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NUTRITIONAL CARE TO PEOPLE LIVING WITH HIV/AIDS IN BUNDA TOWNSHIP

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ABSTRACT

The HIV/AIDS pandemic is a global crisis with impacts that will be felt for decades to come. According to the estimates projected in the UNAIDS 2000 and 2003 AIDS Update December; fourty million people were living with HIV/AIDS as of December 2003, of whom 2.5 million are children below fifteen years of age. During year 2003, 44.9 million people were already infected with HIV and three million died of AIDS. Also in year 2004 HIV/AIDS killed more than three million people and nearly five million people became infected (UNAIDS/WHO2004). More than twenty five million of these live in Sub-Sahara Africa, where Tanzania alone had 157,173 people living with HIV/AIDS; Mara Region had 3216 and Bunda district had 1057 as of December 2003.

Recognizing this situation; several practitioners, Institutions, groups of persons and individuals are joining into the efforts of limiting or minimizing the speed of the sick to progress from HIV to AIDS disease. These efforts are being done through application of the antiretroviral drugs and utilization of good diet combined with recommended herbs that are immune stimulant and/or antioxidant in nature. Bunda Women Savings and Credit Cooperative Society has also opted joining an hand by establishing a nutritional care project to serve people living with HIV/AIDS in Bunda Township who according to the current statistics are now amounting to 482.

The purpose of this document therefore is to justify the relevance and validity of establishing a project of this kind in the area and also to see whether the project is addressing the needs of the targeted community.

In conducting the research to testify the above; several sources of information have been contacted; including literature reviews, various respondents in the area who involved – society members themselves; government officials; partner NGOS which are already working with the affected, as well as the society committee members.

Several trial questions have been developed and used either to lead focus groups discussions or mailed to respondents; the answers of which, after the detailed analysis have enabled the research team to come up with findings and recommendations that appear in chapter four of the document.

Several findings have been learned out of the study as they appear in the document; but briefly the research confirmed to have NGOS in Bunda District engaged in provision of various HIV/AIDS related services to the affected community, but none of the same was engaged in nutritional case services. This immediately indicates a need of having an organ established to take care of nutritional care services so as to assist in filling the vacuum.

The research also noted the high commitment of the society members have in preparing themselves to establish a nutritional care project. This was evidenced by contributions raised by the members, where as of now; more than Ten million Tanzanian Shillings have been set aside to assist the take off of the project - and lastly

The findings predict good marketability of the products that will be produced by the project. This was evidenced by responses of the NGOS, where 77.8% of the total respondents confirmed the market.

Basing on the above findings; the study confirms the establishment of a nutritional care project and recommends a proposal on nutritional care (which appears in chapter five) be developed to aid the Society in securing some of the items (like machineries) that are expensive for the society to afford.

Instruments used in conducting the research appear at the end.

DECLARATION

I S.S.Z. Lugira do hereby declare that this Project Paper is my own original work, except where acknowledgment has been done. The paper has not been submitted for any degree in any other University before.

SILVAN. S.Z. LUGIRA

Date: 19th August 2005

SUPERVISOR'S CERTIFICATION:

I. N.N. Ligembe certify that I have read this Project Assignment and accepted it as a scholarly work. I therefore recommend it to be awarded a **Master of Science in Community Economic Development.**

V. N. LIGEMBE

DATE: 20 August 2005

DEDICATION

To my wife Lestituter and

My beloved child

Ritta.

ACKNOWLEDGEMENT:

I acknowledge with thanks the helpful collaboration offered to me by Mr. J. M. Molai the Bunda District Executive Director, particularly his financial support, moral encouragement and guidance in pursuing the CED Programme; Mr. N.E.J. Malisa the District AIDS Coordinator; Chair persons of the Partner NGOs dealing with HIV/AIDS control in the district (only to mention a few, AMREF, K.K.K.T. BUNDA, HUYAMU, I.A.MARA CHAPTER, AIDS – ABC, SHDEPH+, CRS and BAKWATA) and the Executive committee of Bunda Women Savings and Credit Cooperative Society, led by the Society chair person Mrs. C. Mshora.

I would also like to acknowledge the efforts of Mr. N.N. Ligembe the Mara OUT Region Centre Director who supervised my Project Assignment and Mr. M. Adjibodou the CED Programme Director, who devoted much of his time in assisting me and the CED class to understand what the project assignment entails. It was due to their voluntary efforts that my project work became successful.

I would equally want to acknowledge the torrelance of my wife and children who had to fasten their belts to enable me pursue the CED Programme.

Finally I would like to express my gratitude to Miss Mujo, Miss Jesca Alloph and Mrs. Mary Okello who did the typing work of my project assignment. It is because of the above people that my project paper is as it is now.

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LIST OF ABBREVIATIONS

1. ACC/SCN: Administrative Committee on Coordinations/Sub

committees on Nutrition of the United States.

2. AIDS : Acquired Immune Deficiency Virus.

3. AMREF : African Medical Research Foundation

4. BWSCCS : Bunda Women Savings and Credit Cooperative

Society.

5. CBO : Community Based Organization

6. CED : Community Economic Development

7. D.D.P. : District Development Programme

8. FAO : Food and Agriculture Organization

9. FGM: Female Genital Mutilation

10. FINCA: Foundation for International Community Assistance

11. FISEDA : Financal Services and Enterprises Development

Association

12 GDP : Gross Domestic Product

13. H.A.A.R.D. : Highly Active Anti – Retroviral Drugs.

14. HIV : Human Immunodeficiency Virus

15. IEC : Information, Education, and Communication

16. IGAs : Income Generating Activities

17. K.K.K.T.: Lutheran Evangelical Church of Tanzania

18. M.O.H : Ministry of Health.

19. MTP : Medium Term Plan

20. NACP : National Aids Control Programme

21. NGO : Non Governmental Organization

22. NORAD : Norwegian Agency for Development

23. P.H.C. : Primary Health Care

24. SADC : Southern African Development Community.

25. Sida : Swedish International Development Authority.

26. STD : Sexually Transmitted Diseases

27. STI : Sexually Transmitted Infection

28. TACAIDS : Tanzania Commission for Aids

29. TASAF : Tanzania Social Action Fund

30. UNAIDS : Joint United Nations Programme on HIV/AIDS

31. USA : United States of America

32. USAID : United States Agency for International

Development.

