from both primary and secondary sources.

Primary source

The primary data used for this work were gotten through questionnaire and oral interview which was administered

to the respondent.

Secondary Source

The secondary data was gotten from textbooks, journals, newspapers, magazines and bulletin.

Area of Study

This study was carried out at the office of the National Action for the Control of AIDS (NACA) which is precisely situated at central area besides Ministry of Finance Abuja Nigeria.

Population of the Study

This research was only limited to the employees of NACA. The population of this study which consist of over 100 workers but the target population of this work consists of 90 staff which is made up of Accountants, Directors, External Auditors and Managers and other stakeholders put together.

Sample Size and Sampling Technique

Sample is a small or selected group used to represent the whole. The sample size that was used to represent the whole population selected from the total population. However the sample size is 90 staffs.

Research Instrument

The instruments used for the purpose of the study are oral interview and questionnaire. Oral interview has to do with asking of question so as to gather as many information as possible. The questionnaire issued contains certain questions which are in accordance with the research work and the research hypothesis and are framed in a way that it would not be misunderstood by the respondent.

Validation and Reliability of the Instrument

The question issued to the respondents for this research work was designed in a way that it arouses interest in the mind of the respondent. The Questionnaire was issued out to prominent lecturers, professors and statisticians in the commission who went through them and made necessary suggestions. In the cause of the oral interview, certain checks and balances were also adopted to secure perfect validation of the information given.

Method of Data Analysis

In this study, questionnaires issued was returned and analyzed based on simple percentage. There are various research instruments however the chi-square (X^2)

statistic would be used to address the contribution of action aid to democracy in Nigeria. The chi-square (X^2) is given as:

$$X^2 = \sum (Z_0 - Z_e)^2$$

Where X^2 = Chi- square statistic
 \sum = summation sign
 Z_0 = observed value
 Z_e = expected value

The expression above suggest that to calculate chi-square (X^2), one must find in each category, the difference between the observed and the expected values, square the difference and divide the square differences by the expected value.

Hypothesis Testing

The hypothesis was tested at 0.5 confidence level. The degree of freedom (df) is defined by the formula.

$$Df = (R - C) (C - 1)$$

Where: R= Number of row
 C=Number of column
 DF=Degree of freedom

Decision Rule

If the chi-square computed is greater than the chi-square tabulated we reject H_0 and accept H_1 .

DATA PRESENTATION AND ANALYSIS OF RESULTS

The researcher has devoted this chapter to data presentation and analysis in order to analyze some of the hypothesis contained in this research work. The presentation and analysis of this research work is based on the data collected from the field through primary research which involved questionnaires. In conducting the study, one hundred (100) questionnaires each containing twelve (12) questions were distributed to the respondents out of which ninety (90) were returned and studied. Ten (10) questionnaires were not returned due to some problems associated with self-administered questionnaire such as misplacement. Therefore, only 90 questionnaires retrieved shall be used for the data analysis.

Demographic Data Analysis

This refers to the demographic statistics of the respondents such as their sex, age, marital status, educational level etc.

DISCUSSION OF FINDINGS

From the research conducted, the following findings were made. It was found that the productive work forces are the mostly affected by this challenge. This is remarkable given the fact that union members and their families are directly affected by the epidemic through sickness and death. There are a range of issues from health and safety at work, discrimination in the workplace, access to appropriate health care for workers and dependents, pensions and other entitlements, and so on, that are central to the relationship between employers and workers.

At the same time there are national issues that directly concern workers. Among the more important are appropriate policies relating to employment which ensure that the rights of workers are protected, in areas such as HIV testing for employment, non-discrimination in workplaces, access to appropriate health care including where feasible, antiretroviral drug therapy, plus ensuring that labor legislation and codes relating to employment are consistent with workers' rights in a world increasingly characterized by HIV and AIDS (Jelilov, Gylych; Onder, Evren; a 2016).

