THE IMPACT OF HIV/AIDS ON PRIMARY EDUCATION IN

BUKOBA RURAL AND KINONDONI DISTRICTS OF TANZANIA

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DRAFT REPORT

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Executive summary

The study sought to examine the impact of HIV/AIDS on delivery of primary school education in Tanzania. The study was conducted in Bukoba rural and Kinondoni districts. The choice of these two districts was influenced by the magnitude of the pandemic. It was felt that a rural and urban set up would provide an image that represents the impact of the pandemic in Tanzanian primary education system. It was important also to compare the rural and urban setting in assessing the impact of HIV/AIDS on primary education system. The impact of HIV/AIDS was examined in relation to supply of and demand for education. In doing this, it became apparent that a pre AIDS scenario (1980-1983) and the period thereafter were important phases in assessing the extent of the impact that HIV/AIDS had on education.

The study participants included 1859 pupils, 129 teachers, 71 school committee members, 17 district council officers, 14 NGOs and CBOs staff and 15 religious leaders. The data collection combined several methods to allow validation and comparison with other areas. These methods included the use of questionnaire, interview schedule, documentary review, focus group discussion and observations. The collecting instruments were pilot-tested and necessary changes were made prior to execution of the study. Few limitations were experienced in the course of executing the study. First, it was difficult to obtain adequate data on the period covering 1980 - 1983 because there were no enough records. Secondly, it was difficult to establish whether or not the persistent illness and death among teachers, pupils and parents/guardians were due to HIV/AIDS or other causes.

Regarding the demand of primary education prior to the advent of HIV/AIDS (1980-1983), the study findings revealed that school enrolment was growing, many children of school going age were enrolled in both Bukoba rural and Kinondoni Districts. The attendance was also high ranging between 75 and 98 percent in Bukoba rural and 89 and 96 percent in Kinondoni District. Truancy ranged between 2 to 25 percent. The number of orphans was manageable by the remaining parents/guardians in terms of meeting school costs. Parents/guardians were able to pay fees and other school contributions:

On the impact of HIV/AIDS on the supply of education (1980-1983) it was found that the student teacher ratio was 1:40 as compared to the recommended ratio of 1:45. The teacher's attendance was above average or very good ranging between 75 and 85 percent both in Bukoba rural and Kinondoni Districts. There was adequate supply of materials that facilitated the teaching and learning process. The primary education graduates were considered to have acquired the basic skills necessary for community life after school. The effects of HIV/AIDS from 1983 to date have caused significant impact on the primary education, thus reversing the trend on supply and demand of the system.

The findings on impact of HIV/AIDS on the supply of primary education indicated that the number of teachers in both districts was adequate in comparison to the number of classrooms. However, this number was not commensurate with the expected number of pupils (eligible) to be enrolled. In Kinondoni the teacher-pupil ratio was above 1:45. Teachers average attendance was about 73 (low compared to pre AIDS era) due to teacher frequent illness, absenteeism and social obligations caused by AIDS etc. Also teacher's ill health and the increasing death rate of qualified and experienced teachers caused psychological tension and emotional stress among teachers and pupils. The school plant, teaching and learning facilities are limited given the pupils' academic needs. Most of the classrooms are dilapidated while the community watches but can not do much. The parents/guardians and community ravaged by HIV/AIDS have difficulties in copying with the socio-economic environment.

The demand of primary education from 1983 to date was impacted by HIV/AIDS. Pupil's attendance dropped from average 86.5 percent to 77 percent and 92.5 percent to about 84 percent in Bukoba rural and Kinondoni districts, respectively. Most of the absentees, truants and dropouts were orphans. In some schools the number of orphans has reached to an alarming levels of 49 per cent of pupils' population. In one of the schools in Bukoba Rural had 3,7 and 17 orphans in 1981, 1982 and 1983 respectively. The same school had 119, 125 and 125 orphans in 1998, 1999, 2000, respectively.

The findings further revealed that orphans were conceived as troublemakers because of lack of parental love, guidance and care. Orphans are stigmatized and discriminated. They are enrolled at a later age when compared to non-orphans. Many of them fail to pay for their health services, fees and other school contributions. Orphanation and poverty have increased the burden to the already over-stretched social safety nets. This has reduced the capacity of the parents/guardians and the community in general to contribute to primary education development. The government fiscal budget for primary education is limited to cater for the increasing school needs.

It was revealed that pupils were aware of problems facing people affected by HIV/AIDS and effects of HIV/AIDS to teachers, pupils, parents/guardians and the community. Pupil's perceptions on the impact of HIV/AIDS had implications on their school performance.

The study further indicates that teachers teaching time was wasted due to absenteeism from duty due to effects of HIV/AIDS or other social obligations related to AIDS. Pupils also failed to attend regularly for reasons related to the impacts HIV/AIDS. Time wasted and inconsistencies inhibited the smooth implementation of the primary school curriculum.

Furthermore, it was also noted that the MOEC introduced HIV/AIDS education in the curriculum initiated the development and printing of core and HIV/AIDS supplementary teaching and learning materials. Apart from introducing family life education which would provide the necessary life skills. HIV/AIDS education reduced the number of science subjects in the timetable from three to two. It was noted that policies to promote primary school enrolment, regular school attendance and effective teaching-learning have failed to work effectively, partly because of AIDS. HIV/AIDS orphanhood has inhibited the orphan's education due to costs involved. The new policy to exempt orphans from paying fees remains unclear and in many schools it is not operational. It is argued that the policy contradicted the cost sharing policy.

In the light of the above findings, the study makes the following conclusions and recommendations are made:

That a significant number of qualified and experienced teachers experience ill health, other have died, and that some died because of HIV/AIDS. It is recommended that the government should make deliberate efforts to extend health insurance to primary school teaches and allocated more teachers to regions and districts seriously affected by HIV/AIDS to check the possible shortage due to death and poor health conditions.

That after HIV/AIDS scourge school plant and teaching facilities are inadequate and some in dilapidated form. It is recommended that the government through the Ministry of Education and Culture should launch a multi-sectoral approach to rehabilitate and build primary education infrastructure.

The number of orphans is increasing rapidly in the primary education system in Tanzania, yet are mistreated – stigmatized, conceived as troublemakers and enrolled later or not enrolled. It is recommended that Ministry of Education establish education guidance and counselling to schools, CBO and NGOs to target groups to redress the situation.

That some schools have limited capacity to enrol all eligible children in their catchment areas. This limitation was found to have implications on the admission of children affected by HIV/AIDS. It is recommended that the programme to eradicate poverty in the country should give priority to construction of primary school classes and provision of school materials and teaching-learning facilities. It should also support children in AIDS afflicted households so that they can attend school to completion.

It is further concluded that the government fiscal budget for primary education sector is still limited to cater for all the needs of school. It is recommended that the government expenditure on education should be increased. Deliberate efforts be made to primary schools in the HIV/AIDS affected communities.

It is also concluded that policies formulated by the government to promote school enrolment, attendance and effective teaching-learning process were found not to be functioning properly. It is suggested that the government should re-evaluate the policies so as to make informed remedies.

The exemption of orphans to pay fee and other contributions was not familiar yet with many schools and still faced some problems in some communities. The practical part of the policy was not clear and needed further clarifications. It is also not a lasting solution for children from the most needy HIV/AIDS households. It is recommended that the policy should be revised so that it is clearly formulated to address the reality of the social conditions.

On the current curriculum, it concluded that important topics on family planning and reproductive health were not adequately covered. It is also concluded that the graduates of primary schools lack requisite skills to enable them fit in local communities. It is suggested that the relevant bodies should revise the school curricula to capture the needs of the communities that have been affected by the pandemic.

This study dwelt on the impact of HIV/AIDS on the Primary School Education Delivery System. It is recommended that research be conducted to investigate the impact of HIV/AIDS on Secondary education delivery system. The study will address the adolescents who are the most risk group.

A study is also required to examine the impact of HIV/AIDS on tertiary education delivery system so as to find out informed solutions to arrest the scourge against the future work force. There is also need for a study to assess the impact of HIV/AIDS on the in schools and out of school orphans. Another area for study is to focus on the financing of education of the needy and orphans.

It is recommended that longitudinal studies be conducted to establish the impact of HIV/AIDS on education. Further areas of research can focus on the differences between

girls and boys with regard to the impact of AIDS on education. Different cultural backgrounds in Tanzania also merit further research, as the impact can be different due to the cultural influences despite the fact that education is centrally co-ordinated.

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LIST OF ABBREVIATIONS

AIDS Acquired Immunodeficiency Syndrome
AMMP Adult Morbidity and Mortality Project
AMREF African Medical Research Foundation
BAKWATA Baraza Kuu la Waislamu Tanzania
CBO Community Based Organization
CIPP Context, Input, Process and Products

CCBRT Comprehensive Community Based Rehabilitation Tanzania

EDU Elimu Dhidi ya Ukimwi

EU European Union

HIV Human Immunodeficiency Virus

IEC Informational Education and Communication

MOEC Ministry of Education and Culture

MTP Medium Team Plan

MRALC Ministry of Regional Administration and Local Councils

NACP
National AIDS Control Program
NGO
Non Governmental Organization
OAU
Organization of African Unity
PLWHA
People Living With HIV/AIDS

PASADA Pastoral Activities and Services for AIDS
SADC South African Development Cooperation
SIDA Swedish International Development Agency

STD Sexually Transmitted Disease

TB Tuberculosis

TFTU Tanzania Federation of Trade Unions

UNAIDS Joint United Nations Programme on HIV/AIDS

UNDCP United Nations International Drug Control Programme

UNDP United Nations Development Programme

UNESCO United Nations Education, Scientific and Cultural

Organization

UNFPA United Nations Fund for Population Activities

UNICEF United Nations Children's Fund UPE Universal Primary Education

WAMATA Walio Katika Mapambano na AIDS Tanzania

WHO World Health Organization

ZACP Zanzibar AIDS Control Program

1.0 THE PROBLEM AND BACKGROUND OF THE STUDY

1.1 Introduction

This study presents the impact of HIV/AIDS on primary education system in Tanzania. The impact is examined in relation to the supply of and demand for education with emphasis on the context, input, process and product of primary education in Tanzania.

1.2 Background of the problem

1.2.1 The global situation of HIV/AIDS

HIV/AIDS is a major problem as we begin the 21st Century. The situation of HIV/AIDS globally has moved from a little known condition to a globally threatening disease. HIV/AIDS has spread at a very fast rate since the first cases were identified in the 1970s and 1980s. As of December 1999 a total of 33.6 million men, women and children were living with HIV/AIDS (UNAIDS, 1999). This number includes 14.8 million women and 1.2 million children less than 15 years. HIV/AIDS is spreading very rapidly in spite of the numerous preventive programs being conducted world-wide (UNAIDS, 1999).

1.2.2 Life expectancy

Life expectancy at birth is particularly sensitive to AIDS because deaths occurring to young adults and young children result in a large number of years of life lost. The United States Census Bureau has made projections of the impact of AIDS on future levels of life expectancy in 23 of the most affected countries. It estimates that, for this group of countries, life expectancy in 2010 will be approximately 20% lower than it would be if there were no AIDS. This will affect both supply and demand for education as teachers and parents die at a prime age and leave behind pupils/children facing some difficulties in getting education, which is the basic right and important thing for their future.

Across Africa, HIV/AIDS has drained skilled manpower in every sector, which was scarce to begin with (UNAIDS, 1999). Teachers and students are dying or leaving school because they can no longer afford. Others are needed at home to work or care for the sick. In some countries more than 30 percent of teachers are living with HIV/AIDS, and more now die each year than graduate from teacher training

programs. Moreover, faltering education also diminishes human capital for the future in every other sector.

1.2.3 Impact of AIDS on supply of education

In general, the impact on the supply of education may be seen first through the constraints imposed on human and financial resources available for education. This results, partly, in a lack of equipment, classrooms, materials and books for education (IIEP Newsletter, 2000). There is evidence that education and health systems in a number of African countries are surviving on seriously depleted human resources (health workers, teachers, system managers) due to AIDS (UNAIDS, 1999). Two recent UNICEF studies on the impact on HIV/AIDS on teachers in the Central African Republic and Cote d'Ivoire indicate that the capacity of the education systems of the two countries to accommodate students are adversely affected by the increasing deaths of teachers as a result of the epidemic. The study in the Central African Republic indicates that, from 1996 to 1997, the number of deaths of primary school teachers due to AIDS increased by 8 per cent in five of the seven educational regions where the survey was carried out. Teachers in these countries disappear; primary schools are subsequently closed down. Reduced financial resources available for education further affect the supply of education and its organization.

1.2.4. Impact of AIDS on the Demand for Education

The social demand for school places is reduced in societies where AIDS is omnipresent because fewer children will be born, and most of those who die before reaching school age. Many orphaned by the disease will not enroll in school or may have to leave school due to lack of adequate support and an inability to pay school fees. Girls are more affected since they are usually the first to be withdrawn from school to take care of sick parents and the siblings. The first detailed account of AIDS orphans by UNAIDS and UNICEF in sub-Saharan Africa talks of 10 million children orphaned by the disease. Many of these orphans end up on the streets, and the extended families who take in these orphans often can barely afford to send all their own children to school, let alone additional members (IIEP Newsletter, 2000).

1.2.5 School Enrollment

The World Bank 1997 findings on African Development Indicators show that the school enrollment is declining in Sub-Saharan Africa in Primary school from 79 per cent (1980) to 73 percent (1993). Despite the declining in enrolment UNESCO, (1999) observed that more than 30 percent of children of school age do not go to school in the Sub-Saharan Africa region.

AIDS can affect education in a number of ways: through an impact on cohort sizes and enrollment numbers; teacher needs, turnover and training; parent's willingness and ability to pay for schooling; the efficiency of the education system; and the economic returns to education.

Tanzania belongs to a group of twenty-five countries in the world where the most severe HIV/AIDS epidemic has been documented. The twenty five worst affected countries in the World are in order: Zimbabwe, Botswana, Namibia, Zambia, Swaziland, Malawi, Mozambique, South Africa, Kenya, Rwanda, CAR, Djibouti, Cote d' Ivories, Uganda, Tanzania, Ethiopia, Togo, Lesotho, Burundi, Congo, Burkina Faso, Cameroon, DRC, Gabon, Haiti and Nigeria. Twenty-four of the 25 countries are found in Africa South of Sahara (UNAIDS, 1999). In Tanzania, as in the rest of African countries, the presence of HIV/AIDS was recognised quite early on, but the response to HIV/AIDS was underestimated.

A total of 8,675 AIDS cases were reported to the National AIDS Control Program (NACP) from the 20 regions in 1998, bringing the cumulative AIDS cases to 109,863. The NACP however, estimates a total of 43,375 AIDS cases to have occurred in 1998 alone and a cumulative total of 549,315 cases basing on the estimate that only 1 out of 5 cases are reported NACP (1998).

HIV/AIDS is seriously ravaging all sectors in Tanzania, the education sector not being exceptional. The impact of HIV/AIDS is clearly felt on the primary education delivery system, thus, the teaching-learning environment, the resources, that is, human, fiscal, physical as well as time resources have marked effects. In addition, the whole process of implementation of the curriculum has significant impact as a result of the pandemic and the graduates from the primary education system have suffered

the consequences. However, various interventions to cope with the HIV/AIDS impact have been advanced by the government, international organisations, NGOs, private sector, the community and religious institutions.

1.2.6 The Teaching-Learning Environment

The teaching-learning environment encompasses the context (community) within which schools operate and the situation at the schools themselves. Community studies conducted in different parts of Tanzania indicate that the major impact of the epidemic is on the households (World Bank, 1991; 1997; Kaijage, 1997, Katabaro, 1992; Ndamgoba, 1999). It is argued that the rise of deaths due to AIDS has created inordinate large numbers of vulnerable groups especially widows, orphans, and elderly who have found themselves without visible means of material, emotional and psychological support due to the loss of their primary care providers.

In Tanzania like elsewhere HIV/AIDS is clearly taking an immense and growing human toll. The disease is catastrophic for thousands of parents who become effected, become sick and stark contrast to children and school going youths hopes who entirely depend on their welfare and assistance. It is also a tragedy for their families who in addition to suffering and profound emotional loss may be impoverished. Losing a parent can be of profound consequences for any child and is likely to be worse in poor households. The situation whereby the school going youth depend on such impoverished family for food, clothing, fees and other school requirements is paradoxical. Researchers have agreed that HIV/AIDS have aggravated the poverty situation to households and extended families in Tanzania (Katabaro, 1993; World Bank, 1997).

Nevertheless, the National AIDS Control Programme researchers observed that it is not easy to differentiate problems due to HIV/AIDS and other causes such as poverty and unemployment. Moreover, they noted that HIV/AIDS adds more to already problematic situation in the families including difference in responsibilities to the sick especially when one member is sick for a long time. Requirements of money for health care, absence of income from salaries and labour force in agriculture and business due to diseases, deaths and stigma attached to HIV/AIDS aggravate the situation aggravate the situation (NACP, 1994; Kaijage, 1998).

The AIDS epidemic impact impinges on a myriad of economic, social and even political processes. One of the issues is the care of vulnerable survivors whose needs can no longer be adequately met by the traditional social safety nets. As Kaijage (1998) correctly puts it "the established social safety nets have been stretched to their limits by the enormity of the problem". The problem has not only put the established institutions of social care to test, but has also brought into sharp focus the structural weakness of the local economy and the gross injustice of the gender and inter generation relationship. As a result the choice of investment by the afflicted families may favour other areas of investment than education. Ainsworth and Koda (1993) noted that family decisions to send children to school depend on, among other things, the value that the family members attach to education and the long-term benefits against the overall cost of education. Such environment is not conducive for smooth teaching-learning process.

1.2.7 The situation in schools

NACP (1998) observes that there is increasing absenteeism at work places, decline on productivity in all service and production sectors, long period of illness to prime producers, funeral costs and bereavement situation is prevailing. The school observations revealed that with such impact of HIV/AIDS efficiency is at jeopardy.

School management on the other hand, has became difficult and often Head teachers have found it difficult to administrate schools composed of teachers surrounded by social disputes which facilitate ineffectiveness. It should also be noted that, the gap between parents/guardians and teachers has widened as a result of suspicion and lack of trust. School fees and other contributions coming to school have become fewer and more unpredictable, making planning of school activities almost impossible (Shaeffer, 1999).