33. U\$D : United States Dollar

34. WHO : World Health Organization.

35. WPF : World Food Programme.

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CHAPTER ONE

1. BUNDA WOMEN SAVINGS AND CREDIT COOPERATIVE SOCIETY BACKGROUND:

1.1. PREAMBLE:

The Bunda Women saving and Credit Cooperative Society (BWSCCS) is a women voluntary cooperative society situated in Bunda town in Mara Region. The Society was established as a service group in August 1999 with sixteen start up members; but later registered as a Savings and Credit Cooperative Society in year 2001; under Registration No. MAR. 391 of year 2001. The society now has twenty-one members.

1.1.2. THE CBO'S VISION AND MISSION:

Vision

The CBO's vision is -To have its members and neighboring communities lead a good and prosperous life

Mission:

In line with the above vision, The Saving and Credit Cooperative Society's mission is: -

- Attainment of improved living conditions by society members through access of loans of low interest rate obtained from the society's own credit base – and using a part of it's earning to improve other people's living conditions in Bunda Township"

1.1.3. OBJECTIVES:

The objectives of the Bunda women Savings and Credit Coop. Society are two:

- (i) To create a capital base for credit services to its members through:
 - a) Mobilization of resources by members' monthly contributions.
 - b) Establishment of Income generating activities (IGAs) and
 - c) Getting interest on loans that are credited to its members.
- (ii)To provide a development service to Bunda Urban Community, particularly health related services, this being a Society's contribution to Bunda Communities social development

1.1.4 ORGANIZATIONAL STRUCTURE

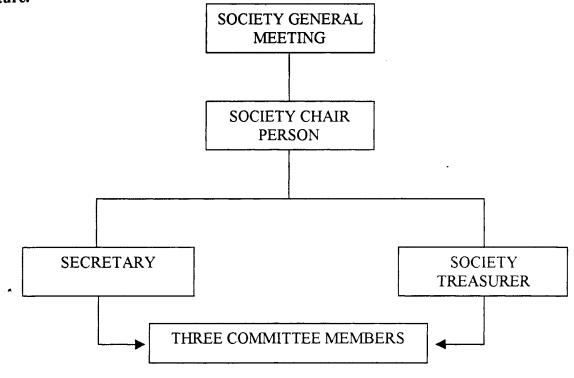
The CBO organizational structure is headed by the society's general meeting which is the final decision making organ. It is under this body (which by constitution meets once per month) where all major issues concerning the society are being handled.

Next to the society general meeting is the chair person who is assisted by two immediate persons- a secretary and a treasurer. These three are directly responsible for the day to day running of the society activities.

Next to the above are three committee members who have been appointed by the society general meeting to join the implementing team; thus making an implementation committee to have six people.

The diagrammatical presentation of the structure is as follows:

Figure No. 1: Bunda women savings and credit cooperative society organizational structure.



Source: Society's Secondary data

1.1.5. THE CBO's PROJECTS:

Besides members' monthly contributions; the BWSCCS has two generating projects. These are: -

- (i) A Poultry project: where the Society is raring eight hundred layers and
- (ii) The Tailoring mat project where the Society has ten Sawing Machines.

These projects together with members' monthly contributions generate funds for the society to operate its credit functions.

1.1.6. ACTIVITIES:

The activities of the cooperative are: -

(i). Chicken Rearing

The Society currently has eight hundred layers. These averagely produce seven hundred and fifty eggs per day; (when the conditions remain stable) – i.e. if there's no outbreak or stress – inadequate feeding; inadequate drugs; and poor care.

The eggs when sold earn an average society's income of five hundred and twenty-five thousand Tanzanian shillings per day at a price of seventy shillings per egg.

The society also secures income from the sale of old layers. So far the society has laid out three hundred layers at a price of Tshs. 1,500/= each, where four hundred and fifty thousand Tanzanian shillings have been obtained.

(ii). Tailoring mat and Tailor Training: -

The society receives several tailoring tenders from different communities: Schools, various groups, individual business practitioners and others who need such type of service.

The society also gets training fee from its trainees. In general this activity secures a monthly average income of three hundred thousand Tshs. for the society.

(iii) Members' monthly contributions:

The society members contribute five thousand shillings per person per month. At an average; it secures a total sum of one hundred thousand and five Tanzanian shillings per month.

These three sources of income make the credit base for the society to enable its activities keep on moving.

1.1.7. THE PROJECT ASSIGNMENT:

My project work started by identifying three CBOs to work with during my eighteen months of study. These CBOs are:

- (i) Bunda Women Savings and Credit cooperative Society.
- (ii) Liziki women group
- (iii) Zinduka Mama Women group.

A communication to these CBOs was done in writing as the attached letter to this report indicates. The major and only massage of these letters was to inform them on my intention to work with them for the period identified above. Moreover I wanted them to indicate what area of development out of the under listed they would need my assistance as a group: -

- 1. Conducting surveys in an Organization
- 2. Preparation of reports.
- 3. Conducting Evaluation
- 4. Proposal writing
- 5. Developing a Training package
- 6. Advocacy
- 7. Conducting monitoring
- 8. Development of CBO policies and
- 9. Any other development need that they could identify.