This is remarkable since the primary route through which the epidemic affects social and economic development is through changes in the 'effective' labor supply over time, i.e. changes in both the quantity and quality of labor as affected directly and indirectly by the HIV epidemic. This is a highly complex matter since the effects of HIV/AIDS on labor stocks over time is an area where little is known. But it is researchable and it is important (Jelilov, 2016). Thus it is evident that both output prices and profitability are changed by the impact on costs directly caused by increased labor morbidity and mortality due to HIV/AIDS, and although some of the research has looked at some of these identifiable costs, it has done so in a very limited way (Jelilov, Gylych; Musa, Muhammad, 2016).

Perhaps more important for productive activity are changes in factor costs that arise from shifting supply functions for heterogeneous labor caused by HIV/AIDS. Thus relative wages and other conditions of employment will change as a result of increasing scarcity of labor with appropriate skills and experience – at all levels, including those with higher professional skills and management.

These trends must be having significant effects on recruitment and retention of labor for many enterprises in both the formal private and public sectors, with effects on the maintenance and cost of capacity that are largely unknown. It seems in many countries that posts in formal sector employment are left unfilled, with unknown effects on production, and in other situations staff are promoted to jobs that they are entirely untrained for, with again unknown consequences for the production of goods and services.

Table 1. Sex Distribution of Respondents

Sex	Respondents	Percentage (%)
Male	60	66.7%
Female	30	33.3%
Total	90	100

Source: Field survey 2014

The table 1 shows the response of the respondents according to their sexes. From table, about 67% of the respondents are male while about 33% are females. Therefore, the study may suffer from gender biasness.

Table 2. Age Distribution of the Respondents

Ages (years)	Respondent	Percentages
21-30	16	17.8
31-40	48	53.3
41-50	6	6.7
50-Above	20	22.2
Total	90	100

Source: Field survey 2014.

From the table 2 we would see that about 18% of the respondents fall within the age bracket 21-30. While 53% falls within 31-40 years. 7% and 22% are at age 41-50 and 50-above respectively. What could be inferred from the distribution is that it comprises larger proportion of adults and small proportion of the aged.

Table 3. Marital status of the respondents

Marital status	Respondents	Percentage
Married	51	56.7
Single	36	40.0
Divorced	3	3.3
Total	90	100

Source: Field survey 2014

The table 3 shows that the married numbers of the respondents are of greater percentage with about 57% while the proportion of single and divorced are of lower percentage with 40% and 3% respectively.

Table 4. Religious Backgrounds Of The Respondents

Religion	Respondent	Percentage
Islam	44	48.9
Christainity	46	51.1
Pagan	0	0
Total	90	100

Source: Field survey 2014

The table 4 shows that there is no significant difference between the proportions of the religion of the respondents. Hence, the study is free from religions bias.

Table 5. Educational qualifications of the respondents

Education	respondents	Percentage
B.sc	15	16.7
M.sc	20	22.2
Ph.d.	55	61.1
Total	90	100

Source: Field survey 2014

The table 5 shows that above 16.7% of the respondents are B.sc holder, 22.2% account for M.sc while about 61.1% for Ph.D. Therefore the information sourced for will be adequate and reliable. This is because larger proportion of the respondents has acquired education up to the advanced level and has acquired enough skills and trainings in the Nigeria society.

Table 6. Responses on the effect of lack of sex education on the spread of hiv/aids

Responses	Respondents	Percentage
Yes	85	94.4
No	5	5.6
Total	90	100

Source: Field survey 2014

It is obvious from the table 6 about that poor sex education has an effect on the spread of HIV in Nigeria. This is because about 94% of the respondents out of 90 gave a "yes" responds to the question while only 2% said no.

Table 7. Responses On The Effects Of Unemployment On Spread Of Hiv

Responses	Respondent	Percentage
Yes	88	97.8
No	2	2.2
Total	90	100

Source: field survey 2014

From the table 7 about 98% of the respondents said that unemployment is a threat to spread of HIV in Nigeria while only 2% said it is not. From this data however we can conclude that unemployment is a threat to the spread of HIV Nigeria economy.