The impact of HIV/AIDS on primary education system entails the human factor (teachers and pupils), fiscal, physical resources and time. Any consideration of the impact of the epidemic must recognise that the resources often face uniquely severe problems.

1.2.8 Teachers

Simple modelling indicates that the impact of HIV/AIDS epidemic is serious at work places, where socialisation and interaction between people of different sex is persistent (world Bank, 1992). Teachers fall prey of such circumstances. Most of the teachers in Tanzania primary schools are aged between (20-49 years). This is the group susceptible to HIV/AIDS disease.

World Bank, (1993), asserts that if it is assumed that the rate of the infection among teachers is the same as among general adult population, 14,460 teachers will have died from AIDS by the year 2010 with the number mounting to 27,000 by 2020. It should be understood that in 1993 there were 99,000 primary school teachers in Tanzania. The average cost per year of teachers training was Tsh.140, 000 in 1993. To train 27,000 additional teachers for two years each to replace those who die would cost Tsh.560 million in the recurrent costs which is extremely exorbitant. The other effect of the AIDS epidemic is the ability to attract teachers to those areas most severely affected.

1.2.9. Pupils

On the case of school pupils the major problem is increasing orphanhood. This seem to be a common phenomenon to different families country wide due to spread of the AIDS disease (NACP, 1994). The infection rate due to HIV and deaths due to AIDS are increasing and therefore increasing orphans. With the loss of parents and increasing number of orphans the households and extended families cope as best by selling household assets and drawing on their friends and relatives for cash and in kind assistance.

Their children may be permanently disadvantaged by worsening malnutrition and withdrawal from schools (World Bank, 1997). AIDS orphans may suffer social stigma from having lost their parents to sexually transmitted diseases. They often face serious problems for very young orphans whose mothers are infected or die of AIDS have higher mortality rates than other orphans because roughly one third of them are themselves infected with HIV at or around the time of birth. This situation hampers enrolment, attendance and encourages truancy and dropout.

In Tanzania the findings show that about 23 per cent of the households have orphans (who have lost one or two parents). Seven per cent of the households have children who lost their mothers, 11.6 percent have lost their fathers and 4 percent have children who lost both parents.

Interestingly however, it is revealed also that half of the children who lost their mother live with their fathers (58 percent), a quarter live with grand parents (23 percent). Those who lost their fathers live with their mothers or grand parents (64 percent). Those who have lost all parents live with grand parents (42 percent) and other relatives (41 percent) while about 12 percent live with either brothers or sisters.

Katabaro (1999) found out that primary schools in Kagera have on average 30.4 percent of orphans out of the whole school pupils. It was observed that the impact of HIV/AIDS on these orphans is increasing as a result of increasing needs in the community and at the household level.

The orphan situation is better known, albeit imperfectly. The latest estimates available on orphan population in Tanzania are 730,000 at the turn of the 21st century (UNAIDS, 1999). The problem of AIDS orphan as it has depicted has wide-ranging ramifications at different levels of social relations. The growing presence of such large population, which for the most part cannot fend for itself, must exert enormous demands on the support systems of the society. "In a country where welfare state schemes are at best rudimentary the burden of material and psychological support must be borne by informal support network which are family based" (Kaijage, 1998).

Generally, an educational opportunity to orphans has limitations. The most central is lack of resources. Orphans are often send back home for failure to pay UPE fees and other contributions. Also uniforms, shoes even pens, pencils and exercise books are not accessible to orphans (Red Cross, 1995; Katabaro, 1993; Kaijage, 1998). Jallow and Hunt (1991) have shown that orphaned children received different treatment from biological children in the same household.

It was assumed that they required assistance to face difficulties of attending school for seven years. It was noted that girls were more disadvantaged because parents/guardians would prefer to take boys to school rather than girls because of biased traditions. The community, too, has a role in determining the child's entitlements in the family. An orphaned girl cannot be expected to gain access to education from her fostering parents when resources are limited (World Bank, 1997; Ainsworth & Over, 1994). Boys have the advantage of being regarded as future heads of the family and all benefits accruing from investing in them are enjoyed by the whole family. It was also found out that orphans were enrolled later when they were much older than their fellow children were.

These feelings about the causes of orphanhood not only suggest complications surrounding the pandemic but also a lack of understanding of the nature of AIDS. Orphanhood to AIDS is unique because of its antecedents and consequenBefore a loved one dies of AIDS, different studies have shown that there can be prolonged periods of uncertainty on the part of the victims before they break the news of their HIV/AIDS status to other members of the family (Aggleton et al., 1991; Cleland et al., 1995). This is believed to cause depression and withdrawal. The orphaned children are likely to suffer most as they not only witness their parents suffer during the terminal stages of AIDS but also the post death period is not certain. Other studies (Reid, 1993; Geballe, 1995; Mugisha, 1992; UNAIDS, 1997) have also indicated that AIDS orphans are more disadvantaged when compared to orphans from other causes of death. Ngowi and Hogan (1992) observed that:

Parental loss through AIDS has created a new form of bereavement. Offspring not only have to deal with parental loss and family disintegration but very often the stigma, fear, guilt and shame the society imposed on AIDS (1992:47)

"Fear, guilt and shame" occur because society attributes AIDS to undesirable behaviour on the part of the victim and also stigmatises other family members for failing to check their relatives' conduct or even having directly caused the infection by passing it to them. These problems are magnified further by feelings about their imminent responsibilities to the children left by relatives.

The WHO/UNICEF (1994) have classified these problems into the following categories:

- reduced capacity for individual families to provide for their own food and other needs;
- susceptibility to health risks and vulnerability to HIV infection with high morbidity conditions;
- psycho-social problems that affect child development;
- inability to provide school equipment and clothing;

It should be noted however, that orphans who got assistance and support of resources (financial, material, school facilities etc) from various sources such as NGOs and international organisations were easily enrolled compared to as other children. Clearly, HIV/AIDS have a marked impact on pupils' who are the product of primary education delivery system.

1.2.10 Fiscal and Physical resources

At the core of mitigating the impact of HIV/AIDS on primary education delivery system is the paucity of economic resources. The problem hinges on two central issues: high mortality rates due to AIDS, which inhibits production and endemic poverty in all regions of Tanzania. These factors have mitigating agency resource providers to their limits.

The financial constraints faced by the government in the regions in the last two decades have led to the responsibility for financing of primary education being passed to communities and parents (World Bank, 1993, 1997; Kaijage, 1998). "These responsibilities includes building of classroom and teachers houses, providing textbooks and other school requirements. As pointed earlier, the orphanation has overburdened poor parents/guardians and the community in general. As such they have very little to offer.

Teacher's illness and absence from duty caused by HIV/AIDS related problems reduce teaching time. Absenteeism and truancy among pupils also reduces the pupil's time spent at the school (World Bank, 1993). Surveys in Arusha, Mwanza and Kagera revealed that both teachers and pupils during teaching-learning process waste a lot of time. It is pointed out that teachers waste time in many cases when he/she falls sick, while taking care of the sick and attending funerals. It was further noted that, parents/guardians waste time especially when pupils are sent back to find fees, class requirements and other school contributions. Illness among pupils is also mentioned to be time consuming. It is strongly argued that the reduction of teaching time is mainly a common experience exaggerated by HIV/AIDS pandemic. Failure to observe time results into failure to accomplish the intended objectives specifically not covering the respective syllabus.

1.2.11 Teaching learning process and the curriculum

The teaching learning process presupposes introduction of school health education about HIV/AIDS education in the curriculum and teaching learning process within schools. The area where the impact of AIDS is expected is in the field of school curriculum. Studies have uncovered that the over-increasing visibility and impact of HIV/AIDS has forced the Ministry of Education and Culture to work with greater effort in the introduction of HIV/AIDS education in the curriculum. In many cases the government has in collaboration with NGOs and various international donor agencies embarked on the issue (Shaeffer, 1993). According to Red Cross (1995) the efforts they launched early in 1990's in Kagera region bore positive results that was introduction of "EDU", that is, education against AIDS in primary school curriculum.

1.2.12 Teaching-learning process within the school

AIDS is having an impact on the teaching learning process within schools. As said elsewhere, interaction between pupils and teachers and among pupils has been affected and perhaps the overall learning process as well. Children are expected or ordered to stay a home for chores, especially petty business during market days to participate fully in production of their food and other monetary demands. This can result in loss of the logical sequence of subject matter because of frequent absenteeism and development of more interest in money generating activities than in discipline and regulation presented by the school (Katabaro, 1993).

The internal efficiency of educational system is likely to suffer due to poor pupils' performance of graduates from lower socio-economic status. This will affect the large investments in primary education system. It is also likely to lower the returns to education realised by graduates their families, employers and communities. The other impact is that teachers are becoming less quas older, more experienced teachers fall ill or die, they are often replaced by young, less - experienced and less - qualified teachers (Red Cross, 1995). More experience revealed by studies in Tanzania which are also found in Uganda include: group tasks in the classroom becoming difficult, especially where orphaned pupils are viewed as possible carrier of AIDS because of the death of parents. Stigmatisation is also observed as a serious problem. Learning problems encountered by orphans are not also getting attention they deserve, as teachers have no training in the field.

The adverse impact of HIV/AIDS on primary education system have a deleterious effects on the quality of education and efficiency of the system, where efficiency can be defined as the educational outcomes that is achieved as a result of the time spent on the implementation of the curriculum.

1.3 Interventions to cope with HIV/AIDS impact on primary education system

The responses to the impact of HIV/AIDS on primary education which intensified during the introduction of a multi-sectoral approach in the mid 1980's can be seen at two levels. At the national level educational programme have been established and campaigns mounted to inform the public about the consequence and nature of the epidemic. Government bodies (Ministry of Health, National AIDS Committees, and International Organisations, NGOs and religious institutions have done this. At local levels, government bodies are less involved and NGOs are very active, local communities are also organising themselves to take care of the sick, dead and orphans (Kaijage, 1993).

1.3.1. Government Response

The government response has been diverse, variable in nature and scope and was articulated at five programmatic cycles between 1985-1998. Each of the five plan cycles comprised of a combination of intervention. According to National AIDS

Control Programme the interventions are information Education and Communication (IEC) and patient care, counselling and social support.

1.3.2 The Private Sector response

NACP in collaboration with the NGOs, Tanzania Federation of trade Union (TFTU) spearheaded interventions. Programmes carried out are: peer education counselling home-based care, orphan care and support and IEC programs by mass media institutions (NACP, 1997).

1.3.3 The NGOs Response

NGOs both local and international have entered in the scene, especially in helping the orphans. NGOs also deal with the disadvantaged groups such as street children, women, disabled and the like. The NGOS involved include: World vision, Red Cross, WAMATA, GTZ, and Tanzania AIDS Project, just to mention a few. Other activities they perform are, counselling and home based care, orphan care and support, peer education, early diagnosis and treatment services for STDs, and provision of school facilities and equipment

1.3.4 International Organisations

International Organisations have intervened to supplement Government, NGOs, CBOs and private efforts to cope with the magnitude of HIV/AIDS problem. Organisations such as SIDA, CIDA, UNICEF, UNESCO, UNDP and USAID have been on the forefront.

1.4 Statement of the Problem

It is about fifteen years now since the first multi-sectoral interventions to redress HIV/AIDS were introduced in Tanzania. However, the killer disease is seriously ravaging the primary education delivery system. Orphanation phenomenon, which forces pupils in primary schools to miss the required care and facilities, is increasing. Also some fail to continue with studies because of failure to get the required school needs. Currently as said elsewhere 730,000 orphans have been reported. The enrolment of primary school students (orphans) has dropped. HIV/AIDS impact may be one of the contributing reasons.

The situation inhibits the smooth implementation of the curriculum. Moreover, the pupil's attendance is jeorpodized by deteriorating health status prevailing in the society among pupils and their parents. The HIV/AIDS impact on primary education is closely connected with the public outcry that the education standard in this sector has fallen.

How all these affect the development of education is not known. So far no study has been conducted to specifically assess the impact of HIV/AIDS on primary 608x1911Yeducatio

gap.

1.5 Purpose of the study

The purpose of the study is to assess the impact of HIV/AIDS on primary education delivery system in order to find out the magnitude of the problem, hence devise possible remedies. Specifically the objectives of the study are:

- (i) To assess the primary school context inputs, process, and product prior to the advent of HIV/AIDS in Tanzania
- (ii) To find out the effect of HIV/AIDS on primary system input (human, physical, fiscal, time policies etc)
- (iii) To examine the effects of HIV/AIDS on primary system process (curriculum, teaching-learning, administration etc).
- (iv) To investigate the effects of HIV/AIDS on primary education delivery system products (completion rate, pass/fail rate).

1.6 Rationale

The outcome of the assessment of the impact of HIV/AIDS on primary education delivery system in Tanzania will provide basic information on the magnitude of the problem and suggest remedies. In addition, the knowledge generated will be of vital importance to various institutions such as Ministry of Education and culture (MOEC), Ministry of Health (MOH), International Organizations, Non Governmental Organization (NGOs), Community Based Organizations (CBOs) and individuals in making informed decisions pertaining to supporting programmes addressing the impart of HIV/AIDS on primary education in the country. The information will also

act as a stimulant that will inspire the curiosity of other researchers to conduct further studies in the same area or related fields.

1.7 Delimitation

This study will be confined to assessing impact of HIV/AIDS on primary education delivery system. Also the study will be limited to 2 districts in Tanzania. The districts are Kinondoni and Bukoba rural.

2.0 RESEARCH PROCEDURES AND METHODOLOGY

2.1 Area of Study

The study was a cross-sectional survey in Bukoba Rural and Kinondoni Districts (Kagera and Dar Es Salaam regions) of Tanzania mainland. The districts were selected because they had reported many cases of HIV/AIDS.

2.2 The target population of the study

2.2.1 The population sample and sampling techniques:

The population of the study comprised all primary school pupils, teachers, member of school committees, education officers, Ministry officials and the general public in Bukoba Rural and Kinondoni Districts. The two districts were chosen because they are among districts with the highest incidence of AIDS in Tanzania. For practical purposes the study area was narrowed down to two divisions and three wards in Bukoba rural Districts and Kinondoni Districts respectively. These divisions and wards were purposively selected because of the magnitude of the HIV/AIDS. In Bukoba District one division had the highest percentage of orphans and another division was the fourth in the list with relatively high percentage of orphans (See Table 1). In the case of Kinondoni District, the three wards (Kinondoni, Mabibo, Makumbusho) are highly populated with prominent trading centres most congested with squatters namely Manzese, Tandale and Kinondoni. It was assumed that these areas have the required information related to the impact of HIV/AIDS on primary education system.

Table 1: Primary school pupils' enrolment in Bukoba rural district divisions - 1995

Division	Total enrolment	Number of orphans	% of orphans	
Bugabo*	6053	2019	33.7	
Katerero	15011	3976	26.5	
Kiziba	13060	4162	31.7	
Kyamtwara*	6168	1637	26.4	
Misenye	9974	2450	25.4	
Rubale	8351	1931	22.7	
Total	58617	16175	27.6	

Source:

Bukoba District Council Education Office (1996)

Monitoring and Evaluation Report for School year 1994/95

* indicates the divisions where the study was conducted in Bukoba rural district.

In Bukoba two wards were selected by using a simple random method. Pieces of papers with ward names were fairly mixed and only one picked piece determined the ward. All wards were given equal chances of participation in the study. All schools in the wards in Bukoba District participated in the study. In the case of Kinondoni, eight schools were selected on the bas1Xtheir location in relation to the incidence of HIV/AIDS and involved in the study. The participants are shown in Table 2.

Table 2: The Number of Participants by District and Sex

Category	Bu	ıkoba (Rural)		Konondoni		Grand
. .	Males	Females	Total	Males	Females	Total	Total
Pupils	502	416	918	474	467	941	1859
Teachers	29	20	49	10	70	80	129
School	29	25	54	11	6	17	71
Committee							
Members							
District Council	8	1	9	7	1	8	17
officers							
NGOs/CBO staff	8	1	9	1	4	5	14
Religious leaders	4	-	4	11	0	11	15
Counsellors	8	5	13	-	-	-	13
Others	-	-	-	_	2	2	2
Total	588	468	1056	514	550	1064	2120

The selection procedure for each of the above categories is discussed in more details below.

2.2.2 Pupils

The pupils' sample included pupils in grades five, six and seven (age range from eleven to nineteen years, with mean age of fifteen) from sampled schools. This group was purposely selected because could contribute constructively on the impact of the pandemic as they, in many different ways, may have experienced the impact of AIDS.

In Bukoba rural hundred and two pupils who could read and write well were identified and selected from each sampled schools, putting into consideration gender, and at least thirty four pupils from each grade. In Kinondoni District a list of pupils from the three grades was alphabetically prepared. Each sixth pupil was selected from the list, starting with the first in the order. A hundred and eighteen pupils were selected from each sampled school

2.2.3 Teachers

All teachers were selected purposefully. Thirteen head teachers from 13 schools participated in the study. One hundred and sixteen teachers were selected taking into account their responsibilities-academics, teachers in charge of HIV/AIDS education and discipline teachers. Teachers were considered to be a good source on information pertaining to support and care of pupils affected by the HIV/AIDS in different ways.

2.2.4 Non Governmental Organisations

All NGOs and CBOs selected were dealing with support of primary education by payment of school fees, and other official school contributions as well as construction of classrooms. Some of the NGOs provide HIV/AIDS education and social support. The heads and their designates participated in the study. The selection of these organisations was made after consultation with the District Education Officers. The choice of these organisations aimed at collecting information regarding the nature of support for the provision of primary education in the areas under study given the problems posed by HIV/AIDS.

2.2.5 Other participants

Education officers at regional and district level and head of sections in the District education office (academic, supervision, teachers service commission) as well as district community development and planning officer were selected and involved in the study. All heads of religious denominations and counsellors were selected and participated in the study. These individuals were specifically involved because of directing, monitoring, advisory, supervisory roles and their position in relation to policy and administrative issues pertaining to primary education. They provided information about policies, strategies and support options available for delivery in the primary school education system.