Out of the three CBOs mentioned above; only one – Bunda Women Saving and Credit Cooperative Society responded and showed interest to work with me; as the attached group's letter indicates.

A first meeting therefore was arranged on 13th of October 2003 with the CBO members where the details of my work were discussed.

After the discussion; the members opted for Proposal writing.

Method for selection:

A pair wise ranking technique was developed; where all twenty one-society members participated in comparing one activity to the other.

Finally the Proposal writing as a project assignment was selected at a score of 145 votes as the attached matrix no.2. indicates.

The meeting identified six group members to assist me in the day-to-day assignments of the project.

A date was set (19th Nov. 2003) for the second meeting to identify a project for proposal writing.

Project selection.

On the 19th Nov. 2003 a society meeting was again convened. All twenty-one members attended.

Members were divided into three groups of seven. Each group was given time to suggest what type of project they would need my assistance in developing a project proposal. Each group was request to come up with three types of projects, which after presentation per group, only five were selected for ranking.

Through the P.R.A. pair wise ranking methodology; the HIV / AIDS project was selected for proposal writing; with a score of sixty one as indicated in the appended Ranking matrix no. 2; this being the fulfillment of the society's objective of providing a development service to Bunda Community members.

A schedule of implementation indicating the planned activity and the time within which implementation has to take place is as appended.

1.1.8 SIGNIFICANCE OF THE STUDY

The society members find it significant to select the nutritional care project for people living with HIV/AIDS as an area of study for the following three main reasons.

First, the intervention is in line with the society's mission and objective. It has ever since been the aim of the society to provide a developmental service, particularly the health related to Bunda Township communities.

Second, members feel proud of the intervention because, in case of success; they will have joined efforts of other people in other parts of the world in prolonging the living of the HIV/AIDS affected communities - and particularly the affected communities in Bunda Township.

Third, the society members, through running of the nutritional care project; will have developed good capacity and capability on handling health related activities, particularly the HIV/AIDS issues- and lastly;

The society members consider the intervention significant because it is potential for generating society's income, since its services touch people's lives.

CHAPTER TWO

2:0: LITERATURE REVIEW:

Before we get into the details of testifying the validity/relevance of establishing a Nutritional care project in Bunda Township; let us have a look on what literatures theoretically say on HIV/AIDS and Nutrition.

2.1: MEANING OF HIV / AIDS:

HIV / AIDS can better be looked at by analyzing these two words HIV and AIDS separately:

HIV:

HIV stands for Human immunodeficiency virus. It is a virus that is transmittable from one person to another (Ferri Janice et al. The HIV Coalition pg.1)

When one is attacked by HIV, the virus starts to attack his / her immune system, which is the body's defense against illness – and once a person is infected, he / she cannot be cured for life.

HOW HIV DEVELOPS:

HIV dwells in blood. The blood is made up of a fluid called plasma and three types of cells – Red blood cells which give blood its colour; Platelets which help the blood to clot and the white blood cells which defend the body from germs and fight against infections.

In the white blood cells, there's one most important type of cells in the immunal system called the T- helper, commonly known as the CD 4 cells. This is type of cell, which coordinates all other immunal cells – HIV develops by attacking this type of blood cells, and once attacked, the HIV virus takes it over and starts to reproduce itself. During this process (which takes a couple of days), the infected cell dies and the virus looks out for other CD 4 cells to infect.

The CD 4 cells usually battle against the invading infection – and it's for that reason that one may take a long time before any HIV symptoms are noticed on him

However as the attack continues the CD 4 cell count goes down – and one starts having signs of HIV disease like fevers, night sweats, diarrhea and swollen lymph

AIDS:

AIDS stands for Acquired Immune Deficiency Syndrome. A person is said to have AIDS when he usually has a few years after having been infected by HIV. (Ferri Janice et al pg.1)

At this position, a person develops a number of several rare illnesses or cancers, since the immune system is already weakened.

2.1.1. TRANSMISSION OF HIV:

HIV is greatly all allocated in sexually fluids, blood of infected people and breast milk of infected women. (Landry – virology madsci – Network ltm).

Because of the way HIV is spread, the most common ways of contracting the virus is – through unprotected penetrative sex and the use of infected needles and syringes. HIV can

also be passed on to an unborn baby either before or during birth. There's also a small risk of one contracting HIV through oral sex, but this is very rare.

2.1.2. STAGES OF HIV INFECTION:

HIV usually has four stages of development

Stage I: Primary stage:

This is a stage of infection, which lasts for a few weeks and is accompanied by flue like illness, which occurs just after infection. An HIV test at this time may not yet prove positive.

Stage II: Clinically a symptomatic stage

This stage usually takes a period of ten years and as its name suggests, it usually has no symptoms, although there may be swollen glands. HIV remains infectious and will now reveal itself positive in a test.

Stage III: Symptomatic HIV Injection:

This is the stage where as time elapses, the immune system looses the struggle to contain HIV, due to the following main reasons:-

- i) The lymph nodes and tissues become damaged because of activity over the years
- ii) HIV becomes stronger and more varied leading to more CD 4 cells destruction.
- iii) The body fails to keep up replacing the CD 4 cells that are lost.

As a result, one may get infection and cancers that normally the immune system would prevent, causing symptomatic HIV infection.

Stage IV: Progression from HIV to AIDS:

At this stage, as the immune system becomes more and more damaged, the illnesses that occur become more and more severe leading to an A.I.D.S diagnosis. People can be very ill with HIV but not have an AIDS diagnosis.