Table 8. Responses On The Effect Of Government Failure On The Spread Of Hiv In Nigeria

Response	Respondent	Percentage
Yes	50	55.6
No	40	44.4
Total	90	100

Source: Field Survey 2014

From the table 8 above, 55.6% of the respondents said that the failure of government contributes to spread of HIV in Nigeria while 44.4% said that the HIV crises are motivated by other factors. However, we could still figure out the other factors responsible for HIV in Nigeria. This is due to the seriousness of government in Nigeria.

Table 9. Responses On The Effect Of Rise Of HIV/AIDS On Human Capital As Well As Economic Development In Nigeria

Responses	Respondents	Percentage
Yes	75	83.3
No	15	16.7
Total	90	100

Source: Field Survey 2014

From the table 9, 83.3% of the respondents believe that HIV has an effect of economic as well as human capital development in Nigeria while 16.7% are against such action.

Table 10. Responses On The Effect Of HIV On The Population Of Productive Manpower In Nigeria

Responses	Respondents	Percentage
Yes	85	94.4
No	5	5.6
Total	90	100

Source: Field survey 2014

From the survey above it's very evident that over ninety percent of the respondents believes that HIV has a negative effect on the growth of human capital as well as economic development in Nigeria, while 5.6% says otherwise

Table 11. Responses on the negative effect of HIV on gross domestic product (GDP) of Nigeria

Responses	Respondents	Percentage
Yes	49	54.4
No	41	45.6
Total	90	100

Source: Field survey 2014

From the above data it can be concluded that 54.4%, although not obvious enough, believes that HIV has a marginal effect on the growth of Gross Domestic Product (GDP), while 45.6% says otherwise. It can be said here that HIV effects GDP adversely.

Table 12. Responses On Whether Government Has A Great Role To Play In The Management Of HIV/AIDS In Nigeria

Responses	Respondents	Percentage
Yes	90	100
No	0	0
Total	90	100

Source: Field work 2014

It can be deduced from the above that virtually all of our respondents believe that government has a great role to play in curbing the spread of HIV in Nigeria.

Table 13. Responses On Whether The Reduction In The Rate Of Unemployment And Poverty Rate In Nigeria Can Reduce The Spread Of HIV

Responses	Respondents	Percentage
Yes	54	60
No	36	40
Total	90	100

Source: Field work 2014

It can be seen from the above research conducted that most of the respondents totally 60% believes that the reduction in poverty rates can mitigate the spread of HIV in Nigeria, while 40% says no.

Table 14. Responses On Whether Proper Sensitization And Early Warning On The Effects Of Unprotected Sex And Use Of Sharp Objects Will Curb The Spread

Responses	Respondents	Percentage
Yes	67	74.4
No	23	26.6
Total	90	100

Source: Field work 2014

It can be seen from the above research conducted that proper education on the effect of HIV in Nigeria will help in curbing the spread of the disease, while 26.6 does not believe so.

TEST OF HYPOTHESES

The table below shows the respondents used

Responses	Observed frequency (Z _o)	Expected Frequency (Z _e)	Z _o -Z _e	(Z _o -Z _e) ²	$\frac{(Z_o - Z_e)^2}{Z_e}$
Yes	15	45	-30	900	20
No	75	45	30	900	20
Total	90				40

Hence: $X^2_{cal} = \sum \left(\frac{Z_o - Z_e}{Z_e} \right)^2 = 40$

X^2_{tab} Is determined thus:

Significant level = 5% = 0.95

Degree of freedom (df) = n-1 = 2-1=1

$X^2_{tab}(0.95) = 3.84$

DECISION RULE:

Since $X^2_{cal}=40 > X^2_{tab}=3.84$, we reject H_o and accept H₁, thereby concluding that the spread of HIV/AIDS has led to the poor growth rate of human capital and economic growth in Nigeria.

In all productive activities, management has a major role in determining the level of efficiency and yet there has been very little research into the impact of HIV directly and indirectly on the quality of the management function (Jelilov, Gylych; Abdulrahman, Samira; Isik, Abdulrahman,; 2015). Most research has been on what can be best described as operational activities and the effects of HIV/AIDS on the performance of non-management personnel. But it has long been hypothesized that HIV infection increases with socio-economic status such that many enterprises within both formal and non-formal sectors will be facing losses of key management staff.