2. 3 Methods of data collection

The required data were gathered through interview schedule, questionnaire, focus group discussions, observations and documentary review. The use of more than one technique made it possible to counter check and cross validate information obtained from different sources (Babbie, 1983)

2.3.1 Interview schedules

A structured interview schedule was used for the teachers, pupils, religious leaders, staff from NGOs, members from education, planning and community development offices at district level. The interviews were devised to elicit information about adoption/fostering practices in the community for children after losing their parent(s).

The interview method was also considered useful for the explorative nature of this study and the flexibility it offers to the respondents. Because of people's different backgrounds in terms of settlement patterns (rural-urban) and socio-economic status, it was expected that there were different experiences on teaching, curriculum, social support patterns and the magnitude of HIV/AIDS in the community.

Furthermore, given the participant's willingness to participate in the study, the interview method allows participants to feel relaxed and free as the techniques takes form of the normal conversation, unlike in the questionnaire method where one would develop a sense of being examined (Creswel, 1994; Coolican, 1995; Hedrick et al., 1993). The method, however, had its disadvantages. Collecting information from people of different background and experiences led to the generation of information that can be difficult to compare.

2.3.2 Questionnaire

The collection of information regarding questions on pupils' self-evaluation, attitudes, demographic information and opinions, a questionnaire was considered to be a useful instrument. The pupil's questionnaire collected information about each pupil's demographic status, such as age, sex, and school information. The closed ended items that were used in this study provided a respondent freedom to choose from a well selected responses that addressed the issue in question. The open-ended items required pupils to provide additional information about themselves and their experiences. Pupils responded to both open and closed items by either filling in the gap or putting a tick in the relevant box on the item.

2.3.3 Focused group discussions:

Focus group discussions (FGDs) were used to collect information from school committee members. The method was used also to tap information from other resourceful members of the community such as community leaders.

2.3.4 Observations

This instrument was employed to gather data from the field of study. It is worth using because planned observation enabled the researcher to see exactly what is in place, therefore avoided bias. Aspects such as health status of teachers, pupil's orphanhood status, and pupils' attendance were captured. The instrument also enabled the researcher to be independent of clients' willingness to respond.

The use of observation and in-depth interviews facilitate responsiveness and openness to participants. In the present study, these techniques allowed researchers to focus on pupils' experiences in schools and how they perceived other pupils. The methods allowed a deeper analysis of issues within school, where meaning and concepts are defined and re-defined in line with changing community practices about HIV/AIDS.

2.3.5 Documentary Review

Primary and secondary sources of information were reviewed. Primary sources included reports, policies, directives, curricula, and research reports. Information pertaining to the enrolment of pupils, attendance, completion, number of teachers, fiscal allocation, physical facilities, pass/fail data, death trends and orphanhood status

were gathered from primary sources. The secondary sources included journals, books newspapers and dissertations.

Documentary review involved also scrutiny of school records pertaining to pupils' background information, performance in school activities, proceedings of various school committees, such as the disciplinary committee and reports sent to parents for individual children's problem cases. Different types of correspondence to and from higher authorities, such as regional and district education offices on matters relating to AIDS were also studied. The documentary source could not be totally relied upon as a source of all information especially on issues related to financial resources, policies and practices (Mlekwa 1975). They were still important to provide the basic data to complement information from interview and questionnaire.

2. 4 Validation of Instruments

In order to evaluate the validity, effectiveness and efficiency of the instruments, the items designed for the study were pre-tested in Mwananyamala Kisiwani, Makulumra, and Mugabe Primary Schools in Kinondoni District. The district was selected because it was one among the most hit districts in the country and it was within reach of the researchers during the planning phase of the study. The pre-tested instruments were devoid of ambiguities, inconsistency, hence the gaps and discrepancies were filled and cleared for use during the main study.

2. 5 Data Analysis

The CIPP model (context, input, process, product) guided the analysis of the data. This model was deemed useful in analysing key issues such as supply and demand in the provision of education. In order to examine the impact of HIV/AIDS on education at primary school level, the context in which education is delivered was analysed. The inputs, the processes and the outcomes/products were also analysed in relation to the extent to which HIV/AIDS has impacted on all and/or on individual aspect. Further details are provided in the subsequent sections.

3.0 PRESENTATION AND ANALYSIS OF THE DATA

3.1 Assessing the impact of HIV/AIDS on education

In assessing the impact of HIV/AIDS on education, this study focused on the demand and supply of education in two selected districts. On the demand for education the focus was put on children's enrolment, school attendance, promotion and drop out rates and truancy. The supply of education entailed the assessment of the inputs into the education system such as the availability of teachers, teaching-learning materials, physical facilities, time, the payment of fees and other school contributions. The pre-AIDS scenario and the period after 1983 when all 3 cases of AIDS were reported formed the basis for establishing the impact of AIDS on education.

3.1.1 The demand and supply of primary education prior to AIDS in Tanzania (1980-1983)

This section presents the findings on the provision of the primary school education prior to AIDS in 1983. Data presented covers a period of four years (1980-1983). Pupils are the central target group in the primary education delivery system. The study examined the impact of HIV/AIDS on pupils' enrolment, attendance, truancy and availability of teachers. The major concern was to establish the extent to which HIV/AIDS impacted on the school processes.

3.1.1.1 School enrolment

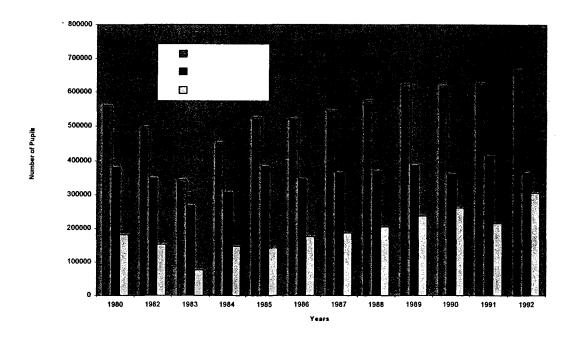
Assessing the demand for education entailed a critical analysis of the enrolment of school going children in the selected areas of study in the two districts. All the respondents in both districts indicated that the communities around the schools were economically well off before 1983. This enabled many parents to contribute to the school development. It was reported also that a large proportion of people was in good health status and there were very few deaths if compared with the period after AIDS. This implies that in the absence of AIDS, the community could concentrate its efforts on development activities. It was therefore possible for most households to contribute to building of classes, teachers' houses and even build new schools.

The documentary evidence suggests that school enrolment in Tanzania in general and Bukoba Rural and Kinondoni districts in particular, was growing between the period 1980 and 1983. The growth in school enrolment in the post-independence period up

to early 1980s in Tanzania can be explained by the expansion of primary education under the Universal Education Programme. Figure 1 below shows enrolment changes in Tanzania between 1980 and 1992.

Figure 1: Primary School Enrolment, Completion, and Drop Out Rates

Between 1980-1992 in Tanzania



Revelations from interviews with participants indicate that sound enrolment during this period was partly due to economic conditions prevailing then that allowed many people to send their children to school. Findings of this study indicate that many school age children were enrolled in schools in both Kinondoni and Bukoba Districts between 1980 and 1983. The majority of respondents attributed the absence of HIV/AIDS in this period to higher enrolment. These revelations are in agreement with Bongoko (1992) and Ishumi (1994) who have shown that enrolment in Tanzania

declined from 3,552,923 in 1983 to 3,492,469 in 1986. Ishumi (1994) further shows that the number of graduating pupils dropped from 649,560 in 1984 to 429,194 in 1985. This suggests that not only enrolment was going down but also that even those pupils who were already enrolled in school were dropping out. One critical question is the extent to which HIV/AIDS has contributed to the decline of enrolment in Tanzania

3.1.1.2 School attendance

Regular pupils' attendance is essential for the teaching —learning process to be implemented successfully. Irregular school attendance can have effects on the pupils' school performance. This has implications also on the school curriculum as teachers have either to re-teach the topic or make arrangements for some children to cover the lost lessons. This can result to time wastage and/or failure to complete the syllabus. All respondents indicated that there was good attendance rate in their schools. Table 3 shows the various data on primary school delivery system between 1980—1983. Pupils' school attendance for selected schools ranged between 75 and 98 per cent in Bukoba Rural district. In Kinondoni district, the corresponding figure was between 89 and 96 per cent.

Table 3: Primary School Data in Bukoba Rural and Kinondoni(1980-1983)

	NJEMA K		KAZI	MWANANY	'AMALA	MALA			
	YEAR	BAHATI	ILUHYA	FURAHA	BUMAI	KYEMBALE	KINONDONI		
Number of students	1980	236	i -	300	308	306	2348		
	1981	234	. -	303	296	312	2383		
	1982	240) -	297	297	314	2161		
	1983	243	, -	305	307	309	2290		
Number of Teachers	1980	11	-	10	10	8	50		
	1981	18	;	8	11	8	51		
	1982	9) -	10	8	8	52		
	1983	10	-	11	8	8	51		
Percentage of pupil attendance	1980	83	, -	97.7	90	78.5	85		
	1981	82	! -	97	87	85	84		
	1982	77	' -	96.7	81	89	84		
	1983	84	-	95.9	89	86.2	77		
Percentage of teacher attendance	1980	80.8	. -	80	80	75	96		
	1981	75	-	77.8	80	75	96		
	1982	77.8	-	80	75	75	90		
	1983			80			89		
Percentage of truancy	1980			2.3			15		
	1981	18		3					
	1982			3.3					
	1983			4.1			23		
Number of graduates	1980	35		40			-		
	1981	36		39			-		
	1982			43			-		
	1983			36) -	-		
Number of students selected for Secondary School	1980	3	i -	8	-	-	11		
School	1981	2	-	12	_	_	9		
	1982		. -		. -	_	5		
	1983		-	18		_	4		
Number of Orphans	1980	•	-	-	-	_	4		
Trainbor or Orphano	1981		_	3	_	-	5		
	1982		_		-	-	4		
	1983		-	17		•	3		

Truancy can cause students to miss some parts of what is taught. This hinders the teaching learning process from running efficiently and effectively. The findings in this study indicate that there were very few cases of truancy ranging from 2 to 25 per cent. This could be due to a number of reasons including lack of essential facilities and domestic activities. Data on truancy rate in Bukoba Rural district indicate that there was low truancy rate in general. However, the truancy rate varied from school to school. The truancy rate of Bahati, for example, ranged from 2.3% to 4.1% while Furaha had rates between 16% and 23%. Respondents from Kinondoni District indicated that there was low truancy rate although there was no data to support the claim.

3.1.1.3 The incidence of orphans

On the problem of orphanhood, participants indicated that there were very few orphans before the AIDS epidemic in both Kinondoni and Bukoba Rural districts. It should be noted that the data on orphaned children were not ordinarily being kept. The survey in the schools visited show that during the 1980 – 1983 period, there were few orphans in the communities and in the schools. Validation of this information was difficult, as no recorded data was available in many schools. Only one school (out of nine) in Bukoba Rural had data on orphans during this period. The data indicated that there were 3,7 and 17 orphans in 1981, 1982, and 1983, respectively. The interpretation of these data from one school shows a rapid increase in the number of orphans then. However, the number of orphans was small enough for the schools and parents/guardians to handle without many problems. The existence of orphans in the school can result into management problems. This is particularly so if these orphaned children do not have good care at home. Fostering parents may not be able to provide them with all of their essential needs.

3.1.1.4 The supply of Teachers

On the supply of education, the number of teachers was found to be adequate for the students enrolled in all the schools. Data from Bukoba Rural indicates that the student teacher ratio was above 1:40. The recommended pupil - teacher ratio for primary school is 1:45 (MOEC, 1999). Most of the schools had enough classrooms and desks during the years between 1980 and 1983 for all students to sit comfortably and learn.

Teacher attendance was evaluated as having been above average or very good in both Kinondoni and Bukoba Rural districts between 1980 and 1983. Data from Bukoba Rural indicates that the teacher attendance ranged from 75 per cent to 80 per cent.

3.1.1.5 Teaching-learning materials

The schools had adequate supply of teaching —learning material - books, maps, exercise books and chalk. The participants indicated that the situation was declining fast. One school committee member said that "now the burden is on parents". Further probing from the teachers concur with this statement that pupils are now receiving exercise books from their parents. Data on financial input of the government was not available. However, there were indications from all respondents from both districts that most parents/ guardians were able to pay school fees and others required contributions. They said that there was enough money collected from the parents/guardians to support children attending school and contribute to school development projects. The community had the ability to contribute to the construction of school buildings, teachers' houses and even construction of new schools.

It should be noted that, the teaching learning process is affected by numerous factors including availability of facilities, teacher and pupil attendance, health of teachers and pupils and motivation of teachers and pupils. As discussed earlier there were adequate facilities in the schools between 1980 and 1983 to facilitate successful the teaching-learning process.

3.1.1.6 Teachers and pupils' health conditions

Data indicates that there were few cases of teacher and student illnesses. It was reported that the community surrounding schools experienced few cases of deaths and illness. Good health conditions for teachers and pupils meant that both teachers and pupils spent most of their time at school. In some occasions, however, teachers and pupils left school to take care of the ill and/or attend funerals. In addition, time spent when school members are out of school due to illness or death in the family there may be psychological effects, which may keep the individual from performing at their

maximum capacity. As there were few deaths and illnesses the school community could run efficiently without many psychological problems.

3.1.1.7 Primary education products

One way of assessing primary education products is to look at the number of pupils who graduate form the system. The school product is usually assessed through the number of students who successfully graduate in each cohort and the number selected for secondary education. In this study it was difficult to establish the ratio of those who graduated in each cohort, as admission data were not available in many schools for the period under study.

Available data on school graduates indicate that more than 80 per cent of the pupils graduate at their first admission schools. This means that few students drop out of the school. It was not clear what was the proportion of orphaned pupils who completed and those who fail to complete their studies.

The number of pupils who completed and were selected for public secondary school entry was available for three schools in Bukoba Rural and in Kinondoni districts. The number of selected pupils in two schools in Bukoba Rural were 3,2,2 and 1 in 1980, 1981, 1982, and 1983 for Furaha, respectively, while the number from Bahati were 8,12,5 and 18 in 1980, 1981, 1982, and 1983 respectively. It was not clear why some school had many pupils selected than other schools. Bahati in Bukoba Rural had a much high rate of students being selected for secondary school than Furaha, despite the fact that they are in the same ward. This however, may not be a good indication of successful completion of secondary school as students are chosen according to the space available in secondary schools. There may be many students who reach mastery level in primary school content (i.e., they may have completed successfully) but are not selected to join Secondary Schools. It is also important to note that the life skills acquired from schools as it is important for graduates even if they did not continue with secondary education. Most respondents, however, felt that the graduates of the years 1980-1983 were well prepared to deal with life after school as they had received the basic skills and knowledge from school. Non Selection for Secondary school entry does not indicate that the person had not completed successfully as few students were selected due to shortage of secondary schools.

Whereas it cannot be argued that this period did not experience problems, the sharp decline in Net Enrolment Rates suggest that increasingly the provision of primary education faced many problems during the period after 1983 as shown by Ishumi (1994) and Bongoko (1992). The conclusion by Sumra (1995) that AIDS has affected the enrollment in school is valid.

3.2 HIV/AIDS impact on the demand and supply of primary education

The primary education system functions depend entirely on the need for education and the inputs channelled into the system. The research sought to investigate the extent to which the demand for and supply of primary school education are affected by the pandemic.

3.2.1 The impact of HIV/AIDS on the demand for education

3.2.1.1 Pupils' school attendance

The pupils' school attendance was another concern of the study. The documentary evidence obtained from the schools indicated that the attendance of pupils was above average. It was revealed that the lowest average attendance for Bukoba Rural schools is 77 percent and the highest is 90 percent. The average percent of absenteeism ranges between 10-23 percent. In Bukoba Rural the interviews insisted that most of the pupils who were absent mainly were orphans. The reasons provided were lack of parents/guardian push especially in the morning, lack of parental guidance, care and support. This situation resulted into orphans not observing normal daily routine such as sleeping early as they sometimes attended night disco because of extended freedom. Failure to get basic school requirements such as fees, uniforms, clean uniforms, and pens was yet another possible factor that resulted in their irregular school attendance.

In Kinondoni many other factors contributed to poor attendance. It was reported that poverty (common in Bukoba Rural too) was one of the main reason behind absenteeism from school for many pupils. This made them fail to acquire basic school requirements. This led them to frustration and despair, pupils engaging in drug abuse, petty business and even in commercial sex. Orphanhood also contributed to absenteeism and other mentioned vices. Differences in school attendance between

orphans and non-orphans have been shown to exist. Foster et al., (1995) found that 76 per cent of orphans as compared to 84 per cent of non-orphans had attended school during the period of the study.

It should be noted here, however, that the focus was not to compare school attendance between children in AIDS households and those from other families. Available studies have shown that AIDS had an impact on pupils school enrolment and attendance (Foster, et al., 1997; Webb, 1997). According to Sumra (1995), AIDS has contributed to low enrolment and poor school attendance in afflicted communities. This view is supported by the World Bank (1997) studies. Katabaro (1999), however, revealed that there were other causes of pupils' absenteeism from school. In his study it was shown that overall, there was slight difference between orphaned children and non-orphaned children. The traditional causes of absenteeism — truancy, work at home and pupil illness cut across all categories of pupils but more pronounced to orphans. It is further argued that today the list of causes has extended to include other reasons such as caring for sick family members, time for mourning, and the inability to meet the financial contributions required by the school (Webb, 1997, Mkoyogo & Williams, 1991).

Frequent absenteeism and pupils' absconding from school was another area dealt within the study. The researchers wanted to know whether or not truancy and drop out had any relationship with the impact of HIV/AIDS. The documentation revealed that many of those who played truancy now and then and the dropouts were orphans, particularly in Bukoba Rural. Evidence from the rural wards (one ward comprising fishing villages) indicated that some of the pupils were engaged in petty business, fishing and charcoal sales to supplement the household income. In Kinondoni district, the truants and dropouts were both non-orphans and orphans. It was learnt that the economic hardship, which was more vivid among poor families in Kinondoni District, aggravated the problem.

As said elsewhere, it was found out that truancy and drop out was conceived to be a result of HIV/AIDS impact. This observation is in agreement with other studies (World Bank, 1992). The World Bank study in Tanzania give three types of this impact as the macro-economic impact, impact on the expenditure and services and the impact on the households and communities (World Bank, 1992). These are reflected in pupils drop out from school and/or failure to enrol due to the financial constraints of their fostering families (Tibaijuka, 1997). There were other factors both in Bukoba Rural and Kinondoni, however the impact of HIV/AIDS particularly in the 1990s when the rate of Orphanhood increased drastically aggravated truancy and drop out rate. Table 4 shows the number of orphans over years

Table 4: The cumulative number of orphaned children in selected schools in Bukoba Rural and Kinondoni districts 1994-1999.