2.2. OVERVIEW OF HIV / AIDS WORLDWIDE:

People living with HIV / AIDS:

According to the estimates projected in the United Nations Programme on HIV / AIDS (UNAIDS) 2002 and 2003 AIDS epidemic update December and the UNAIDS (2002) Report on the global HIV / AIDS epidemic July; forty million people were living with HIV / AIDS as of December 2003, of whom 2.5 million are children below fifteen years of age.

Number of people infected during 2003 and the number of deaths:

During year 2003, 44.9 million of whom 700,000 are children below fifteen years became infected with HIV, which causes AIDS. The year also evidenced 3 million deaths from HIV / AIDS (of whom 2.5 are adults and the rest are children) a higher global total than former years of the epidemic, despite of antiretroviral therapy which reduced AIDS and AIDS deaths in the richer countries.

Total number of AIDS deaths and total number of orphans since the beginning of the epidemic until the end of 2001:

Up to the end of year 2001, total deaths due to HIV / AIDS amounted to 21.8 million, of whom 17.5 million were adults and 4.3 million were children below 15 years. The reports also indicate that – up to the end of year 2001, the total number of orphans since the beginning of the epidemic amounted to fourteen million.

2.2.1. HIV / AIDS AROUND THE WORLD:

As Afred T. Sapse (MD) in his Journal "People living with HIV / AIDS Epidemic – July (2002) points out, the over whelming majority of people with HIV, some 95% of the global total live in the developing world. That proportion is set to grow even further as infection rate continues to rise in countries where poverty, poor health systems and limited resources for prevention and care, fuel the spread of the virus.

High Income countries:

During the year 2003, 680,000 adults and children are estimated to have acquired HIV in Western Europe, 1,200,000 in North America and 18,000 in Australia and New Zealand. Overall HIV prevalence has risen slightly in these countries mainly because anti retroviral therapy is keeping HIV positive alive longer.

Sub Sahara Africa:

In Africa South of the Sahara desert, 28.2 million people were living with HIV / AIDS by the end of year 2003. The overall prevalence on people living with HIV or AIDS continues to rise because there are still more newly infected individuals joining the group each year than there are people living it though death.

It is estimated that in Africa, women are affected with HIV or AIDS more than men. For every ten infected African men, women count twelve to thirteen. This might be due to several reasons, some being:

- The greater efficiency of male to female HIV transmission through sex, and
- The younger age at initial infection for women.

Eastern Europe and Central Asia

As of December 2003, people living with HIV / AIDS in Europe and Central Asia amounted to 1,800,000 compared to 420,000 people at the end of year 1999.

The HIV incidence is rising faster in Eastern Europe and Central Asia than anywhere else in the world, although the epidemic is still at an early stage in the region and massive prevention efforts could curtail its scale and extent

South and South East Asia:

Up to the end of year 2003, 8.2 million people where already living with HIV / AIDS. This figure includes both adults and children

North Africa and the Middle East:

With an estimated 83,000 new infections in the region during 2002, the number of adults and children living with HIV or AIDS had risen to 730,000 by the end of year 2003.

Latin America and the Caribbean:

In Latin America 1.9 people (adults and children) were infected by HIV, by 2003 December, while 590,000 were (adults and children) infected in Caribbean, a region which is now experiencing adverse epidemics.

East Asia and Pacific:

As of December 2003, 1.3 million people both adults and children had contacted HIV; at an adult prevalence rate of 0.1 - 0.19

What is needed on a massive national and international level, as Alfred.T.Sapse in his journal People living with HIV/AIDS recommends is to:-

- End the stifling silence that continues to surround HIV in many countries.
- Explode myths and misconceptions that translate into dangerous sexual practices.
- Expand prevention initiatives such as use of condom that can eventually reduce
- * sexual transmission.
- Create environment in which young children have the knowledge; emotional and financial support to grow up free of HIV.
- Devote real money in providing care for those infected with HIV and support to their families.

The table indicating the Regional HIV / AIDS statistics as of December 2003 is as follows below:-

Table No. 1 Regional HIV / AIDS statistics, end of 2003

No.	Regional	Epidemic started	Adults and children living with HIV/AIDS	Adult prevalence rate	Adults and children HIV/IDS range (2003)
1.	Sub Saharan Africa	Late 70's to early 80's	25 – 28.2 million	7.5 – 8.5%	2.2 – 2.4 million
2.	North Africa and the Middle East	Late 80's	470,000 – 730,000	0.2 – 0.4%	35,000 - 50,000
3.	South and South East Asia	Late 80's	4.6 – 8.2 million	0.4 – 0.8%	330,000 – 590,000
4.	East Asia and Pacific	Late 80's	700,000 – 1.3 million	0.1 – 0.19%	32,000 - 58,000
5.	Latin America	Late 70's to early 80's	1.3 – 1.9 million	0.5 - 0.7%	49,000 – 70,000
6.	Caribbean	Late 70's to early 80's	350,000 - 590,000	1.9 – 3.1%	30,000 - 50,00
7.	Eastern Europe and Central Asia	Early 90's	1.2 – 1.8 million	0.5 – 0.9%	23,000 – 37,000
8.	Western Europe	Late 70's to early 80's	520,000 - 680,000	0.3 – 0.3%	2,600 – 3,400
9.	North America	Late 70's to early 80's	790,000 – 1.2 million	0.5 - 0.7%	12,000 - 18,000
10.	Australia and New Zealand	Late 70's to early 80's	12,000 - 18,000	0.1-0.1%	<100
	TOTAL		40 million	1.1% (o.9 – 1.3%)	3 million (0.5 – 3.5 million)

Source: UNAIDS (2003) AIDS epidemic update, December

UNAIDS (2002) AIDS epidemic update, December UNAIDS (2002) Report on the global HIV/AIDS

2.2.2 HIV/AIDS IN TANZANIA:

The first cases of HIV/AIDS in Tanzania were reported in 1983, although for sub – Saharan Africa as a whole, the problem began to surface in late 1970s. The epidemic has evaluated from being rare and new disease to a common household problem, which has affected most Tanzania families. The development of the HIV/AIDS epidemic has its career impact in all sectors of development though not only pressure on AIDS cases, care and management of resources, but also though deliberation and depletion of comically active population, especially young women and men. HIV infection is un evenly distributed across geographic area, age, groups and social economic class in the country. The percentage of population infected by HIV ranges from less than 3% percent across most of the country to more than 44.4% in certain sub populations. The epidemic has struck more the most economically active group of adults, those aged 15-45.