This is often reported in discussions with senior management enterprises but is rarely if ever documented. It follows that there is a need to identify what is happening as a result of HIV and AIDS to those with higher level professional skills in both public and private sectors (Jelilov, Kalyoncu, & Isik, 2015). As well as the direct effects of HIV/AIDS on production and sales there are also indirect effects that flow from the losses of key personnel in higher managerial and professional positions, together with those exercising important supervisory functions in respect of production (Jelilov, Gylych; Waziri, Fadimatu; Isik, Abdulrahman,; 2016). All of these personnel represent significant levels of formal investment in human capital, together with learning and experience that will have been acquired over many years (and which is impossible to replace through formal educational investment) (Jelilov, 2015).

The impact of HIV/AIDS will be especially severe as a result of losses in this category of labor. One of the key functions that management is expected to perform is the management of change, whatever its origin, including adjustment required due to the effects of HIV and AIDS. A key management responsibility is establishing effective HIV prevention programs, and the conditions for achieving this outcome is a proper and useful area for research. But much more important is the effectiveness or otherwise of management in adjusting overall economic activities: this includes staff allocation and the skill composition of newly recruited workers, changes in product mix and methods of production, revision of capital investment programs, the development of appropriate technologies, and so on.

Whether or not management effectively adjusts production, sales and markets to the new dynamics both within and outside the enterprise will be the deciding factor. As things stand, little is known about what determines the effectiveness of management response. Are there, for example, varied responses to common effects of HIV/AIDS on enterprises in different countries or regions, and if so why is this? Of course one of the factors that will be operating to delay adjustment will be the losses of capacity in the key cadres caused by HIV/AIDS, so that the problem is made doubly difficult.

SUMMARY AND CONCLUSION

In summary, the effect of HIV/AIDS on human capital and economic development are multifaceted. What is required is a re-examination of many of the channels through which changes in the stock of human capital affect production and livelihoods (Smith, 2000). It is unfortunate that much of the research so far undertaken has been of limited value: this in large part arises from the fact that researchers with expertise in production economics and in industrial relations seem scarcely to have been involved in its design and implementation.

Little of the research has focused on the factors that are necessary to sustain production and employment under conditions of HIV/AIDS (Williamson, 2000). To do so, means looking again at the diversity of production conditions in different sectors and developing techniques of largely qualitative analysis for identifying what is happening to productive activities and employment. It means also understanding that production does not occur in a vacuum but that producers are linked through factor and product markets which are themselves adjusting to the impact of AIDS. In other words, research needs to be both more complex and more dynamic in order to make more sense of what is going on (Williamson 2000).

Organizationally what is required is a greater involvement of the key social partners in the response to AIDS. As noted above there is still a long way to go before a genuine and effective alliance can be demonstrated to have taken place. Governments still give very low priority to HIV/AIDS through their actions, and while they often speak rhetoric of 'AIDS as a development issue' it is clear that understanding of the structural causes and consequences of the epidemic is generally missing.

The efforts of most governments still seem to be concentrated on health issues, with the involvement of other key ministries more or less absent. Not least in the case of Ministries of Labor, who seem at best to have a role which is marginal to the national response. Similarly the labor unions have generally not been mobilized in the response to AIDS within the institutional structures where they are an important partner (WHO, 2001).

Finally, the other social partner employers in both the private and public sectors seem either to have been inactive as a group or have again perceived only a narrow role for themselves in the response. Yet they have a crucial role to play in assessing impact and maintaining productive capacity, not least through their actions to sustain stocks of human capital (WHO, 2001).

The key question is how to ensure that each of the social partners is activated in ways that maximize their contribution to the response to the epidemic within frameworks that reflect an understanding of the threat that the epidemic poses for social and economic development. In moving forward it is essential that the

stock of knowledge relating to the issues be expanded and consolidated, and that the social capital thus generated be used in moving forward policies and programs within the region.