District	School	Number			Total		% of total	
		1994	1995	1996	1997	1998	1999	
Bukoba (R)	Iluhya	30	34	37	35	62	89	
` `	Furaha	90	80	94	85	119	128	
	Bumai	97	84	89	88	92	90	
	Kyembale	116	112	94	119	124	112	
Kinondoni	Kinondoni	29	32	36	37	51	60	
	Hananasif	-	_	15	16	16	16	

Table 4 shows overall, the number of orphans increased over the years. The increase in the number of orphans at school can be linked to a corresponding increase at the

household level. This means that the community was increasingly experiencing a heavy burden with time. It should be noted that the figures for Kinondoni District school was relatively lower than that of Bukoba Rural. It was not clear as to why these figures were low despite the fact that the reported schools are located in the area that has reported high incidence of HIV/AIDS. During the period of study the cumulative number of orphaned children in selected schools ranged from 2.5 in Kinondoni District to 44 per cent in Bukoba Rural district as shown in Table 5 below.

Table 5 The number of orphaned children as percentage of the total pupil's population by school in 1999 in Bukoba (r) and Kinondoni districts

District	School	Number of Orphans	Total population	% of total population	
Bukoba (R)	Nyaruyojwe	90	234	39	
` `	Byandilima	105	328	32	
	Makonge	75	310	24	
	Maiga	89	318	28	
	Furaha	125	283	44	
Kinondoni	Mabibo	212	2875	7.4	
	M'nyamala	77	3117	2.5	

There is a significant difference between Bukoba Rural and Kinondoni Districts in the cumulative number of orphans. One plausible explanation could be the fact that children who lost their parent(s) were transferred to the rural schools. Another reason is that these children were being withdrawn from school for a number of reasons, including lack of school needs.

3.2.1.1 School enrolment

The documentary analysis revealed that all schools were expected to enrol children with the school age (all eligible children 7 - 12 years). In Kazi and Mosa wards (Bukoba Rural district) enrolment was according to space available to accommodate pupils. The mean Gross Enrolment Rate for Bukoba Rural district has been reported to be 77 (SD = 4.6) for boys and 75 (SD = 0.7) for girls while the Net Enrolment Rate was 51 (SD = 7.7) for boys and 52 (SD = 4.3) for girls (Ndalichako, 1999). In Kinondoni District the enrolment varied from year to year. The percentages of

children enrolled in schools were 42.8 (1993); 43.3 (1994); 44.2 (1995 and 42.6 (1996) as shown by Katunzi (1998).

As indicated earlier, enrolment in Bukoba Rural wards was determined by the space available. All schools had only one stream each from standard I to standard seven. This limited the capacity of the schools to take all children with school going age. In one rural ward, the 1999 census of school going age children indicated that there were 396 (189 girls) children. Of these, only 232 (110 girls) were admitted in the four schools of the ward. This number represented only 59 percent. When asked to comment on the admission criterion used with such a big number, the Ward Education Co-ordinator said that the policy was to enrol older (e.g., 9-13) children first. She, however, confessed that the practice allowed teachers to admit children whose parents can pay the school contributions. This practice has implications for children from AIDS affected households and other families that cannot pay the money. When probed further about the practice, all school head teachers indicated that it was necessary to take children whose parents can pay first because failure to collect UPE contributions amounted to deductions of their salaries.

The national enrolment target to be reached 2003/4 is 85% (MOEC, 1999). It was uncovered that few children were enrolled as compared to the eligible number. The documentary analysis data from another ward indicated that on average 20 eligible children were not enrolled in each of the five schools in Bukoba region. The children who were enrolled, for example, in 1999 were 37, 45, and 45 that is 57 percent, 69 percent and 69 percent respectively for the three schools.69 and 45 for the five schools in the ward. This represented about 65 percent of the eligible children for two years consecutively. The respondents (teachers, school committees, parents, district education officers) shared the same view that few children were enrolled because the classrooms available could only accommodate the maximum number of 45 pupils in each stream. They noted that it was difficult to take care of others who were left out because parents/guardians/community could not construct more classes. This pattern may change because of the current intervention by one NGO that is helping to construct more classrooms to absorb all children in the community.

Further probing as to why the community members could not construct more classrooms, the reasons given for their inability were as follows. First, that in this area many people were poor because most of their resources are spent on taking care of the sick (hospitalisation) due to high incidence of HIV/AIDS. Secondly, it was pointed out that parents and/or guardians were overburdened because of big numbers of orphaned pupils for whom they were expected to pay fees and provide other needs for. Thirdly, they said that there were many other contributions the same parents/guardian had to subscribe to such as poll tax, health, water and other needs. It was also said that other members were worried of the survival of the HIV/AIDS survivors. They feared that they could die in the near future.

These finding are consistent with other studies done elsewhere (World Bank, 1993; Kaijage, 1998) For example, it was established that the families/households were overburdened with about 30.9 percent of the households having recorded orphans (World Bank, 1993). Kaijage (1998) observed that the social safety nets in Bukoba Rural for example have been straightened so much so that the assistance/contribution from the communities was very much limited. Furthermore, it was found out that HIV/AIDS has effected the production capacity which lenders them poor. Moreover, the poor, overburdened parents/guardians and the community in general have very little offer (World Bank, 1993, 1997; Kaijage, 1998). UNESCO (1999) on the other hand, found out that despite the increase of the population in the Sub Saharan Africa more than 30 percent of school going children do not go to school.

On the issue of who were enrolled among all eligible children, the respondents indicated that all children had equal right and chance to be enrolled. Nevertheless, the respective parents/guardians were to look for the enrolment chance of their children from schools. Also, they had to meet the required conditions to include as contributions for purchasing desks, and construction of classes. The parents/guardians were also to buy uniforms and basic requirements such as shoes, exercise books, pens and pencils. It was observed that the prevailing environment denied chance to the orphans in different ways as follows:

• Parents preferred to take their children first, the orphans were given second priority as compared to biological children in the same household.

- Payments of different school requirements for orphans who were not assisted by NGOs, CBOs and international organisations were a problem;
- Parents/guardians could not risk taking a child whom they were not sure of his/her survival.

3.2.2 The impact of HIV/AIDS on the supply of education

The study focused on human and financial resources and other forms of support that assist in the provision of primary education. The availability of classroom teachers and educational administrators at various levels (e.g., ward education co-ordinators) were considered to be important dimensions in assessing the impact of HIV/AIDS not only as a component of demand of but also as an essential element for the supply of education. The study focused also on the availability of school pupils. This was important in relation to the use of classrooms and the teacher – pupil ratio.

3.2.2.1 Teachers' supply

The number of teachers in both districts was described to be adequate in relation to the demand, given the number of classrooms. It was however, noted that in Kinondoni District, the number of teachers ranged from 50 to 90. This was not commensurate with the number of pupils in these schools. The teacher pupil ratio was slightly higher than the one recommended by the ministry of education. The number of teachers varied from one school to another. In Bukoba Rural visited schools, the number of teachers ranged from 8 to 10. It was however, felt that in assessing the impact of HIV/AIDS, teachers' attendance rate was an essential element to look at.

3.2 2.2 Teachers attendance

The teachers' school attendance, morbidity and mortality rate were examined. The documentary evidence revealed that teachers school attendance was above average. This means that on average three out of ten teachers did not attend school regularly. The teachers' average attendance rate was about 73 per cent. Teachers were required to sign a register in the morning upon arrival. However, data on the actual time that teachers spent at school were not readily available despite the fact that teachers were required to sign a register for out of the school movements after seeking permission

from the school head. The main reasons for outside movements were if teachers fall sick and/or they have to attend a sick relative or attend funerals. The extent to which all cases of absenteeism of teachers were recorded was not clear in some schools. The evidence from these records indicated that teacher movements away from the school were limited. It was revealed from teachers in some schools that these registers were not consistently kept for lack of stationary. So it was difficult to establish the actual time that teachers were away from school. In Bukoba Rural, it was revealed that teachers' regular attendance had become a sensitive matter and was strictly emphasised by Regional and District education officers for the last 3 years. The head teachers said that the emphasis had promoted teacher school attendance. It was also revealed that the emphasis was prompted by the increasing absenteeism ate among primary school teachers. In some schools, however, information was lacking to enable researchers examine the past records of teachers availability in schools and actual teaching. On the possible causes for teachers' absence from duty, it was reported that the major reasons include:

- Teacher illness;
- Relatives illness:
- Attending funerals because of a death of a relative, a fellow teacher or a school committee member;
- Other reasons such as laziness, involvement in economic generating activities;
- Death of a parent/guardian or a person in the neighbourhood,
- During a pay day, teachers were leaving the school to collect their salaries from respective pay stations. It was said that sometimes this could last for more than one day due to poor arrangements.

3.2.2.2 Teachers' health conditions

It was noted that some teachers were sick but still attending school. There was another category of sick teachers who were on and off the bed. Another category includes those who were seriously sick and therefore bed-ridden all the time. All respondents insisted that HIV/AIDS impacted on the teachers' school attendance because they were either sick or were attending problems of their relatives and the community at large.

These findings seem to be in line with a number of the study findings elsewhere. The World Bank (1992), for example observed that teachers in Arusha, Mwanza and Kagera were highly effected by HIV/AIDS that caused persistent illness among teachers that resulted to absenteeism. Care for the sick relatives and attending funerals were also mentioned as reasons behind poor attendance. Another reason that force teachers to remain absent from duty is engagement in other income generating activities to supplement their low salaries that are far below a living wage (World Bank, 1995).

The researchers assessed the extent to which teachers experienced frequent sickness, the type of the disease they suffered and whether or not the diseases were related to HIV/AIDS, and how this frequent illness affected teaching and other activities. All teacher participants interviewed mentioned that the persistence of diseases was a problem to teachers because of the infectious nature of the diseases. Many teachers suffered from infectious diseases common such as coughing, skin diseases and diarrhoea. It was insisted that HIV/AIDS contributed to the increasing illness among teachers. Also it was revealed that some teachers were tested and diagnosed to have contracted HIV/AIDS. The education officers, the school committees and NGOs leaders in both Kinondoni and Bukoba Rural mentioned other diseases disturbing teachers as; malaria, pneumonia, headaches, Tuberculosis (TB) and HIV/AIDS. The respondents pointed out that HIV/AIDS and accelerated poverty, even among salaried teachers, weakens the teachers' ability to maintain their health. The observations indicated that some teachers were weak. These revelations from adult participants are collaborated by pupils' views where 93 percent of pupils mentioned the teachers also suffered from HIV/AIDS.

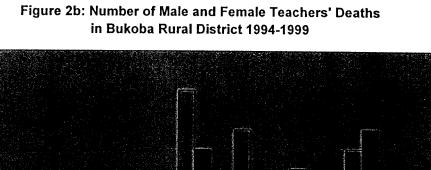
The research conducted in Uganda indicates that HIV infections were exponentially spreading among teachers with multiple illness, which seriously reduced their teaching ability. This trend was also common in Zaire where reduction of both the quality and quantity of teaching available to produce the intended out put was limited and had relationship with HIV/AIDS pandemic (Katahoire, 1993, Darach et al, 1989). Clearly, the persistent illness and general ill health among some teachers affected

their teaching ability. This had a negative impact on the teaching learning process, particularly where it led to teachers' death.

The great loss of life of prime adults due to HIV/AIDS is currently an issue facing the education sector in Tanzania. The study explored the mortality rate among teachers due to HIV/AIDS and how the situation has effected the primary education system.

The documentary analysis revealed that a big number of teachers have died especially from late 1980's to date. Figure 2a, b & c show the number of teachers who died for various causes in Kinondoni and Bukoba Rural districts. Records were available from July 1994 to mid-March 2000.

figure 2a: Total Number of Male and Female Teachers' Deaths in Bukoba (R) and Kinondoni Districts 1991-1999



Number of Teachers' deaths 2 -0 -

■M **s**F

Year

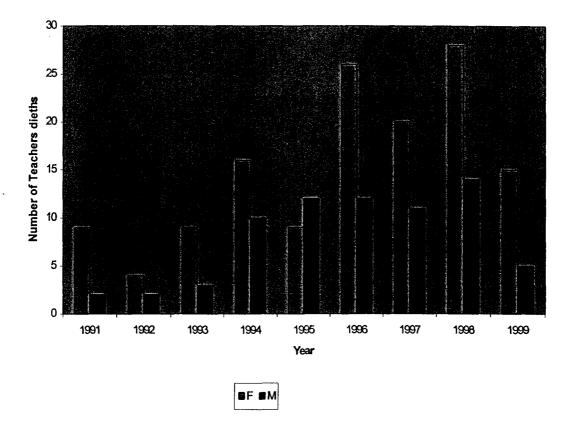


Figure 2c: Number of Male and Female Teachers' deaths in Kinondoni District 1991 -1999

The figures show that in both Bukoba and Kinondoni districts, the rate of teachers' deaths changed over time. Female teachers are the most affected than male teachers as shown in figure 2a. The number of death cases rose more than twice in 1998 as compared to 1994. It should be noted that keeping records of teachers who died was very important for planning, placements and training purposes. It is important to note that no comparable data for the period prior to AIDS was available.

Commenting on the high death rate in the community, one school committee member observed that "the death of an adult was a terrible and frightening experience in the 1960 and 1970s. With the advent of HIV/AIDS, the incident seems to be a normal phenomenon in the community so much so that the children were no longer afraid of passing near the place were burial took place". School records have indicated that a number of teachers have died in respective schools visited. Fifteen cases of teachers' deaths were reported in six schools visited in Bukoba Rural between the period 1991 and 1999. Data from other three schools reported no death cases in the same period.

The challenge about teachers' deaths is that only a few cases were reported as caused by HIV/AIDS. When teachers were asked to state the cause of death of their colleagues, they said that a few of them had the symptoms of HIV/AIDS before their death. The official statement from the District Education Officer, indicated that deaths of teachers were recorded without details of the causes of death. It is difficult to establish the impact of HIV/AIDS in relation to death of teachers if they are not classified. It is however, important to note that the impact can only be estimated based on the rapid growth of deaths and the information from the community since people were aware of all the symptoms of HIV/AIDS.

The information provided by school committees in both Kinondoni and Bukoba Rural districts indicates that most of the teachers who died of HIV/AIDS experienced a long period of illness. During this period teachers can not attend school regularly and, therefore, could not teach effectively. The death of teachers created gaps in implementing primary school curricula because replacement is made much later if any. The policy to freeze employment, therefore, means that replacement of teachers cannot be immediate and this may have aggravated the situation. Another point is that teachers died after passing through various stages such as frequent illness, loss of weight, loss of confidence, despair, isolation and sometimes-mental breakdown. Illhealth conditions and psychological problems have implications on the day to day activities of the teachers even if they were attending at school. This situation does not only result into psychological tension and emotional stress among effected teachers but also can cause bad feelings among fellow teachers and pupils. Data from interviews indicated that teachers were among those who contracted HIV/AIDS. These findings are corroborated by other studies in the region (Barnet & Blaikie, 1992). The study further shows that AIDS deaths in this area accounted for 56% of overall mortality. Out of 1859 pupils who responded to the questionnaire 1727 pupils (93 percent) indicated that teachers were among people whom they knew had contracted the HIV/AIDS.

Addressing the nature and qualification of teachers who died, the respondents pointed that, about 80% of teachers who died in Bukoba Rural district and 73 percent of the teachers who died in Kinondoni were qualified and experienced teachers who had taught for 8 to 25 years. Red Cross (1994; 1995) and UNAIDS (2000) came out with

the same findings. The study underscored that teachers are becoming less qualified as more experienced teachers fall ill or die and are replaced by young less experienced teachers.

3.2.2.4 School plant and teaching and learning facilities

The main inputs into the education system include physical resources such as teaching and learning facilities and equipment. Classrooms, teachers' offices and staff rooms, teachers' houses, toilets, playground form the essential components of a good school. These are by themselves important for effective teaching -.learning processes. A reliable and sound supply of books, exercise books, atlases, science kits is necessary for the school to function. The study sought to establish the extent to which HIV/AIDS impacted on these aspects in the areas of study. The documentary evidence indicated that all rural schools visited had enough classrooms to cater for the number of pupils admitted each year. This is not to say that the school sufficiently catered for the community around it. As indicated elsewhere the enrolment in one ward represented about 60 per cent of the school going children in that area. These findings are consistent with other studies that have shown that enrolment in some districts in Kagera region was as low as 50 percent. The quality of the classrooms was haunting. Many of these classrooms have no window and doorframes and in others window shutters were missing. The floor was muddy and most of the blackboards needed immediate attention. The situation in Kinondoni was different, All the schools visited had their classrooms crowded. Yet, there were other children who were not absorbed in school within the areas of study. On other facilities, the findings revealed that many schools visited had no teachers' houses. In few schools, one could find a unit of dilapidated house used by the school head. The quality of toilets in rural schools left a lot to be desired, despite the campaign to have permanent toilets. The number of holes was not giving a recommended ratio of 1:20 for girls and 1: 25 for boys. The play fields were missing and where they existed they were not up to standard. Children were seen playing locally made balls because schools were not providing these facilities. It should be noted here that girls were forced to play games that needed limited space as boys forced them from the existing playgrounds. Table 6 below gives the pictures of the school facilities by school as compared to the total pupil's population shown in Table 7.