2.2.2.1. DISTRIBUTION OF AIDS CASES:

As the 2002 HIV/AIDS/STI Surveillance Report points out, total of 12,675 cases were reported to the NACP (between 1st Jan to Dec. 2002) from twenty-one regions of Tanzania main land. This resulted into a cumulative total of 157,173 cases since 1983, when the first AIDS cases were diagnosed in Tanzania. The table below and the figure that follow are indicating the age and sex distribution of the reported AIDS cases for the year 2002.

SURVEILLANCE OF AIDS CASES

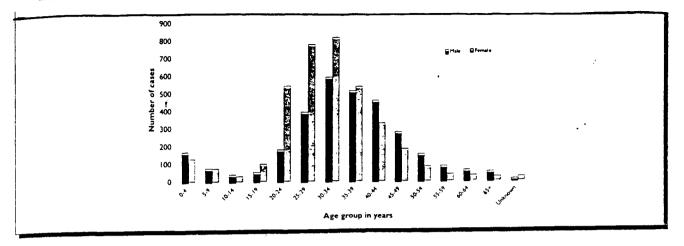
Table No. 2.

Distribution of reported AIDS cases by age and sex Tanzania 2002

Age group	Femal	e	Male		Unkno	wn No.	Total	
	No.	%	No.	%	%		No.	%
0 – 4	126	3.4	166	5.4	9	0.2	301	4.4
5 – 9	71	1.9	73	2.4	1	0.0	145	2.1
10 – 14	28	0.8	38.	1.2	1	0.0	67	1
15 – 19	96	2.6	51	1.7	5	0.1	152	2.2
20 – 24	538	14.7	178	5.8	11	0.2	728	10.6
25 – 29	773	21.1	392	12.7	15	0.3	1180	17.2
30 – 34	813	22.1	589	19	12	0.2	1414	20.6
35 – 39	532	14.5	508	16.5	11	0.2	1051	15.3
40 – 44	324	8.8	453	14.7	8	0.1	785	11.5
45 – 49	179	4.9	275	8.9	3	0.1	457	6.7
50 – 54	82	2.2	150	4.9	1	0.0	233	3.4
55 – 59	37	1 -	83	2.7	2	0.0	122	1.8
60 – 64	29	0.8	60	2	2	0.0	91	1.3
65+	22	0.6	51	1.7	1	0.0	74	1.1
Unknown	21	0.6	9	0.3	5845	98.5	5875	0.8
Total	3,672	100.0	3,076	100	5,927	100.0	12,675	100.0

Source: HIV/AIDS/STI Surveillance report March 2003 pg. 2.

Figure No. 2. Age and Sex distribution of the reported AIDS cases, Tanzania January – December 2002.



Source: HIV/AIDS/STI Surveillance reports pg. 2.

As in previous years, most cases fall within the age group of 20 - 49 years, with highest number of reported cases in the age group 25 - 34 for females and males respectively. This pattern suggests that most individuals acquire infection during late adolescence assuming a median incubation period of around ten years.

Country's response:

During the last twenty years, Tanzania has undertaken different measures in attempting to slow down the spread of HIV infection and minimize its impact on individuals, families and the society in general. This has been carried out through phases of activities led by the National AIDS control programme since 1985. The programme started with a two-year phase called short – term plans lasting for five years beginning with MTP 1. (1987 – 1991); followed by MTP – II (1991 – 1996) and the MTP – III which started in 1998. Through these programme phases, successful national responses have been identified; particularly those that touch on major determinants of the epidemic and addressing priority areas that make people vulnerable to HIV infection.

Situational analysis:

A situational analysis of HIV/AIDS in Tanzania was performed in 1997. The exercise has manifested a worsening epidemic – logical situation where by the epidemic has rapidly spread into rural areas thereby increasing the previously low rural prevalence to more than 10% in some areas. As National Multisectoral Strategic Framework on HIV/AIDS indicates; "Mother to child HIV/AIDS transmission appears to be on the increase, as more and more women continue to become infected and keep on getting pregnant 1" Youth and women have been the most affected groups because of economic, social cultural, biological and anatomical reasons. Hence, poverty, which reflects the country's economy, is an important determinant. Mobile population groups have also been categorized as vulnerable to HIV infection as their occupation forces them into high -risk sexual behaviour. The mobile population groups include commercial sex workers, petty trades, migrant workers military personnel and long distance truck drivers. Determinants of epidemic have been identified and grouped into societal behavioral and biological ones. The HIV/AIDS epidemic has a serious impact of the country's economy. It has affected agricultural and industrial production as well as socio demographic parameters such as life expectancy. AIDS orphans have been increasing in number while families, communities and Government cannot cope with the needed resources to cater for their needs

As regards the Country's response to the epidemic, there have been various national efforts to control the spread of HIV. While the initial efforts were mainly implemented by the M.O.H, overtime, there has been gradual involvement of other public sectors, NGOs and Community based organizations.