The losses of human capital will not be confined to those with the greatest level of education and training so that the costs of the epidemic will be much greater than those normally estimated by economists (WHO, 2001). Since the system requires many levels and types of skills and capacities both of men and women it becomes even more necessary to ensure that mechanisms are strengthened to supply the levels and mix of skills that are needed for development.

This is the policy problem: to ensure that skills are created as appropriate and labor supplies maintained as the HIV epidemic threatens to erode them. The problem is compounded by the fact that the epidemic systematically undermines the capacity to achieve these objectives, at precisely the time that labor supplies are most threatened.

This is the challenge facing developing African economies one where there is no simple solution, but one where there are actions that can be undertaken to sustain human capital that will over time mitigate the impact on social and economic development in Nigeria (UNAIDS, 2001).

It is becoming clearer that the actions needed to sustain development entail a radical break with the past (UNAIDS, 2001). In matters relating to human capital, policies and programs are needed that re-consider current policies and adapt these to the new reality of a world characterized by AIDS (ILO, 2006). To give a few examples:

- The objectives of the education system need to be revisited and redefined, with new tasks set for formal educational organizations that reflect the changing needs of the economy: this will mean more inclusive and less hierarchical systems with fewer resources for higher education and more for primary and secondary schooling.
- The same is true for health, where losses of key human resources due to the epidemic as high as 40 per cent of staff in the some countries will have to lead to a redefinition of attainable tasks, together with a realignment of health training that matches a new set of health objectives and different mechanisms of delivery.
- In terms of rural development it is clear that many traditional systems of social learning that pass skills and knowledge from generation to generation are no longer functioning because of the increasing mortality of parents in their prime working ages. In this case there will need to be alternative ways of ensuring that skills are made available to children, together with the resources to enable production to be maintained.
- New technologies need to be developed that will substitute for the increasing scarcity of labor both the

skilled and professional and the supposedly 'unskilled'.

The search for more appropriate technology will need to be undertaken as a planned activity rather than being left entirely to the endogenous forces of product and capital markets which are not only highly imperfect but much too slow in adapting to changing conditions.

With the search for appropriate technologies there will have to be a redefining of the output objectives of the country – to ensure that key services and outputs are maintained and that access is ensured for all those in need. In other words re-examining development goals and ensuring that these reflect the objective of sustainable development (ILO, 2006).

RECOMMENDATION

The HIV scourge is gradually swallowing up the active labor force in Nigeria (WHO, 2001). However, the epidemic was initially seen as a health problem, with responsibility for policy and program development lodged in the Ministry of Health, with the inevitable result that the policies and programs were primarily health oriented (Kelly, 2000). Even where organizational structures were established that were intended to involve non-health ministries, these were in most cases inoperative and ineffective. While there is now a greater willingness to involve other branches of government and of civil society in the response to AIDS, and to set up multi sectoral programs, it is still the case in most countries that the programs are dominated by health-related concerns (Kelly, 2000).

It is, therefore, rare to find government actively involved in the national response to AIDS. Where they are active they seem to have defined their function as being mainly concerned with health and safety at work, including reviews of national legislation. In some countries they have also supported the development of a national policy framework for labor so as to ensure the existence of guidelines in areas such as HIV testing and nondiscrimination in the workplace. These activities are very valuable where they exist and where there are effective implementation structures, but neither of these conditions are met in most countries (Bennell, 2003).

Furthermore, and perhaps more importantly, Ministries of Labor have not generally understood the threat that the epidemic has for the stock of human capital (ILO, 2006). It is the loss of experienced, skilled and professional labor in many key sectors of the economy that poses the most direct threat to economic and social development, but Ministries of Labor do not seem to have grasped this point. Failure in understanding has led to inactivity with respect to those activities that relate to human resource planning, with the result that no one has seen it as their responsibility to ensure that human capital is as far as possible sustained. The mobilization of Ministries of

Labor so that they have a deeper understanding of their responsibilities in a world of AIDS remains one of the key tasks that need to be undertaken by agencies such as the (ILO, 2006).