Table 6: SCHOOL PHYSICAL FACILITIES

District	School	_	No of No of Desks Classes		Te	No of achers' ouses		Offices		
		Αv.	Req.	Αv.	Req.	A۷.	Req.	Av.	Req.	Ava.
Bukoba	Katare	6	12	73	85	2	7	3	3	9
	Furaha	6	12	95	116	3	7	3	3	8
	Bumai	7	12	85	95	2	7	3	3	9
	Iluhya	6	8	96	115	0	7	3	3	9
	Kyembale	7	14	121	130	1	9	3	3	12
	Makonge	7	7			2	8	2		6

Table 7: PUPILS POPULATION IN SELECTED SCHOOLS IN BUKOBA RURAL AND KINONDONI DISTRICTS

		Bukoba						Kinondo	ni
	Bahati	lluhya	Furaha	Bumai	K'bale	NY	Kinondoni	Han'Sif*	M-
									Nyamala
1991	253	209	283	253	305		2234		
1992	254	287	280	256	312		2239		
1993	252	308	279	247	308		2802	1810	
1994	233	283	285	236	320	267	2556	1900	3934
1995	222	289	290	221	308	260	2519	1750	4323
1996	250	289	298	219	318	218	2669	1705	4143
1997	243	299	305	229	359		2673	1905	3998
1998	244	309	302	240	378	237	2600	1835	3863
1999	244	298	292	236	331	193	2461	1850	3595

Adequate physical facilities would facilitate the teaching learning environment. If other aspects such as teachers, teaching facilities remain constant adequate classes, desks, teachers' houses, would allow required enrolment. The interview data indicated that all schools could not enrol all eligible children because they had no enough classrooms. For example, six more classrooms were required at each school in Bukoba Rural. For Kinondoni about 220 classrooms were required to enrol and accommodate all pupils in school. As indicated earlier the highest number of eligible children that the schools could enrol was up to the tune of 75 percent, which is below, the national target of 85 percent. The major problems highlighted were that: parents/guardian and community could not rise funds to construct more classrooms despite mobilisation through school committees, village councils/meeting and district councils. The other problem has been that despite the paucity of economic resources

due to various factors including HIV/AIDS at the household level for the last two decades, the government has relegated the responsibility for financing primary education to communities and parents (World Bank, 1993, 1997, Kaijage 1998, MOEC, 1999). This means that only those communities with vibrant economic base can sustain the running of school. In no way one can expect a community ravaged by AIDS to operate a school. In one rural ward, the difference between schools in terms of collection of UPE became apparent. Under the World Bank programme, the money collected by schools determines the amount that the Bank's support fund would provide to that school. From the collections, it became clear that some schools will always receive less money because their collection does not exceed 40 per cent of the expected collections. This means that children in these schools will be disadvantaged because their parents cannot pay the fees.

As observed earlier, the parents (guardian) and the community are unable to build more classrooms, on the other hand the number of those not enrolled increases and in some cases there are more pupils that the class can accommodate. The consequence are that children are enrolled when they are very old (9-13 years), the negative part related to this is that when pupils reach grade VII they are already adolescents. This age can subject them to risk behaviours such as STDs and HIV/AIDS. That's why it was revealed that in some of the schools some girls got pregnant and some contract HIV/AIDS. Another problem is that in classes where more than 45 pupils occupied the same class the teaching –learning environment was not conducive.

In addition, some of the children are not enrolled completely. In many cases the most disadvantaged are orphans and girls who are denied favour by traditions as said before. The schools visited in Bukoba Rural had enough desks with least three pupils using one desk. This was however, due to the support by some NGOs. These desks were bought by the NGO called World vision, which also built classrooms at Iluhya and Bumai (1 at each school). It also constructed a teacher house at Bumai and a number of toilets at Furaha and Kyambale. In Kinondoni there seemed to be a serious problem of facilities. There were few desks.

The smooth supply of textbooks and educational materials could strengthen primary education delivery system. The researchers wanted to find out the extent to which

HIV/AIDS has affected the supply and availability of teaching learning materials. The documentary review and physical inspection indicated that the supply of textbooks and teaching materials in some schools of Bukoba Rural district was adequate with exception of science kits and atlases. In the case of Mosa ward, the situation was different in terms of availability of books, exercise books and chalk. The ratio of pupils and books range from 1:6 for arts subjects to 1:15 for mathematics. The difference between wards was due to the absence of a World Vision parallel organisation. In the other ward, the World Vision is not only supporting the provision of education through materials, construction of classrooms but also support of households in critical conditions.

The role for financing education for all was in the past left in the hands of the central government. It is however, noted that the donor community, parents, school pupils and local communities contribute significantly in running education activities. The NGOs, such as the World Vision and religious institutions based in Bukoba have contributed substantially to equipping some schools with teaching-learning facilities, sport and game facilities. In Kinondoni the situation was different there are very few textbooks and educational materials. Normally the textbooks available were those used by the teachers and those bought by pupils from bookshops in Dar es Salaam. Sports and games facilities are also not available, but all schools have playgrounds albeit inadequate.

3.3 Problems related to HIV/AIDS

3.3.1 Orphans problems

The research conducted elsewhere has linked orphanhood with high truancy and drop out rate. (Mukoyogo & Williams, 1991; Kaijage, 1998; World Bank, 1993). Also it has been noted that there has been decline in pupils enrolment and gradual increase of absenteeism and high proportions of children in school (25-30 percent) being orphans. (Kanyanjui, 1999). In one study in Tanzania, Urassa et al., (1996) show that there was a higher rate of mobility among orphans and foster children than others, and that these two categories also had lower school attendance and enrolment rates. They also show that these children had higher dropout rates than children who lived with their parents. They observed that "among girls, enrolment was lower among orphans and foster-children compared to other children, but no significant differences could be

observed for drop-out rates". It seems truants and dropouts were common to both orphans and non-orphans, but more pronounced to orphans given the gravity of the impact of HIV/AIDS in the community.

The other major problems which confronted the orphans were that they were conceived as troublemakers because they lacked parental love, guidance and care (UNAIDS, 1999). It was also found out that orphans were enrolled later when they were much older than their fellow children were. It was assumed that they required assistance to overcome difficulties of attending school for seven years. Furthermore it was revealed that girls were more disadvantaged because parents/guardians would prefer to take boys to school rather than girls because of biased traditions. The community, too, has a role in determining the child's entitlements in the family. An orphaned girl cannot be expected to gain access to education from her fostering parents when resources are limited (World Bank, 1997; Ainsworth & Over, 1994). Boys have the advantage of being regarded as future heads of the family. Katabaro (1999) found out that orphans were of older age in comparison to other pupils in the same class. In his study, the average age for orphans was 15 years while that of non-orphans was 14 years. The current study findings are in agreement that orphans were admitted to school at later age than non-orphans.

Studies of the impact of AIDS have demonstrated that discrimination, stigma and ostracism against individuals and families afflicted by AIDS are widespread (Shaeffer, 1993; The New York Times, 1988; Nicolao, 1991). Concerned governments and NGOs have voiced their worry over the problems AIDS orphans are facing and their potential consequences. It is argued that, in addition to their loss of education and other social services, AIDS orphans are prejudiced, suffer grief and confusion and experience social exclusion that can lead to a vicious circle of poverty and isolation (UNAIDS, 1997).

There are several other illustrations of the nature and cause of psychosocial problems among orphaned children. The Redd Barna Project in Uganda in (1991) (WHO/UNICEF, 1994) identified some of the possible sources of psycho-social problems as:

- witnessing the slow, miserable death of one, and possibly both parents;
- often the subsequent loss of their siblings, their home and property, their friends, school in fact everything that until then has made up their world;
- a move to an unfamiliar home and pattern of life, with little or no choice in the matter;
- school teachers unsympathetic to their difficulties and often too ready to punish them for being late or ill-equipped, without looking for explanations;
- experiencing relatives haggling over the division of their dead parent's property, sometimes immediately after the funeral
- multiple loss, first of parents and then of the care givers who had taken them in;
- the prospects for some of having to fend for themselves if their parents die; anxiety about abuse from adults, mostly relatives, and about having to drop out of school.

Commenting on the psychological problems orphaned children encounter, Jareg, a researcher with the Redd Barna project warned that it should not be assumed that: children recover quickly from bereavement simply because they start to play and smile again (Barnett & Blaikie, 1992). The death of a parent is the most profound loss a child can experience, and grief and depression often remain hidden-perhaps to surface later in disturbed behaviour. (WHO/UNICEF, 1994:37) Although psychosocial problems were more acute among orphans, other pupils and teachers who perform the activities in the teaching-learning environment overshadowed by HIV/AIDS impact also experienced the problems. From the findings it is clear that the teaching learning process is also affected by HIV/AIDS, the situation which requires deliberate interventions to redress the situation.

3.3.2 Pupils' health conditions and treatment

The pupils' general well being rose concern in this study. The documentation from schools in Bukoba Rural showed that an average of about 8 - 10 (4 percent) of pupils went to nearby dispensaries for treatment daily. The public dispensaries were less equipped in terms of drugs and this meant that only children from affluent households could get a good treatment from private dispensaries. The text below provides a situation as to how some schools find it difficult to handle emergencies at school.

One researcher (in one rural ward) had to come in to help send to hospital a std V girl who sustained a fracture during play. It took 15 minutes before the girl was brought to the attention of the researcher during the interview with a school committee, because the teachers were not ready to expend their money on fare to the government hospital in town. They had to wait for the mother of the child who was not at home then. The researcher postponed the session and rushed the girl to the hospital in company of the teacher on duty. On arriving at the hospital, a fee of Tsh. 500 was charged, despite the claim by the teacher that school pupils were supposed to be registered free of charge when they produce a school log book. The teacher could not pat with the money and the researcher had to pay. The girl not get the immediate attention she needed. Her case was not considered to an 'emergency case'. The girl was still being kicked around, waiting for the doctor on duty, who was said to be out of the doctor's room. This scenario clearly tells it all that children from poor families were on the disadvantage in terms of health services. There is no doubt that many children in AIDS households fall in this category.

It was also understood that the dispensary records as well as school records and interviewees indicated that the main diseases diagnosed were such as malaria, typhoid, plague, bilhazia, skin diseases, and meningitis. Student questionnaires also showed that the leading diseases in Bukoba Rural district the percentage were malaria (92%), HIV/AIDS (70.5%), cholera (58.5%) TB (50%) and in Kinondoni it was malaria (82%), cholera (79%), bilhazia, (58.5%) and HIV/AIDS(53%).

The issue raised by most of the respondents was that due to HIV/AIDS the rate of both pupils who attended health services and the frequency of attack of diseases increased over time. The respondents marked that the nutrition status was poor among families due to poverty that prevailed. Also some few pupils poor health was associated with their parents deaths some of whom were suspected victims of HIV/AIDS. The observation schedule also showed that most of pupils had poor health. Furthermore, some of them dressed poorly with either torn or dirty uniforms. A number of research findings elsewhere indicate that coping mechanism in

communities affected by HIV/AIDS is very difficult. The poorer households having lower assets to draw on have difficulty in coping, their children may be permanently disadvantaged by worsening malnutrition and withdraw from schools (World Bank, 1997).

According to World Bank (1992, 1997) it is said that, even if some HIV infected children and those ill with AIDS live to enter primary schools the increasingly debilitating episodes of HIV-related illness will likely make it difficult for them to complete schooling. Even otherwise health children in an AIDS effected family may pay a price in terms of ill health. The households attempts to cope with death or ill-health of an adult may shift household labour away from health maintaining activities such as cleaning, collecting water, hygienic food preparation and breast feeding (Feachem, 1999).

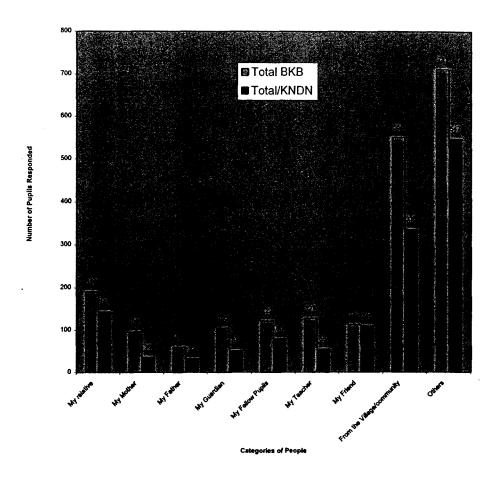
3.3.4 Awareness of the problems related with HIV/AIDS

Another way of assessing the impact of HIV/AIDS on Education is to look at the people's awareness of the problems of AIDS on education. This is important because in different ways it influences policies on education. Awareness of the impact of HIV/AIDS can also influence the relationships between individuals. The relationship between teachers and pupils, and between pupils and pupils or teachers and teachers can be affected significantly depending on the HIV/AIDS status.

It is clear that school pupils were aware of the problems that faced people affected by HIV/AIDS. This has implication on their perceptions and attitudes. This is particularly so where the pupils mention problems such as being weak, failure to work, children becoming orphans, dropouts and truancy mental disturbances and failure to teach. One wonder what happens in a classroom situation where pupils know that their teacher is an HIV/AIDS victim. Perception and attitudinal studies are lacking to establish how AIDS affects the relationship and interactions among people belonging to the same groups.

Pupils' responses on the actual effects of HIV/AIDS also revealed that pupils were aware of the impact of the pandemic. It is clear that pupils know that AIDS has caused many deaths in the community including community

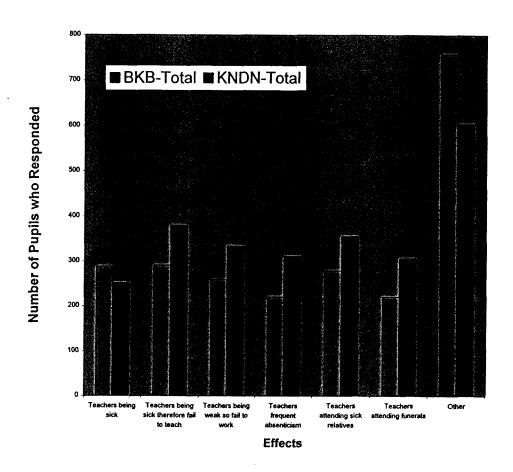
Figure 3: Categories of People identified by Pupils to be affected by HIV/AIDS in Bukoba Rural and Kinondoni Districts



experts (teachers inclusive). Pupils are also aware that these deaths had an impact on the production of food and increased health costs.

This has implication on their school performance. It can effect school enrolment and regular attendance if they are worried about their future. It can also cause panic if they think about their living parents who have contracted HIV virus. This fear of the pandemic is reflected by a small number of pupils who indicated that the most affect people face in the 'other' category than those the very close categories of people (father, mother, my relatives etc) as shown in Figure 3 above.

Figure 4: Teachers' Responses on the Effects of HIV/AIDS on Teachers in Bukoba Rural and Kinondoni Districts



It can be said that the majority of pupils regarded the problem to be more critical to other people than on relatives and parents. This can be interpreted as avoidance behaviour and/or denial of HIV/AIDS.

The teachers' responses on the effects of HIV/AIDS on teachers as indicated in figure 4 also concur with that of pupils shown in figure 5.

Figure 5: Effects of HIV/AIDS to Teachers in Bukoba Rural and Kinondoni Districts

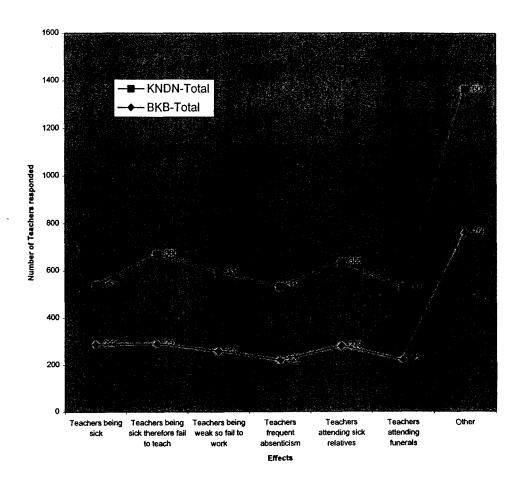


Figure 5: Effects of HIV/AIDS to Teachers in Bukoba and Kinondoni

As observed by pupils, teachers were also of the views that HIV/AIDS had a greater impact on other than themselves.

The slight variations on the effects reported by teachers from the two districts suggest that, generally, people see HIV/AIDS problems to be critical for others.

3.3.5 The cost of education

It has been observed that HIV/AIDS has led to shifts of resources form other essential services to health (Tibaijuka, 1997). As already said, the running costs of primary

education in Tanzania are the responsibilities of the government, local councils and parents/guardian in different proportions that are not clearly known. It is surprising to note that the donor community is contributing immensely in some areas. The government provides financial support to primary education (basic education). Table 8 shows the Tanzania government expenditure on education and particularly on primary education from 1992 - 1998.

Table 8:	Trends in Public Expenditure on Education 1990-1998										
YEAR	1992	1993	1994	1995	1996	1997	1998				
GDP1 Expenditure on Education	3589.5 92.8	3662.1 100.6	4528.1 131	4712.3 108.1	4899.9 110.6	4929.5 118.5	EST.5000.2 Est.112.0				
Expenditure	47.3	52	82	70	74	97.	75				
on Basic						٠					
Education.											
Expend.of Basic Education/	13154	13923	21597	18014	18864	19517	17960				
Pupil Exp.on Basic Ed/Exp on	51%	52%	63%	65%	67%	67%	67%				
Edu Expend. On Basic Ed./GDP	1.3%	1.4%	1.8%	1.5%	1.5%	1.6%	1.6%				
Expend. MOEC/pupi I/GDPpc	2.60%	2.70%	2.90%	2.30%	2.30%	2.40%	2.20%				

Source: MOEC 1999

Table 8 indicates that the government allocated 51 percent of the total expenditure on education to primary education in 1992 and 67 percent of the budget in 1998. The allocation increased however, the government expenditure on basic education was merely 1.3 percent of total Gross National Product in 1992 and 1.1 percent and 1.5 percent in 1997 and 1998 respectively.

When interviewed on what the government offered to education, the District Education Officers and the school head teachers indicated that government support was minimal in comparison with the number of target groups. Many schools went without chalks, exercise books and even textbooks leave alone desks. In Bukoba Rural district, the education system was rescued by NGOs through support and provision of materials.

According to Sumra (1995) the low enrolment at primary school level as shown by Galabawa (1994); Sumra (1995) and Cooksey et al. (1991) can be partly attributed to the lack of family's financial capability and the different effects of AIDS. The cost of education at primary school level has meant that pupils are required to pay what is popularly referred to as 'Universal primary education' (UPE) contribution of about Tsh. 2000/= (equivalent to USD 2.5) per annum. There are also other contributions intended to help with the maintenance and expansion of the school plant and the procurement of equipment such as desks and teaching/learning materials. Furthermore, the contributions ranged from Tshs. 1,000.00 to 5,000.00 (USD 1.25 to 9.6) can be instituted when deemed necessary by the school bodies and educational authorities. In addition to school contributions, parents are required to buy exercise books, ball point pens, school uniforms, and text books as government supply of text books is limited to a few copies only. Over and above these costs, parents face other maintenance costs on health, food and clothing.