This Multi – sectoral response to the HIV/AIDS/STDs problem has involved, among others, IEC activities for the prevention of HIV transmission, care of AIDS patients in hospitals and at home, family life education, Government budgetary allocation for AIDS activities, condom procurement and distribution and STD management activities. Encompassing all the above responses is the development of National Policy on HIV/AIDS/STDs to widen and strengthen the National response against the epidemic.

Epidemiological Situation of HIV/AIDS in Tanzania

In Tanzania transmission of HIV occurs mainly through heterosexual contact beginning in the early teen years and peaking before the age of 30. Since 1983 when the first three AIDS cases were reported in our country; the HIV epidemic has progressed differently, highly located along highways and urban areas. According to NACP HIV/AIDS/STD Surveillance report No. 17of March 2003 (The most recent one) the epidemic is notably high in areas of Mtwara urban; Dodoma Road side semi – urban, Mbeya urban and border and Dar es Salaam city.

2.2.2.2 Prevalence of HIV infection

A picture of HIV prevalence manifests itself by looking at the year 2002 blood donation exercise.

A total of 147,271 individuals donated blood in year 2002.

Twelve individuals with age less than fourteen years were excluded from the analysis; thus making the denominator of the analysis count 147,259 individuals.

As in previous years, the majority of donors were males, consisting 82.1%. Seventeen point nine percent were females and in less than one percent, the sex was not stated.

A total of 14,284 blood donors were HIV infected, resulting into an overall prevalence of HIV infection among blood donors in year 2002 to become 9.7%. (95% C1 = 9.5 - 9.9). This is a decrease of 1.3% when compared with the year 2001 prevalence estimate of 11.0% (p<0.0001) in blood donor population. Prevalence continued to vary by sex as in the previous years. Females having a significantly higher prevalence compared to males. Prevalence among female was 12.3% (95% C1 = 11.9 - 12.7) compared to that of males, which was 9.1% (95% C1 = 8.9 - 92). These differences are statistically significant (p<0.0001).

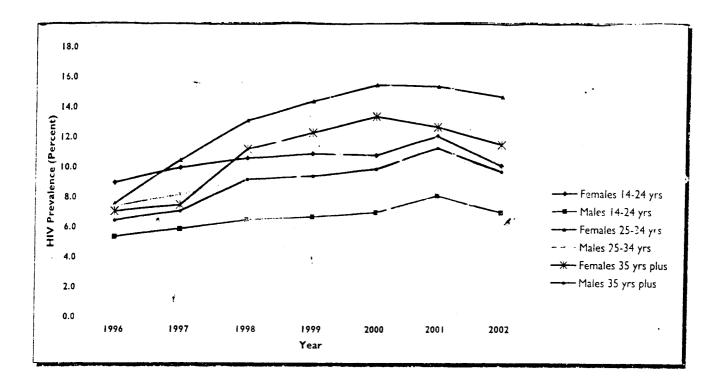
Contrary to the previous year where increasing or static prevalence estimates have been noted for both sex; during the year 2002 there has been decrease in prevalence. For females; the prevalence had decreased from 13.7% to 12.3% for years 2001 and 2002 respectively. For males on the other hand; prevalence has decreased from 10.4% to 9.1 respectively. This decrease in prevalence for both sex is statistically very important. (p<0.0001).

Using this prevalence; and the 2002 census data; a total of 1,894,160 individuals (791,318 males and 1,102,842 females) aged 15 years and above were living with HIV/AIDS in Tanzania during the year 2002. Of these, 1,665,309 (672,825 males and 992484 females) were aged between 15 – 49 years).

As for youths who constitute 20% of the Tanzania mainland total population; 566,129 are HIV infected; 214,918 being males and 315,211 females. These figures are lower than those of the year 2001 – and it is the first time a reduction in the number of people living with HIV/AIDS has been noted.

The following line graph below illustrates changes in the age and sex specific prevalence trends among blood donor population for years 1996 to 2002.

Fig. 3. Age and sex specific prevalence of HIV infection among blood donors, Tanzania 1996 – 2002.



Source: NACP - HIV / AIDS / STI Surveillance Report pg. 16.

2.2.2.3. Determinants of the epidemic:

The main determinants are societal, behavioral and biological. These singly or in combination provide opportunities for HIV infection to occur to an individual.

Social Determinants:

Commercial sex workers form a group that potentially increases the sexual transmission rate of HIV infection. Studies by AMREF along the major truck stops and towns have shown this group to have a high HIV prevalence of up to 60%. A study conducted by MUTAN in Moshi Municipality showed that bar workers had HIV infection prevalence rate of 32%, while a study of Dar es salaam showed that 50% of the bar workers were HIV positive.

Stigma and discrimination against people living with HIV/AIDS are quite common in Tanzania. Studies done in communities in Magu, Mwanza, by TANESA show the level of stigma and the denial for AIDS and HIV to be very high. Many people would not admit that their sick relative could be suffering from HIV/AIDS but believe instead in which craft as the cause of their sickness. This situation makes it difficult to convince people with wife in heritance traditions not to marry women whose husbands may have died from AIDS.

A large proportion of the population with very low and / or irregular income is an important social determinant. Over 50% of Tanzanians live below the poverty line and females are worse than males. In addition, low and irregular income creates an environment that encourages labour migration. Women in such situation may be easily tempted to exchange sex

for money and this puts them and their spouses at risk for HIV. People with low income have less access to medical care including that for STDs and HIV/AIDS.

Social isolation for long periods and peer pressures for high – risk behaviour among the military form other social determinants. In Tanzania when one is enrolled in the army, he / she is confined in a camp and barred from getting married for six years. This makes one vulnerable to high-risk behaviour and hence to HIV infection especially when the army has no proper programs for HIV /AIDS prevention like the promotion of condom use and provision of IEC for HIV prevention.