Thus in line with the several effects of HIV on the economy, the following recommendations were made:

- i). Strong political leadership and commitment to transparency and prudent management of financial and other resources at all levels for sustained response to HIV/AIDS.
- ii). Multi-sectoral approach that is community-based, community-driven, gender responsive and forges broad partnerships, dialogue, consultations and effective coordination among stakeholders.
- iii). Commitment to scale up prevention among the general population as well as among high risk and other groups vulnerable to HIV infection.
- iv). Protection and promotion of the rights and access of PLHIV to comprehensive health care and other social services.
- v). Commitment to protecting rights of PLHIV, reduction of stigma and discrimination and ensuring greater involvement of PLHIV in national HIV/AIDS program at all levels.
- vi). Commitment to promote and protect rights and reduce vulnerability of women, children, young people and marginalized groups to HIV infection.
- vii). Promotion of comprehensive approach that strongly links HIV prevention, treatment, care and support and geared towards universal access.
- viii). Culture, traditions and religion have a strong influence on behavior, attitudes and practices of majority of Nigerians and traditional and faith based institutions as gate keepers of attitudes and behavior and joint facilitators of social transformation are critical assets in the fight against the disease.
- ix). Effective response to HIV/AIDS requires respect for, protection of and fulfillment of all human rights civil, political, economic, social, and cultural and upholding the fundamental freedoms of all people in accordance with the country's constitution and existing international human rights principles, norms and standards.

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APPENDIX

Department Of Economics,
Faculty of Social Sciences,
Nigerian Turkish Nile University Abuja,
Nigeria.
19th February, 2014.

Dear respondent,

I am a final year student of the above named institution, carrying out a research study on the topic titled: "IMPACT OF HIV/AIDS ON HUMAN CAPITAL AND ECONOMIC GROWTH IN NIGERIA" This study is purely for academic purpose. I therefore implore you to please fill the attached questionnaire appropriately as any information therein will help me in the study. Any information given shall be treated with strict confidentiality.

Thank you.

Yours faithfully
Fatima Tijjani

Please pick and complete the following

Section A: Respondent Personal Information

I. SEX

Male

Female

II. AGE

21-30

31-40

41-50

51&bove

III. Religion

Christianity

Islam

Pagan

IV. Marital status

Married

Single

Divorced

V. Qualification

B.sc

M.sc

PhD

Other

SECTION

B:

INFORMATION ON THE CAUSES OF

HIGH GROWTH RATE OF HIV/AIDS IN NIGERIA

1. Do you believe that lack of sex education propels the spread of HIV/AIDS in Nigeria?

No

Yes

2. Would you say that poverty and unemployment contributes to the rise in the spread of the endemic disease?

Yes

No

3. Do you think that the failure of government has inflated the spread of HIV/AIDS?

Yes

No

4. What do you think are the other reasons for increase in the spread of HIV/AIDS in Nigeria?

.....
.....
.....

SECTION C: INFORMATION ON THE EFFECT OF HIV/AIDS ON HUMAN CAPITAL AND ECONOMIC DEVELOPMENT IN NIGERIA.

5. Do you believe the rise of HIV/AIDS has an effect on human capital as well as economic development in Nigeria?

Yes
No

6. Would you say that the effect of HIV reduces the population of productive manpower in Nigeria?

Yes
N

7. Do you think the rise of HIV has a negative effect on gross domestic product (GDP) of Nigeria?

Yes
No

8. What are the other negative effect of HIV on economic growth in Nigeria?.....

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.....

SECTION D: INFORMATION ON WAYS OF ABATING HIV/AIDS AS A MEASURE TO BOOST HUMAN CAPITAL/ECONOMIC DEVELOPMENT IN NIGERIA.

9. Do you think government has a great role to play in the management of HIV/AIDS in Nigeria?

Yes
No

10. Would you say that the reduction in the rate of unemployment and poverty rate in Nigeriacan reduce the spread of HIV?

Yes
No

11. Do you believe that proper sensitization and early warning on the effects of unprotected sex and use of sharp objects will curb the spread?

Yes
No

12. What are the other means of curbing the spread of HIV/AIDS in Nigeria?.....

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