As regards to UPE fees and other schools contribution such as UMISHUMTA, classes construction, contribution, purchase of desks etc rose much concerned to all respondents. There was an outcry about too many contributions specifically by poor parents/guardians. NGOs and school committees interviewed complained of the parents/guardians being forced to contribute to various activities without considering their economic ability. It was revealed from the interviews that teachers still demanded contributions from the parents/guardians regardless of the HIV/AIDS status of the family to pay the fees.

When the parents/guardians were unable to pay, their children were sent back home to find the required money. According to the respondents this caused truancy and sometimes dropout especially when parents decided to withdraw their children from school. Research findings elsewhere indicate that the consequence of HIV/AIDS for example in Sub-Saharan African have negative impact on economic growth, human development and reduced educational opportunities for children (UNAIDS, 1999). The World Bank (1997) also found out that the much-affected families with HIV/AIDS and poorer households have difficult coping and normally would withdraw their children from school.

The researchers found out that data related to UPE fees were not properly kept both at the district level as well as at school. The data available was not also consistent.

With the exception of Iluhya Primary School where UPE fees payment was excellent (83.6 - 99 percent) other schools, in both Bukoba Rural and Kinondoni the UPE fees payment was not satisfactory. Although the fee seems to be a small amount of money to be paid (Tsh 2000) but the impact of HIV/AIDS has affected significantly the traditional support system in many families and communities. As a result the affected families find it difficult to pay the fees and other contributions required (World Bank 1993, Kaijage, 1998).

On this issue Ainsworth and Koda (1993) note that with paralysis of community economic system due to HIV/AIDS the factors effecting parents demand for child schooling will include measures of the costs and benefits of schooling as well as measures of the household's own budgets constraints specifically these include:

- The intrinsic value of the parents place on education;
- Expected long benefit on schooling;
- The current value of the child's time in productive activities inside and outside the home;
- other costs of schooling including school fees;
- The quality of schooling available;
- Household current income

Whilst education is one of the rights of the citizenry, the family must also be expected to play a major role in the provision of education through financial and social

contributions to augment the state's provision. AIDS and its direct effects on the family will weaken the already ailing economy and may significantly reduce the family's ability to support itself. Apparently, the financial resources in the primary education system are negatively affected by HIV/AIDS.

3.3.6 The implementation of primary school curriculum

The total time spent to perform school activities, given the impact of HIV/AIDS on pupils and teachers in the primary education system were conceived very crucial by the researchers. The documentary analysis and interviews showed that persistent illness among teachers led to absenteeism from schools due to a number of reasons. These include taking care of their sick relatives, attending funeral ceremonies of either a parent, or fellow teachers and attending meetings, seminars and workshop related to HIV/AIDS education. It was also underscored that sometimes teachers attended for a short time and asked permission/or were allowed to attend the so-called social obligations. The World Bank, (1997), UNAIDS, (1999) and Katabaro, (1993) also found out that illness and absenteeism of teachers reduced teaching time.

During data collection in Kinondoni district, one teacher died. This incident caused absenteeism among teachers of the school visited and those of the neighbouring schools. HIV/AIDS impact-triggered truancy while truancy among pupils reduced the pupil's time spent at school (World Bank, 1997). The number of pupils who played truancy daily at schools in both Kinondoni and Bukoba Rural districts were a substantial number, constituting between 10 and 25 percent.

Also teaching time was wasted when pupils were sent back home to look for fees. The occurrence of this experience depended very much on the parent/guardian ability and willingness to pay fees, the pressure exerted on the Head teacher by either district council, school committees or the quest to foot the school costs. The orphan children and the needy pupils experience a tough time for they were sent back home frequently.

Clearly the impact of HIV/AIDS has a marked influence on teachers, pupils and community well being which in turn have limited the efficiency and effectiveness of the teaching learning process.

The curriculum entails a series of educational subject matter presented in accordance to the educational philosophical outlook of the country. The interest of the study was to investigate the extent of the effects of HIV/AIDS on primary education curriculum. The main areas addressed by the study are the curriculum and teaching learning process.

The impact of HIV/AIDS on primary education system motivated the Ministry of Education and Culture (MOEC) to introduce HIV/AIDS education in the curriculum. The documentary review revealed that the then Institute for curriculum Development (ICD) initiated the development and printing of a number of core and supplementary HIV/AIDS preventive teaching - learning materials with different levels of Health Care Project (sponsored by Red Cross) in Bukoba Rural district. The primary schools in the area of study, that is Mosa, Kazi and Leba wards were supplied with the teaching materials in the period between 1983-1998.

The documentary analysis further indicated that the MOEC responded to the shortcoming found in the teaching/learning materials by issuing the guidelines for HIV/AIDS/STDs. These include Preventive Education for schools, whose ultimate goal is the provision of quality preventive health education related to HIV/AIDS/STDS to primary school pupils in classes V-VII. The response of the MOEC redressed the situation by introducing health education to grade levels V to VII.

It was also leant that two major shortcoming with these teaching leaning materials were that the Ministry had developed the curriculum which has not been issued to schools. It was also revealed that the textbooks and teacher's guide did not include some important topics such as life skills and reproductive health. These shortcomings have implications on the implementation of school curriculum.

It was further noted that the curriculum also introduced family life education (FLE) subject. This involves the process of offering skills to enable the youth to understand the inter-relationships between population and development and aspect of quality of human life. Among the main areas related to HIV/AIDS is reproductive health

including sexuality and sexual health. United Nations Population Fund (UNFPA) supports FLE and the Ministry of Education and Culture through Tanzania Institute of Education are the main implementers of the programme (MOEC, 1999). The main focus is on the in-school youths specifically primary school grades V to VII. Although the area of the study have not been covered so far by the Ministry of Education, The Tanzania Red Cross which introduced FLE in its activities in 1993 implemented the subject in the area of study. The area covered by the Ministry of Education and Culture are Iringa, Morogoro and Mtwara Regions.

It was observed that Kinondoni and Bukoba Rural districts HIV/AIDS education was taught in standard V-VII since 1992. In Bukoba Rural, two teachers from each school were trained on how to teach HIV/AIDS education by the Tanzania Red Cross Society from 1993-1998. In Kinondoni AMREF trained two teachers from each selected school to act as patron and matron as well as two peer educators from each class (STD 5-7) to provide HIV/AIDS education. In addition, PASADA trains local youth to provide HIV/AIDS education in selected schools in Kinondoni.

The major problem with HIV/AIDS education subject (EDU-Elimu Dhidi ya UKIMWI) as noted by the respondents is that, first, the subject has reduced the number of science subjects which were taught to standard V-VII pupils. Previously the Science subjects were three in number. So far there are only two in the timetable. Second, some of the teachers who teach HIV/AIDS education were not trained and therefore lack the knowledge to teach the subject. This curtails the quality of AIDS education offered. The issue of the level of knowledge the teachers have was also noted by research conducted in Uganda about the impact of HIV/AIDS on education (Shaeffer, 1999). He observed that in most of the schools the teachers' knowledge about HIV/AIDS education was questionable. Whereas there are problems that have been noted in many areas experiencing the severe impact of AIDS, there is limited information on the actual processes in schools. Pupils' performance in academic activities, interactions with peers and teachers have received minimal attention. Social learning theories recognise the individual's capacity to monitor and moderate behaviour in the environment and through self-efficacy processes to control the environmental factors that influence one's life (Durkin 1995). It can be assumed from this theoretical perspective, that the impact of AIDS on human kind can only affect

the educational process for a short time and that people can learn to cope with its impact and challenges. It is imperative, therefore, to examine the impact of AIDS on the educational processes.

The interviews indicated that the ill health, the orphanage situation and the death of pupils' parents/guardians created psychological stress. This situation was reported to result into lack of pupils' patience, failure to follow the subject matter effectively and activated pupils to hate HIV/AIDS education subject because they could relate the subject to deaths of their beloved parents and /or guardians. This situation was also highlighted by (Shaeffer, 1993) when the expert seminar participants dealing with impact of HIV/AIDS on education noted that: "those in the class who are infected or ill or even members of the families-both teachers and pupils- may face discrimination, ostracism and isolation."

They further highlighted that forced by such an environment, teachers may face formal suspension of social and health benefits and/or dismissal from the system. Pupils may face formal suspension by the system or be pressurised to leave school voluntarily. Also the stigma and discrimination brought about by the fear of AIDS will be manifested in the pupil - pupil and the pupil - teacher interactions which will have consequences for both the victims and those yet to be affected. Thus the nature of school and classroom relationships may be governed by fear and suspicions that will in turn affect the teaching-learning process. Consequently, this will affect the processes and the quality and quantity of education.

In addition, the interview and focus group discussions revealed that the current poor performance in primary education examination by Kagera Region and Bukoba Rural district in particular including the area of study was a result of the impact of HIV/AIDS on education. A study by Norman (1996) pointed out a number of problems including poor school attendance by orphans, poor teaching-learning environment and poor discipline among pupils (orphans) who lack parental, guidance and care. The study also pointed out poor pupils' study environment especially to orphans who lack parental push and sometimes engaged in house chores and other non-educational activities, poor health of both teachers and pupils (sometimes due to poor nutrition). Whereas school attendance and lack of academic stimulation may

account for a large part of orphans' poor performance, lack of concentration during classroom instructions is another problem facing orphaned children.

3.4 Product of primary education in the face of the pandemic

One critical question in assessing the impact of HIV/AIDS on primary education is to look at the product of the system of education. There is a range of products of the system at different level schooling. One would like to look at the number of graduating pupils after the seven years cycle of primary schooling. This is possible if the number of pupils who do not graduate is known and/or can be estimated. The question of quantity cannot be avoided. The quality of graduates and non-graduates is also important in terms of the life skills that they ultimately graduate with at any level when they leave school. This was important in assessing the impact of HIV/AIDS on education system given the nature of activities that school projects affected by HIV/AIDS are forced to undertake (see below).

In determining the product of primary education in the areas under study, the number of pupils who completed the seven years cycle was studied. This exercise was, however, frustrated by lack of data about the pupils who graduated from these schools. This was mainly due to missing records for various reasons as mentioned before. Out of 13 schools studied 6 schools provided data on the number of their graduates at least for the past 5 years.

This makes it difficult to establish whether the reflection observed in the number of graduates from the same school over the period (1983-1999) was due to lower enrolment at entry point or due to dropout. The data, however, suggest that both lower enrolment and high dropout rates may have contributed significantly in lowering the number of graduates in the period between 1986 and 1993 for two reasons. First his is the period when the community in Bukoba Rural district was experiencing the first shock of the pandemic which may have affected both enrolment and support of projects in school causing observation. The second point is that the drop out rate may have increased due to the fact that some children were withdrawn from school to take care of their sick parents/members of the family. The ward from which this school was drawn is one of the wards with a high rate of HIV/AIDS prevalence. Out of 7 pupils who were selected to join secondary school two pupils a

boy and a girl were orphans. The girl managed to continue with secondary school because of a special programme that is supporting girls' education. The boy also managed to continue with schooling.

In one ward in Bukoba District, it was revealed that orphan graduates also competed with non-orphans for the limited vacancies in public secondary schools. It was reported, however, that the majority of these orphaned pupils selected for public schools found it difficult to continue with secondary education for lack of school needs. The major school needs that affected these pupils include school fees, uniforms, exercise books and other schools contributions. The recent policy that orphans should be exempted from paying fees seem not to have reached every parent and/or guardians as revealed during the interviews with parents and some of the school head teachers and school committee members. It was reported that the village government had the powers to determine who should be exempted from paying the fees and other school contributions. It was also reported that only UPE contributions would be exempted and that all pupils would be required to pay other contributions. This requirement has far reaching implications on the number of pupils who ultimately graduate their primary education, and in particular those who belong to the orphan category.

The number of pupils who drop out of school at different levels of schooling over the period of time was also examined. It should be noted, however, that the number was not consistently reported due to lack of all records for reasons already mentioned in this report. Table 9 shows the number of pupils who abandoned school for various reasons in one ward under study.

Table 9: The number of pupils who dropped out of school between 1994-1999 in Mambo ward.

	1994		1995		1996		1997		1998		1999	
	0	D	Ο	D	O	D	O	D	O	D	O	D
Boys	6	_	10	3	8	1	14	2	NA	NA	11	-
Girls	5	-	12	1	20	2	9	2	NA	NA	9	-
Total	11	-	22	4	28	3	23	4	NA	NA	20	-

N A - Not available

Source: Ward education office file March 2000.

One hundred and fifteen pupils abandoning school may sound to be a small number depending on the number of pupils in those 6 years. The only challenge is the nature of pupils who dropped out of school. There seems to be a balance between boys and girls in this ward that abandoned school. It was not clear what proportion of these were orphaned pupils and how many of these abandoned school because of AIDS related problems in their respective families. The question here is the level at which they dropped out of school and the life skills that they had accumulated in the course of study before they dropped out.

Another aspect of the product of primary school is the quality of education that those who graduate without an opportunity to continue with post-primary education get out with. This is difficult to measure in quantifiable terms. It can, however, be deduced from the activities that they engage in after school. It is unfortunate to report that parents responding to this item were not happy if their children graduated and could not continue with secondary school education. It was argued that primary school graduates complete primary school cycle without the requisite skills for them to start a sound life in the village. Both teachers and parents indicated that primary school graduates engaged in casual labour to earn a living, which did not satisfy their needs. They were still dependent on their parents. It was further reported that the situation was bad for children who lived with their grandparents. This was particularly so with both double orphans and children who had lost one parent. They said that children in these two categories were faced with many problems including starvation and lack of essential needs such as kerosene, salt, washing soap and body oil for girls. The situation was described to be worse with children who upon graduation were

supposed to take care of their siblings. Responses from a specific question on the number of households that were constituted by siblings only with the eldest child having less than eighteen years indicated that the number varied from village to village depending on the magnitude of AIDS. There were a total of 13 one ward in Bukoba Rural district.

In the next section we give the summary, conclusions and recommendations of the study.

5.0 Summary, Findings, Conclusions and Recommendations

This section presents the summary of the findings, conclusions and recommendations on policy and further research.

5.1 Summary of the study

The purpose of the study was to assess the impact of HIV/AIDS on the provision of primary school education in Bukoba rural and Kinondoni districts with the view to establishing the magnitude of the problem so as to advise on possible remedies. Two districts were deliberately selected because they are the most ravaged with AIDS disease in Tanzania.

The impact was examined in relation to the demand for and supply of education. The study focused on Context, Input, Process and Product within the school system in Tanzania. In doing this, it was imperative that the Pre-AIDS scenario (1980-83) and the period thereafter be reviewed to allow assessment of the extent to which HIV/AIDS impacted on primary education.

The respondents included 1859 pupils, 129 teachers, 71 school committee members, 17 district councils officers, four NGOs and CBOs staff, 15 religious leaders and two others members of the community. Participating members were involved in the study because of their respective positions in the school.

The study employed different data collection techniques. These include questionnaire, interview schedule, documentary review, focus group discussion and observation. The instruments were pilot-tested in order to validate them.

The study encountered two major imitations. Firstly, it was difficult to obtain adequate data on the period covering 1980 - 1983 because there were no enough records. Secondly, it was not easy to establish whether or not the persistent illness and death among teachers, pupils and parents/guardians were due to HIV/AIDS for they were not tested and many people took the issue to be confidential.

5.2 Findings and Conclusions

The findings revealed that first, the community as a whole had relatively good health status and there were few deaths as compared to the period after HIV/AIDS episode. Another point is that the schools had relatively enough input in the primary school education delivery system to facilitate its implementation, these included: human, physical, financial input, and time. Thirdly, the most eligible school age children were enrolled in schools in Bukoba rural and Kinondoni districts and there were few orphan children in both districts. Fourthly, the number of teachers for pupils enrolled were adequate. Data from Bukoba rural indicated that the pupil teacher ratio was above 40:1. The official pupil-teacher ratio for primary school by the Ministry of Education and Culture is 45:1.

The fifth point is that many schools in Bukoba rural had enough and desks for many pupils to sit comfortably and learn. The schools also had instructional aids, books, maps, exercise books and other materials for teachers and students to use. In Kinondoni some schools experienced a shortage of rooms, desks and books. Sixth there was no adequate data on financial input. It was, however, noted that there were indications that parents/guardians were able to pay school fees and other contributions, therefore schools had fairly enough money for pupils upkeep and development projects. Seventh there were fairly adequate facilities which facilitate the teaching learning process. Eighth, the pupils as well as teachers attendance rate was above average that is 77 per cent and 97.7 per cent for pupils and 75 per cent and 80 percent for teachers. There were few cases of truancy. Ninth, there were few cases of teachers and pupil's illness, and deaths in the community surrounding the school. The teachers and pupils spent so little time either because they were ill or because they had to take care of the ill or attend funerals. Tenth, there were few orphans in the communities and in the schools. One school in Bukoba rural had 3,7 and 17 orphans in 1981, 1982 and 1983 respectively. The same school had 119, 125 and 125 orphans in 1998, 1999 and 2000 respectively.

The last point is that, teachers were highly motivated, which facilitated effective teaching and smooth running of primary education. The condition, which motivated teachers, included fairly sufficient salaries and good teaching-learning environment. Twelfth, most of the pupils were motivated to learn because had their basic needs met were physically healthy and parental love and push was abundant. The parents and

teachers motivated their pupils as they could see a bright future in front of them if they acquired education.

Finally, it was difficult to have data of those who graduated in each cohort as records were not available. Few schools had data showing pupils who were selected to join the secondary schools. However it was found out that the graduate of the years 1980 - 1983 were well prepared to deal with life after school as they had received adequate basic skills and knowledge from school.

The study findings related to teachers revealed the following: Teacher's attendance at school was above average to about 73 per cent. The schools had attendance registers and Regional and district Education officers in Bukoba rural had emphasized about teacher's attendance the last three years. The main reasons for the teacher's who were absent from school reported to be teachers' illness, relatives' illness, death of relatives and fellow teachers, parent/guardians and school committee members. Other reasons included laziness, and participation in economic generating activities, aggravated by HIV/AIDS impact. Two, persistent diseases was a problem to same teachers. The diseases, which disturbed teachers, were malaria, pneumonia, headaches, tuberculosis (TB) and HIV/AIDS, diarrhea, skin diseases and coughing. Some of these diseases were infections.