Cultural norms beliefs and practices that subjugate / subordinate women are important determinants. These include cultural practices like wife inheritance, polygamy and female circumcision, which are common among many tribes in Tanzania. Obligatory sex in marital situations is condoned even by religion, and women do not divorce in some faiths. Furthermore, in some cultures multiple sex partners for men is tolerated and may even be encouraged.

Young people leave home and school environments to become independent without a source of income. In Tanzania every year about 300,000 pupils leave primary education quite early (13 age - 17yrs) and significant proportion migrates to large towns like Dar es Salaam in search of employment. These youth, especially the female, become very vulnerable because they end up getting employment which is poorly paid and in turn have to supplement their meager income through unsafe sexual practices. Although there have been attempts to introduce sex education in schools, these have not adequately prepared those leaving school to confront sexual issue.

Illiteracy and lack of formal education is on the rise in Tanzania. In the eighties the level of literacy in the country was around 80%. At that time many people could read and understand messages meant for their well-being. Today, the literacy rate has gone down to less than 60%. This means less people can understand written messages. This has been contributed by the fact that many young people are not being enrolled into schools and these are unfortunate because it has been shown that the prevalence of HIV infection in educated women is lower than in those who are not educated.

Behavioral determinants:

Unprotected sexual behaviour among mobile population groups with multiple partners makes them vulnerable to HIV infection. The groups include long distance truck drivers who have been found with HIV sero – positivity of up to 50%. This because they have multiple sexual partners available in all major truck stops. Migrant or seasonal workers are also vulnerable. It has been found that farm and plantation workers in Iringa and Morogoro for example, have HIV prevalence of about 30%, which is very high, compared to the general population.

Reduced social discipline for making good decision about social and sexual behaviour. Long before the eighties when the AIDS epidemic was not yet apparent, Tanzanians were a disciplined society where traditional values and norms were cherished. But recently, social discipline has been eroded. This is so because of several factors- such as failure of parents to institute traditional values and discipline to their children for luck of time. Sudden mushrooming of televising programmes and other mass media have also contributed negatively to social discipline.

Biological Determinants:

STDs infections (especially gonorrhea and other genital discharges) are among the top-ten causes of disease in mainland and Tanzania. Studies have found that patients with STDs are 2 to 9 times more likely to be infected with HIV.

However, because HIV and other STDs are both highly associated with the high – risk sexual behaviour, it is difficult to show the extent to which STD alone enhance infection of HIV. Nevertheless, studies in Mwanza have shown that STD management within the existing PHC system can reduce the incidence of HIV infection by about 40%. Transmission rate through transfusion of contaminated blood is almost 100%. For this reason, in Tanzania all centers rendering this service are equipped with facilities to ensure safe blood transfusion. However, due to lack of regular supplies of reagents and equipment as well as lack of reliable power supply in some centers there is some risk of transfusing contaminated blood. This situation therefore calls for improved blood transfusion services in the whole country.

2.2.2.4. Impact of the HIV Epidemic:

Given that the HIV/AIDS epidemic has progressed with different rates in various population groups in Tanzania, the impact has varied from being

minor to being profound depending on the time the infection was introduced in the area, rate of spread and the proportion of the population affected.

Experiences from several parts of the country indicate that HIV infected persons, on average, die about 4 to 12 months after falling ill with one or more of the major manifestations of AIDS. During this period a member of the family often has to stay at home or hospital with the patient to provide care especially during the terminal stages of the disease. The medical, emotional and social costs on the patient and indeed the family are frequently high. More social economic difficulties arise when the patient is the main bread earner. When death finally comes, the traditional family structures, already stressed by poor health, increased burden of care and poverty, are in many cases at breaking points. Funeral costs have been estimated to exceed USD 100 for every adult death in Kagera. Available data from severely affected communities show that AIDS often leads to social and economic disruption of affected individuals, families and communities. The poorest households are least above to cope with the impact of adult deaths due to AIDS and are frequently unable to obtain even the most basic needs in the short term. Child nutrition, education, health and living standards for the survivors may be severely affected.

Hospital based data indicate that up to 50% of beds are occupied by patients with HIV related illness. Consequently the demand for care and hospital supplies is enormous and by- and – large, government health facilities are facing inadequate funding and manpower. It is estimated that in Tanzania the ideal lifetime and nursing – care costs for HIV / AIDS is USD 290 for adults and USD 195 for children. Gains made during 1980's in TB control have been lost due to HIV/AIDS. TB care rates have been declining steadily up to 1982 but since then there has been a sharp increase in the number of reported TB cases and in most urban areas these have more than doubled.

Industries experiencing the loss of skilled workers are facing high costs of recruitment and raining of the new personnel. As the labour force in agriculture declines, agricultural production will decline. Agriculture takes place on family farms where agricultural production is labour intensive, and seasonal labour constraints are

common. Workers are in the group of 15 – 45 who are mostly affected by the epidemic. The impact of HIV/AIDS is gradually becoming noticeable as the epidemic spreads to rural communities. Production of food and cash crops is bound to suffer as labour force gets sick and dies from AIDS. The World Bank estimates that because of AIDS epidemic, life

expectancy by 2010 will revert to 47 years instead of the projected 56 years in the absence of AIDS. The bank further predicts that the mean age of the working population (labour force) will decline from 31.5 to 29 years between 1992 and 2010. The overall younger work force will have less education, less training and less experience.

The bank further estimates that, AIDS will reduce average real GDP growth rate in the period 1985 – 2010 from 3.9% without AIDS to between 2.8 and 3.3% with AIDS. These factors will certainly have a negative impact on the overall economic performance of the country and its living standards.

2.2.3 HIV / AIDS – MARA REGION

HIV/AIDS statistics in Mara Region have consistently been increasing since 1999. As the current (2002) National Aids Control Programme (NACP) HIV/AIDS /STI Surveillance report indicates; five thousand one hundred and fifty one (5151) people donated blood in 1999. Out of that number; 9.2% (i.e. 474 people) were HIV positive.