Three, a large number of the teachers have died especially form late 1980s to date, many of them are qualified and long serving teachers. In Bukoba rural while 9, 21, died in 1994 and 1995 and 19, 8, died in 1998 and 1999. In Kinondoni 19, 9, died in 1994 and 1995 and 33, 16, died in 1998 and 1999 respectively. Many teachers died because of HIV/AIDS or AIDS opportunistic diseases. Before many teachers died, passed through various stages, frequent illness, loss of weight, loss of confidence, despair, isolation etc. This situation caused psychological tension, emotional loss among the effected and bad feelings among fellow teachers and pupils. Four, replacement of teachers who died was not done immediately resulting into a gap for a long time.

The study findings indicated the following: in the first place, pupils in Bukoba rural were enrolled in accordance to class space available. In Kinondoni, schools enrolled more pupils than what the class space could accommodate. Secondly, schools could not enrol

all eligible children both in Kinondoni and Bukoba rural. Three schools in Bukoba rural enrolled about 57 per cent, 69 per cent and 69 percent in 1998 and in 1999. Thirdly, the schools in Bukoba rural and Kinondoni could not enroll all eligible children because could not build more classes due to parents/guardians' financial inability. Their inability was attributed to HIV/AIDS impact that accelerated poverty, lack of adequate resources because were used to take care of sick. Overburden parents/guardians because of big numbers of pupils (orphans) to pay for and other costs parents/guardians were to pay e.g. poll tax, and services (water and health). Some parents/guardians were worried of the survival of orphans. Fourthly, most of those not enrolled were orphans because parents preferred to take their children first and orphans who were given the second priority. Also parents/guardians could not risk taking a child whom they were not sure of his/her survival. The orphans were enrolled later when they were much older, their educational opportunities had limitations. Fifth, orphans were conceived as troublemakers because lacked parental love, guidance and care. Sixth, pupil's attendance in Bukoba rural was between 77 per cent and 90 per cent. The average absenteeism was between 10 and 23 per cent. Most of those who were absent from schools were orphans who lacked parental push and basic school requirements such as fees, uniforms, pens, and exercise books. In Kinondoni both orphans and non-orphans were absent from schools. Seventh, truancy and drop out among pupils had relationship with HIV/AIDS impact, this aggravated orphanhood that in turn increased truancy and dropout rate.

Eighth, the state of ill health was common among school pupils in both Kinondoni and Bukoba rural districts. About 4 percent of pupils went to dispensaries for treatment daily in Bukoba rural. Pupils were affected by malaria, pneumonia, diarrhea, anemia, skin diseases, worms etc. The medical records indicted that about 83.4 per cent of pupils complained of malaria. TB and HIV/AIDS attacked few pupils.

The findings indicated that Bukoba rural and Kinondoni districts had few classes as compared to the requirements. The available classes in Bukoba rural were 59 while the requirement were 100, which were about 59 percent. In Kinondoni the available classes are 98 while the requirement is 204 about 48 percent. It was also revealed that Bukoba had adequate desks, textbooks, playgrounds and sports and game facilities which were supplied by the government and a strong support from NGOs especially World Vision

and Red Cross. In Kinondoni desks as well as sport and games facilities were inadequate.

The study findings indicated that the impact of HIV/AIDS reduced the financial ability of the parents/guardians and the community at large because of illness and deaths of prime producers. Consequently, many parents/guardians were unable to pay UPE and other schools contributions which reduced the capacity to develop schools. This reduced the educational opportunities for the pupils, especially orphans. Also girls were denied chance by biased traditions. Two, the government allocated budget was too small to an extent that schools both in Bukoba rural and Kinondoni operated without essential educational materials and equipment. The NGOs and CBOs are rescuing the situation in few schools.

The study revealed that persistent teachers' illness and their frequent absenteeism from schools, attending meetings, workshops and seminars to arrest HIV/AIDS reduced teacher's time at school. Second, pupils' ill health, frequency of pupils being sent back home to look for fees wasted pupils' time to attend schools. Third, the orphans were the most disadvantaged because most of them were sent back home frequently as compared to non-orphan pupils.

The study indicated also that the compulsory enrolment and attendance rates, and the subsequently policies which emphasized it, that is, the education and training and child development policies, have not been implemented successfully. One of the reasons mentioned was the impact of HIV/AIDS, which has escalated truancy, drop out rate, absenteeism and failure to enroll all eligible children.

As regards to fee exemption to the orphans, the finding revealed that the District Council Officers did not accept the policy. It was also noted the policy was contradicting the cost sharing policy and did not address the reality.

The study findings emanated from curriculum and teaching learning process. In relation to the curriculum it was indicated that the impact of HIV/AIDS motivated the Ministry of Education and Culture to introduce HIV/AIDS education in the curricula. Also Red Cross in collaboration with the MOEC printed and supplied core and supplementary

teaching-learning materials in all schools in Bukoba rural district from 1993-1998. In addition, the HIV/AIDS education subject (EDU - Elimu Dhidi ya Ukimwi) is taught in standard V - VII. Furthermore, the major problems identified were that the introduction of HIV/AIDS education subject has reduced the number of science subjects from three in the past to two now. Also some teachers are not conversant which reduces that quality of subject matters presented. The findings indicate also that there are a number of NGOs providing HIV/AIDS education in schools such as World Vision, HUYAWA, WAMATA, etc in Bukoba rural and AMREF, CCBRT, Red Cross, and PASADA in Kinondoni.

The finding from the study revealed that first, the teaching/learning, process have been adversely affected by HIV/AIDS impact. The absenteeism of both teachers and pupils has resulted into both loss and absence of logical presentation and perception of subject matter. Secondly, illness, orphanage situation and deaths of pupils, parents/guardians created psychological stress. This resulted into pupils' lack of patience, failure to follow the subject matter effectively and hatred of HIV/AIDS education subject. Thirdly, the current poor performance in primary education examination in Kagera region and Bukoba district was among other factors attributed to HIV/AIDS impact. The HIV/AIDS impact was noted to cause orphans poor attendance, poor teaching-learning environment, poor discipline among pupils (orphans) and poor health of both teachers and pupils.

The study findings revealed that first, there were not enough data on pupils who graduated from the school visited at least for five years. Secondly, the lower enrolment rate and drop out rate accelerated by HIV/AIDS may have contributed significantly to the lower number of graduates from 1986-1993.

Thirdly, some pupils in Bukoba rural district the majority of orphans (who did not get assistance from NGOs and CBOs) who were selected to join public secondary schools found it difficult to continue for lack of school needs. Fourthly, many graduates who have completed grade VII were without requisite skills suitable to start a sound life in the village. Fifthly, life after graduation was with more problems mainly to the orphans who lived with their grandparents and children who were supposed to take care of their siblings.

5.3 Recommendations for action and research:

In the light of the research findings and conclusions made, recommendations for action at macro and micro levels and suggestions for further research are highlighted.

5.3.1 Macro level

- It was found out that a big number of qualified and experienced teachers have died some of them as a result of HIV/AIDS. It has also been noted that teachers are reluctant to accept their new appointments or transfers to places seriously ravaged by HIV/AIDS. This situation reduces both the number and experience among teachers. It is recommended that the government should make deliberate efforts to allocate more teachers to regions and districts seriously affected by HIV/AIDS, that is allocation of teachers in primary schools, should bear in mind HIV/AIDS impact.
- 2. It was noted that diseases frequently affect many teachers. Given the cost sharing exercises taking place, some teachers are unable to pay for their health services. More seriously the dispensaries which are found in the rural areas do not have adequate medicine. It is suggested that the primary schools should be supplied with subsidized first aid kits and trained teachers on first aid services. This will not only minimize teachers health services costs but will also arrest absenteeism among teachers and pupils.
- 3. It was found out that a significant number of pupils attend dispensaries daily. It was observed that some of the diseases were merely related to poor nutrition, and poor awareness of health practices. It is recommended that District medical offices could provide health staffs who could oversee issues related to primary school health activities. The government can facilitate this activity by providing the required directives.

- 4. It was discovered that parents/guardians could not enroll all eligible children because could not construct enough classes and contribute school requirements. It is recommended that the programs launched to eradicate poverty in the country some sponsored by the international organizations, should give the first priority to construction of primary school classes and provision of school materials and teaching-learning facilities. The priority could consider the HIV/AIDS impact.
- 5. The government fiscal budget for education sector and primary education sector was very small per gross national product. It is suggested that the government expenditure on education should be increased so as to rescue the primary schools in the HIV/AIDS ravaged societies with parents/guardians who have very little to offer in terms of school development.
- 6. Policies formulated by the government to promote enrollment, attendance and effective teaching-learning process were found not to be functioning properly. It is suggested that the government should evaluate and revise the policies so as they can work effectively in the teaching-learning environment overshadowed by HIV/AIDS impacts.
- 7. The policy, which exempts fees to orphans, was not accepted and supported. Also it was found that it contradicted with the cost sharing policy. It is recommended that the policy should be revised so that it is clearly formulated to address the realities so as to promote its practicability.
- 8. It was discovered that the curriculum does not contain important topics such as family planning and reproductive health. It is suggested that the institute of curriculum development should include topics in the curriculum, which will address HIV/AIDS and related issues. The curriculum content should be accompanied by teaching-learning materials and training of teachers.
- 9. It was found out that the graduates from the primary school delivery system had no requisite skills enable them fit in local communities. It is recommended that the curriculum a well as training of teachers should be evaluated and designed taking into account the impact of HIV/AIDS and its manifestations.

- 10. The International organizations such as UNICEF, WHO, UNDP, UNESCO etc support national programmes to redress HIV/AIDS. Also some of then support NGOs and CBOs in their endeavours to arrest the disease and its impacts at the grass roots. It is suggested that more resources could be mobilized to support more NGOs and CBOs which are providing HIV/AIDS education and social support programmes to the vulnerable groups such as the orphans, the needy, the disabled, and people living with AIDS.
- 11. Few researches have been conducted on the impact of HIV/AIDS of education sector and specifically primary education delivery system. It is recommended that the government in collaboration with international organizations, NGOs and individuals could channel the resources in this area. These will not only find informed remedies to the immense effects of HIV/AIDS on the sector but would also address the base of education service in the country.
- 12. It was discovered that the impact of HIV/AIDS on primary schools has resulted into various situations which were not there before. Such situations are like pupils and teachers with psychological stress, emotions and trauma. Also pupils (orphans) who lack parents love, guidance and care. Other pupils lack direction especially after graduation. It is suggested that the government through Tanzania Education Institute should introduce educational guidance and counselling in the primary education curriculum to redress the adverse situations prevailing to date.

5.3.2 Micro level

At micro level, the following recommendations are made:

 It is also suggested that apart from HIV/AIDS educational guidance and counselling skills the village counsellors are provided, the NGOs should provide them with vocational guidance and counselling skills. The skills will be employed to educate the graduates of primary education delivery system about proper placement. The people living with AIDS and the community will benefit from the skills too.

- 2. It was found out that pupils were involved in risk practices such as attending disco, participating in celebrations during night and the like. It is recommended that school committees in collaboration with the local village council could identify all risk practices pupils are involved in and prohibit them.
- 3. It was noted that some primary schools had enough play grounds and NGOs supplied them sports and games facilities. It is recommended that the teachers should collaborate with the village local governments to acquire playgrounds suitable for sports and games. They should also strive to obtain the facilities. This will not only develop the pupils physically, mentally, and spiritually but will also arrest the psychological tension among pupils.
- 4. HIV/AIDS have accelerated poverty in the society so much so that they can not construct enough classes to enrol all eligible children. It is suggested that the NGOs and CBOs supporting the parents/guardians and local communities to invest in education should be provided with the required assistance that will enable them realise their mission effectively.
- 5. HIV/AIDS education and related issues should be given the first priority in the village/local meetings, seminars, workshops agenda so as to address all HIV/AIDS impacts in the society including primary education delivery system. The District council could give directives and monitor the implementation.
- 6. There are various social groups in the local communities established to solve community problems. It is suggested that these groups could be assisted by NGOs to form well-organised social and economic groups. These could take the role of social support nets, which have been over stretched and some broken by HIV/AIDS, impacts.
- 7. Community education funds that are collected through different ways including cutting down a certain percent out of sale of products in co-operative societies has been instrumental in solving educational problems. It is

suggested that the education funds should include orphan aid. This would help to solve orphans problem while schooling and later when they are selected to join the secondary school.

5.3.3 Recommendations for further and future research

- 1 This study dwelt on the impact of HIV/AIDS on the Primary School Education Delivery System. It is recommended that research be conducted to investigate the impact of HIV/AIDS on Secondary education delivery system. The study will address the adolescents who are the most risk group.
- 2 The study is also required to examine the impact of HIV/AIDS on tertiary education delivery system so as to find out informed solutions to arrest the scourge against the future work force.
- 3 Orphanhood is problematic. The study is required to assess the impact of HIV/AIDS on the in schools and out of school orphans.
- 4 A study is also needed to investigate about financing of education of the needy and orphans.
- It is recommended that longitudinal studies be conducted to establish the impact of HIV/AIDS on education. Further areas of research can focus on the differences between girls and boys with regard to the impact of AIDS on education. Different cultural backgrounds in Tanzania also merit further research, as the impact can be different due to the cultural influences despite the fact that education is centrally co-ordinated.

BIBLIOGRAPHY

- 1. Aggleton, P., Hart, G. & Davies, P. (Eds.) (1991) AIDS Responses, Interventions and Care, London, The Falmer Press.
- 2. Ainsworth, M & Over, M (1994) AIDS and African Development, *The World Bank Research Observer*, 9. No. 2. July 1994. pp. 203-40.
- 3. Ainsworth, M. & Over, M. (1994) The Economic Impact of AIDS on Africa. In Essex, M., Souleymane Mboup, Phyllis J.K, and Kalengayi M.R. (Eds.) *AIDS in Africa*, New York: Raven Press.
- 4. Ainsworth, M. and Koda, G. (1993) The Impact of Fatal Illness on School enrolment and Attendance, Report of a Workshop on The Economic Impact of Fatal Adult Illness in Sub-Saharan Africa, held in Bukoba, Kagera Region, Tanzania September 16-20,1992. Processed. The World Bank and the University of Dar es Salaam, July, 1993.
- 5. Babbie, A (1983) The Practice of Social Research. California, Wardsword.
- 6. Barnett, T. & Blaikie, P. (1992) AIDS in Africa: Its Present and Future Impact, London, Belhaven Press.
- 7. Bongoko, (1992) Reflections on education in Eastern Africa: Its Present and Future Impact. London, Belhaven Press
- 8. Cleland, J & Ferry, B.(1995) Sexual Behaviour and AIDS in the Developing World, London, Taylor & Francis.
- 9. Cooksey, B., Ishumi, A.G.M., Malekela, G., and Galabawa, J.C.J. (1991) Survey of Living and Working Conditions of Primary and Secondary School Teachers on Mainland Tanzania. Dar es Salaam, TADREG, 1991.
- 10. Coolican, H. (1994) Research Methods and Statistics in Psychology. London, Hodder & Stoughton
- 11. Creswell, J. W. (1994) Research Design: Qualitative & Quantitative Approaches. London, Sage Publications, Inc.
- 12. Durkin, K. (1995) Developmental Social Psychology: From Infancy to Old Age. Oxford, Blackwell Publishers
- 13. Feache M. R (1995) Valuating the Past, Investing in the Future evaluation of the National HIV/AIDS Strategy 1993/94 to 1995/96. Canberra, Australian Government Publishing Service
- 14. Foster, G., Makufa, C., Drew, R., Mashumba, S. and Kambeu, S (1997)
 Perceptions of Children and Community Members Concerning the
 Circumstances of Orphans in Rural Zimbabwe, *AIDS CARE*, 9 (4) pp. 391405.

- 15. Foster, G., Makufa, C., Drew, R., Kambeu, S and Saurombe, K. (1996) Supporting Children in Need Through Community-based Orphan Visiting Programme, *AIDS CARE*, 8 (4) pp. 389-403.
- Foster, G., Shakespeare, F., Chinemana., Jackson, H., Gregson, S. Marange,
 C. and Mashumba, S. (1995) Orphan Prevalence and Extended Family Care in Peri-urban Community in Zimbabwe, AIDS CARE, 8 (5) pp. 3-17.
- 17. Galabawa, J.C.J (1994) Status and Future Challenges of the Tanzania Primary and Secondary Education, In Msambichaka, L.A., Moshi, H.P.S & Mtatifikolo,(Eds.) F. P. Development Challenges and Strategies for Tanzania: An Agenda for the 21st Century, Dar-Es-Salaam, Dar-Es-Salaam University Press.
- 18. Geballe, S., Gruendel, J and Andiman, W (1995) Forgotten Children of the AIDS Epidemic, London, Yale University Press.
- 19. Hendrick, T. E., Bickman, L. Rog, D.J. (1993) Applied Research design: A Practical Guide. London, Sage Publications, Inc.
- 20. International Institute of Educational Planning. AIDS and Education in Africa, IIEP Newsletter vol. Xviii No. 1 January-March 2000.
- 21. Ishumi, A. G. (1994) 30 Years of Learning: Educational Development in Eastern and Southern Africa from Independence to 1990. Ottawa: International Development Research Center.
- 22. Jallow, H.B. and Hunt, P. (1991) AIDS and the African Charter: Occasional Paper, No. 3, November 1991, Banjul.. African Centre for Democracy and Human Rights Studies,
- 23. Kaijage, F.J. (1993) AIDS Control and the Burden of History in North Western Tanzania, *Population and Environment: A Journal of Interdisciplinary Studies*, 14. No. 3.pp.279-300.
- 24. Kaijage, F.J. (1997), Social Exclusion and the Social History of Disease: The Impact of HIV/AIDS and the Changing Concept of the Family in Northwestern Tanzania, in *Rethinking African History: Interdisciplinary Perspectives*, Edinburgh, University of Edinburgh Press.
- 25. Kaijage, F., (1998) "HIV/AIDS and the Collapse of Social safety Nets in Tanzania" Paper Presented at National Multisectoral AIDS Conference in Tanzania, Arusha 6-10 December 1998.
- 26. Katabaro, J K. (1992) An Exploratory Study of Factors Influencing School Achievement among HIV/AIDS Orphaned Children in Tanzania, M.A. Dissertation, Faculty of Education, University of Dar es Salaam.

- 27. Katabaro. J.K. (1993) "The impact of HIV/AIDS on Education in Tanzania A case Study of Bujumegoma Community" Draft Manuscript International Development Research Centre Nairobi.
- 28. Katabaro, J K (1999) School Performance and Perceptions of 'AIDS' Orphaned Primary School Pupils: A Case of the Bukoba District in Tanzania, Unpublished Ph.D. Thesis submitted to the School of Education, University of Cambridge.
- 29. Katahoile A. (1993) "The Impact of AIDS on Education in Uganda: A case study of Lyantonde Community" Draft Manuscript, International Development Research Centre Nairobi.
- 30. Katunzi, N. B. (1998) Dar Es Salaam Education System: A Report Submitted to UNICEF, August, 1998
- 31. Kinyanjui, K. and Katabaro, J.K.(1994) The Impact of HIV/AIDS on Education at the Micro Level In East Africa. In Oulai, D. and Carr-Hill, R. The Impact of HIV/AIDS on Education. Paris, UNESCO.
- 32. Ministry of Education and Culture (1999) Education for All. Dar es Salaam, Ministry of Education and Culture.
- 33. Mugisha, L.S (1992) The Role of Counselling in Extended Family system Affected by HIV/AIDS (TASO Experience), Paper presented at the 4th International Conference on HIV/AIDS and African Family, held at Arusha, Tanzania 28th Sept.-1st Oct., 1992. Processed.
- 34. Mukoyogo, C.M & Williams, G (1991) AIDS Orphans: A Community Perspective from Tanzania, Strategies for Hope, No. 5, London, AMREF.
- 35. NACP (1994) National AIDS Control Programme Report. Dar es Salaam, Ministry of Health No. 8.
- 36. NACP (URT). (1987/1999) National AIDS Control Programme Surveillance Report, Nos.1-13. NACP (URT). (1998) Strategic Framework for the Third Medium Term Plan (MTP-III) for prevention and Control of HIV/AIDS/STDs 1998-2002.
- 37. NACP, 1998 "National Multisectoral AIDS Conference in Tanzania", Report. Arusha International Conference Centre 6-10 December 1998.
- 38. NACP, 1999, National AIDS Control Programme Strategy. Mainland Tanzania under MTP III 1998-2000.
- 39. NACP (URT). (1997) The 'Mama Mkubwa' Model for Community Based Support of Orphans, Dar es Salaam, Ministry of Health National AIDS Control Programme.

- 40. Ndalichako, J. (1999) Qualitative Analysis of Primary Education in Tanzania: Trends in Enrolment, Transition, Repetition and Drop out Rates 1990 1997 A Report submitted to UNICEF, January 1999.
- 41. Ndamgoba, D.L. (1999) "Participation of Target Groups in the Implementation of HIV/AIDS education and Social Support Programmes Administered by NGOs in Bukoba Urban District" Research Report, submitted to NACP.
- 42. Ndamgoba D.L.: (1997) "Appraisal of the Internal Workings of NGOs implementing HIV/AIDS Education Programmes" Case Study of Bukoba Urban. District Unpublished, M.A. (Education) Dissertation University of Dar es Salaam.
- 43. Ngowi, J & Hogan, M (1992) The Psychiatric/Psychological Effects of Parental Loss and Death through AIDS on Two Surviving Offspring: The need for early Intervention: Case presentation, Paper presented at the 4th International Conference on HIV/AIDS and African Family, held at Arusha, Tanzania 28th Sept.-1st Oct., 1992. Processed.
- 44. Nicolao, M.O. (1991) Tanzania Experience in Planning for Assistance to the AIDS Orphans: The Case of Kagera Region, Paper presented at the International Child Development Centre in Florence, Italy, June 14-15 1991.
- 45. Oppenheimer, A. N. (1996) Questinnaire Design, Interviewing and attitude measurement. London, Printer Publishers
- 46. Oulai, D. and Carr-Hill, R. The Impact of HIV/AIDS on Education, Paris, UNESCO.
- 47. Red Cross (1994) Appraisal of Orphan Situation in Kagera Region Report. Bukoba, Red Cross.
- 48. Red Cross (1995) Evaluation of HIV/AIDS in Kagera Region report. Bukoba, Red Cross.
- 49. Red Cross, (1998) "Tanzania Red Cross Society Health Care Project on the Prevention of HIV/AIDS in Schools Kagera Region Tanzania" Hand Over Report.
- 50. Red Cross (1999) Evaluation Report on HIV Education in Kagera Region. Report. Bukpoba, Red Cross.
- 51. Reid, E (1993) Children in Families Affected by HIV Epidemic: A Strategic Approach, Issue Paper No. 13, New York, UNDP.
- 52. Rossi, M.M. and Reijer, P. (1995) Prevalence of Orphans and their Education Status in Nkwazi Compound-Ndola, Paper presented to the 5th National AIDS Conference, Lusaka, Zambia.

- 53. Shaeffer, S. (1993) Impact of AIDS on Education, Background paper for the Experts' Seminar on the Impact of HIV/AIDS on Education, International Institute for Education Planning, Paris, 8 10 December, 1993. Processed.
- 54. Sumra, S.A. (1995) Enrolment Trends in Education in Tanzania, Papers in Education and Development, A Journal of the Faculty of Education, University of Dar es Salaam, 16 pp. 49-64.
- 55. The New York Times. (1988) Foster Care for Children with AIDS: In Joy and Pain, *The New York Times*, Saturday, May 7, (1988).
- 56. Tibaijuka, A.K. (1997) AIDS and Economic Welfare in Peasant Agriculture: Case Studies from Kagabiro Village, Kagera Region, *Tanzania in World Bank*, 25 (6) pp. 963-975.
- 57. UNAIDS, (1997), Children and HIV/AIDS: UNAIDS Briefing Paper, Geneva.
- 58. UNAIDS, (1999), Children and HIV/AIDS: UNAIDS Briefing Paper, Geneva.
- 59. UNAIDS, (1999) "Key Issues and Ideas for Action: 1999 World Campaign with Children and Young People" Geneva.
- 60. UNICEF, (1999) The State of the World's Children 1999: Education, New York, UNICEF.
- 61. UNICEF, (1991) AIDS and Orphans in African UNICEF._New York.
- 62. Urassa, M., Ng'weshemi, J.Z.L., Isingo, R., Schapink, K., Kumogola, Y. and Boerma, J.T. (1996) Orphanhood, Child Fostering and The AIDS Epidemic in Rural Tanzania, TANESA Working Paper No. 16, Tanzania-Netherlands Project to Support HIV/AIDS Control in Mwanza Region (TANESA).
- 63. URT, (1980-1999) Basic Education Statistics. Dar es Salaam, Ministry of Education and Culture
- 64. Webb, D. (1997) HIV and AIDS in Africa, London, Pluto Press.
- 65. WHO/UNICEF (1994) Action for Children affected by AIDS, Program Files and Lessons Learned, Geneva/New York, WHO/UNICEF
- 66. World Bank (1992) Tanzania AIDS Assessment and Planning Study: World Bank Country Study, Washington, D.C
- 67. World Bank, (1993) University of Dar es Salaam, The "Economic Impact of Adult Illness in Sub-Saharan Africa" Report of a Workshop, Bukoba, Tanzania, September, p.16-20.

- 68. World Bank, (1997) Confronting AIDS Public Priorities in Global Epidemic, World Bank, Washington D.C.
- 69. WHO/UNICEF (1994) Action for Children Affected by AIDS, Programme Profiles and Lessons Learned, Geneva/New York, WHO/UNICEF.

Appendices: Instruments

PUPILS' QUESTIONNAIRE

The purpose of this questionnaire is to gather information on the impact of HIV/AIDS on primary school education delivery system. It will not be used otherwise.

Please put a tick (\checkmark) on the response you think is collect along side or fill the blank space were required.

1.	Class							
2.	Age							
3.	Sex:	Boy	. Girl					
4.	Which diseases infect the community surrounding the school?							
	(i)	Malaria	(ii) Bilhaziasis					
	(iii)	Meningitis (iv) TB	(V)					
	(vi)	Cholera (vii) HIV/AIDS						
	(viii)	Skin diseases	(ix) Elephantiasis					
	(x)	Typhoid	(xi) Others(Please Mention them)					
5.	The following diseases infect pupils mainly:-							
	(i)	Malaria	(ii) Bilhaziasis					
	(iii)	Meningitis (iv) TB	(v)					
	(vi)	i) Cholera (vii) HIV/AIDS						
	(viii)	Skin diseases	(ix) Elephantiasis					
	(x)	Typhoid	(xi) Others(Please Mention them)					
6.	Different diseases infect mainly pupils in:-							
	(i)		(ii) Standard I (iii) Std III					
	(iv)	Std. IV (v) St	d. V (vi) Std. VI					
			All pupils without exception					
7.		Diseases infect mainly						
	(i)	-	(ii) Teachers only					
_	(iii)	Teachers and Pupils	••••••					
8.	•	u know what is AIDS?	40.37					
	(i)		(ii) No					
9.	How is HIV/AIDS spread?							
	• •	(i) Breathing in polluted air						
	(ii) Sharing food with a person who has contracted HIV/AIDS							
	(iii) Through sex intercourse							
	` '	(iv) To share blades and with the affected						
	(v)	·						
		(vi) To be infected by the affected mother during pregnancy						
10	(vii)	Others						
10.		Have you ever seen a person/people infected by HIV/AIDS?						
1 1	(i)		(ii) No					
11.	•	•	by HIV/AIDS. That person was your					
	(i) (iii)		(ii) Father(iv) Guardian					
	4 1 (7)	WIGHTER	CIVICHALCHAH					

			(vi) villager
			(vii) Teacher
	` /		(ix) Others
		e mention)	
12.			ted by HIV/AIDS at this school
	(i)		(ii) No
	(iii)	I don't know	
13.		the infected was	
14.			DS has the following problems
	(i)	Frequent sickness	/**\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	(ii)		(iii) Weakness
			(v) Failure to work
	` '		/ ''' Od 11
	(vii)		. (viii) Other problems
	T T	(please mention)	
15.	•	you leant about HIV/AIDS	ZIII NT.
1.0	(i)		. (ii) No
16.	-	have leant about HIV/AIDS.	
	(i)		
	(ii)	-	(i-) Other places
	(iii)		(iv) Other places
17	Y Y TTX	(please mention)	an atable?
17.		//AIDS subject in the school ti	
10	` '	S	(ii) No
18.		<u> </u>	timetable. It is taught is class
	` '		(ii)
	` '		(iv) (vi)
19.			I was in class
1).			1 Was III class
20.			each week
20.		minutes.	
21.		IDS subject is taught by	
		y teacher	(ii) Teacher conversant with HIV/AIDS
	• •	ion	(iii) HIV/AIDS specialists
		edical doctors	(v) Others
	` '	e mention)	(,, -, -, -, -, -, -, -, -, -, -, -, -, -
22.		IDS have effects	
			(ii) At school
	(v)		(vi) Not at school
23.	ĤÍV/A	IDS have effects in the comm	
	(i) Yes		(ii) No
	(iii)		
	• •		
24.	If yes t	the HIV.AIDS community effort	ects include:-
	(i)	Deaths to many people	
	(ii)		
	(iii)	· • •	re weak
	(iv)	Some people are sick therefor	re weak

	(v)	Persistent deaths inhibiting farming/business/office duties
	(vi)	Increase of health services costs
	(vii)	Others (please mention)
25.	Effect	ts of HIV/AIDS to our school are:
	(i)	Parent/guardian sickness
	(ii)	Teacher's sickness
	(iii)	Teacher's sick relatives
	(iv)	Pupils sickness/sick relatives
	(v)	Parents failure to contribute to school development e.g. construction of
		school building
	(vi)	Deaths to parents/guardians/pupils/teachers
	(vii)	Others(please mention)
26.	Effect	ts of HIV/AIDS to teachers
	(i)	Teacher's sickness
	(ii)	Teacher's failure to teach due to weakness
	(iii)	Teacher's failure to work properly due to weakness
	(iv)	Teacher's absenteeism
	(v)	Teachers attending their sick relatives/immediate
	. ,	families
	(vi)	Teachers attending funeral ceremonies
	(vii)	Teachers deaths
	(viii)	Others (please mention)
27.	Effect	s of HIV/AIDS to pupils are:-
	I. Lo	posing one or two parents
		eing orphans
	III. Tr	uancy
	IV. Dı	ropout
	V. No	ot taught all subjects
	VI. Po	oor class performance
	VII.	Failure to pay school fees and other requirements
	VIII.	Hate school because of stigmatization
		rphans being segregated by their fellow pupils
	X. Ot	thers(please mention)
28.	Measu	ures to redress HIV/AIDS effects include
	(i)	
	(ii)	
	(iii)	
	(iv)	

INTERVIEW SCHEDULE TO TEACHERS

1. When did you hear about HIV/AIDS for the first time? 2. Is HIV/AIDS a problem in this area/school? 3. When was HIV/AIDS a problem on this area/school? 4. What are the effects of HIV/AIDS on: (i) Construction of school building (ii) **Teachers** (iii) Parents/guardian **Pupils** (iv) (v) **Orphans** (vi) People living with AIDS (vii) Teaching (viii) Curriculum Fees/Contributions (ix) (x) Pupils discipline **Enrolment** (xi) (xii) Graduation (xiii) Teachers welfare 5. What is the different between the performance in the primary education delivery system before 1983 and after 1983 as regards. (i) **Pupils** (ii) Parents health (iii) Enrolment Attendance (iv) (v) Fees/Contribution (vi) Class teaching (vii) Curriculum Teaching learning environment (viii)

What are measures to control the effects of HIV/AIDS?

(ix)

(x)

6.

Community welfare

HIV/AIDS subject

FOCUS GROUP DISCUSSION GUIDE FOR THE SCHOOL BOARD

Theme I: Enrollment and attendance

Students' enrollment and attendance:

- Enrollment prior to the intial reporting of HIV/AIDS cases, e.g., the % of children in the community enrolled in the school, 1980-1983 (Estimates should should be used to indicate the impression).
- Enrollment trend after the reporting of cases of HIV/AIDS
- Current Enrollment
- Trend of attendance prior to first reported cases of HIV/AIDS 1980-1983.
- Trend of attendance after reporting of HIV/AIDS 1983.
- Causes of truancy- Is there a difference between children from households which have been afflicted with AIDS and those not affected?
- Causes of dropout Is there a difference between children from households which have been afficted with AIDS and those not affected?
- Steps taken by the school management to stop dropout and poor school attendance

Teachers' number and attendance

- Number of teachers between 1980-1983
- Trend in number of teachers after 1983.
- Number of teachers currently in the school
- Performance of teachers as indicated by attendance: Rate of attendance of teacher between 1980-1983
- Trend in rate of attendance
- Current rate of attendance
- Frequency of transfer and teacher resignation

Theme II: Health Status

Students Health Status:

- General status of students' health between 1980-1983
- Trend of health status of students after 1983
- Current Health status
- Mortality rate before and after 1983
- Current mortality rate

Health Status of Teachers:

- General status of teachers' health between 1980-1983
- Trend of health status of teachers after 1983
- Current Health status
- Mortality rate before and after 1983
- Current mortality rate
- How AIDS has affected teachers performance

Theme III: Efficiency of teachers

- Teachers' involvement in teaching learning activities between 1980-1983
- Trend of Teachers' involvement in teaching learning activities
- Current situation in teachers' involvement in teaching learning activities
- Time on task
- Opinion of school board on the performance of Teachers in the school
- What are the causes of the current status in performance
- What affects teachers regular attendance?

Theme IV: Student performance

- Rate of students Enrolment/Graduation between 1980-1983
- Trend in students Enrolment/Graduation after 1983
- Current rate of students Enrolment/Graduation

FOCUS GROUP DISCUSSION GUIDE FOR THE PREFECTS

Theme I: Enrollment and attendance

Students' enrollment and attendance:

Current Enrollment % of children in the community enrolled (Estimate to get general impression)

Current Trend of school attendance

Current frequency of truancy and causes of truancy

Current frequency of dropout and causes of dropout

Steps taken by the school management to stop dropout and poor school attendance

Teachers' number and attendance

- Adequacy of number of teachers currently in the school
- Trend in rate of teachers' attendance
- Current rate of attendance
- Frequency of transfer and teacher resignation

Theme II: Health Status

Students Health Status:

Current Health status Current mortality rate

Health Status of Teachers:

Trend of health status of teachers

Current Health status

Current mortality rate

Theme III: Efficiency of teachers

Previous trend of teachers' involvement in teaching learning activities Current situation in teachers' involvement in teaching learning activities Time on task

Opinion student leaders on the performance of Teachers in the school What are the causes of the current status in performance

Theme IV: Student performance

General impression of school board on student performance:

Trend in students Enrolment/Graduation

Current rate of students Enrolment/Graduation

Current trend of achievement on school and national examinations

Theme V: Shortages in the school

Financial

Supplies, e.g., Books, desks. How has this been affected by HIV/AIDS?

FOCUS GROUP DISCUSSION GUIDE FOR TEACHERS

Theme I: Status of Imput, Process and Product of Primary Education system Prior to reporting of HIV/AIDS outbreak.

What was the status of this primary school prior to HIV/AIDS outbreak, i.e., 1980-1983.

- Enrolment and attendance of students
- Health status of the students
- Teachers attendance and efficiency
- Teachers health
- Students performance
- The school environment

Theme II: Effects of HIV/AIDS on Primary Education system.

Current status of the school in terms of effects of HIV/AIDS on the Input

- Enrolment and attendance of students
- Health status of the students
- Teachers attendance and efficiency
- Teachers health
- School Budget
- School Facilities
 - Educational activities and effects of HIV/AIDS if any.

Theme III: Effects of HIV/AIDS on the Primary Education System Process.

Current Status of teaching learning Process

- Effectiveness of the process
- Any effects of Infection
- Changes in Curriculum due to HIV/AIDS

Theme IV: Effect of HIV/AIDS on output

Current status of the school in terms of Graduation and performance

- Percentage of students graduation
- Reasons for dropout
- Achievement/Perfomance of internal and National examinations.

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