In year 2000; ten thousand six seventy-six people screened for blood donation. Out of the screened; 9.4% (i.e. 1004 people) proved HIV positive.

In year 2001; nine thousand two hundred and seventy seven people appeared for screening. Out of the above figure, 9.0% (which is 835 people) were HIV positive.

In year 2002; ten thousand seven hundred and nine people screened for blood donation. Out of the above; 10.3% (which is 1,103 people) also were confirmed HIV positive.

Among four Districts of Mara Region; Bunda District ranks the second after Tarime in having a high HIV prevalence rate through out the four (4) years of comparison. The details of this information can be illustrated by the fallowing table:

<u>Table No. 3.</u> Prevalence of HIV infection among blood Donors Mara Region (1999 – 2002)

District	Year 1999		Year 2000		Year 2001		Year 2002	
	Total Donors	% Prevalence	Total Donors	% Prevalence	Total Donors	% Prevalence	Total Donors	% Prevalence
Bunda	262	9.9	2416	10.7	2495	9.0	2391	9.1
Musoma	2835	8.0	4230	7.6	4670	7.5	2943	9.5
Serengeti	988	6.3	1335	2.9	1042	2.1	1567	2.7
Tarime	1066	14.7	2695	14.3	1070	22.2	3794	14.9
	5151	9.2	10676	9.4	9277	9.0	10709	10.3

Source: National Aids Control Programme HIV/AIDS/STI surveillance report March 2003 pg. 19

2.2.4. HIV/AIDS IN BUNDA DISTRICT:

Bunda, like any other District in Tanzania is not free from HIV/AIDS infection. The exponential rapid increase in number of HIV/AIDS infected people in the district is alarming. The number of HIV/AIDS patients admitted in two hospital of Kibara and Bunda District Designated Hospitals (BDDH) as well as the number of people screened for blood transfusion justify the above argument as can be learned from the following two tables below:-

Table NO. 4.

HIV HOSPITAL ADMISSIONS (1992 – 2003)

YEAR	MALE	FEMALE	TOTAL
1992	22	41	63
1993	32	64	96
1994	42	54	96
1995	52	90	142
1996	63	107	170
1997	94	150	244
1998	60	106	166 ·
1999	64	84	146
2000	114	139	253
2001	175	140	315
2002	239	250	489
2003 – JAN- SEPT	256	240	496

SOURCE: Kibara and Bunda District Designated Hospital (BDĎH) admissions. Table NO. 5.

BLOOD SCREENING

YEAR	SCREENED	HIV POSITIVE	% OF THE TOTAL
1999	1,845	126	6.8%
2000	1,853	188	10.5%
2001	1,409	144	11.0%
2002	3,060	254	8.3%
2003 JAN-SEPT	1,428	146	10.25%

SOURCE: Kibara and Bunda DDH Screening figures.

Also the antenatal screening for syphilis indicates similar results; where out of 754 pregnant mothers screened for syphilis; sixty nine (69) were RPR positive; a number equivalent to 9.1%.

As it can be noted from tables No 4 and 5; HIV/AIDS is really becoming a threat in Bunda District. In year 2002 alone; a total of 489 patients were admitted in the above-mentioned hospitals under the HIV/AIDS cover. In 2003 a total 496 new patients were also admitted on the same basis, most of whom(206)coming from Bunda Township. Similarly in year 2003 (Jan – Sept); a total of 146 people were HIV positive, out of 1428 who had screened for blood donation; equivalent to 10.25% of the total. Also the 2004 March reports of the Huyamu and K.K.T.Bunda agencies to the Council HIV/AIDS Coordinator indicate that agencies screened 2532 people of whom 1345 came from Bunda Township. Out of the screened, 415 were tested positive; 232 being Bunda Township residents. This situation indicates how threatening is the HIV/AIDS epidemic in our Bunda District particularly in Bunda Town.

2.2.4.1. Factors Contributing to Spread of HIV/AIDS in Bunda

The spread of HIV/AIDS in Bunda District is due to the following main factors:-

1. Customs and Traditions

These include:

(i) Polygamy

Polygamy is a practice of getting married to more than one she spouse. This type of marriage is highly practiced by several tribes in the district and though traditionally legitimate; most women are not in favour to it. It therefore appears as one of the great causative reason for sex abuse in the family and hence the spread of HIV/AIDS

(ii) Women to Women Marriage (Nyumba Ntobhu)

This is a practice where an elderly woman without children pays a bride price to the parents of a girl in order for a marriage to take place between them. What follows after the marriage has taken place is that – the elderly Woman allocates a man to the "bride" usually from her clan and the children borne out of this relationship belong to her; referred to as her grand children – but as days pass by; the girl later decides to deal with any other persons according to her choice; thus putting herself and her partner friends into a risk of contacting HIV/AIDS.

iii) Female Genital Mutilation (FGM) and Traditional circumcision:

These are two customary constituted norms, which are very strong to some of the Bunda District tribes. The practices are so strong and internalized to the minds of some of the Bunda communities; such that whenever the public circumcision is on progress, some girls and young boys dare to abscond their homes and join the nasty function; where one knife is used to circumcise all participants of the affair.

iv) Inheritance of widowed women

This again has been a tradition to most of the Bunda District families. Widowed Women are being inherited by brothers of the diseased in most cases by force, regardless whether the diseased has died out of HIV/AIDS or not. This is a very dangerous exercise and highly perpetuates the spread of HIV/AIDS.

v) Cleansing

A tradition which obliges a widow to undertake a ritual known as "KUSOMBOKA" of having sex with a specialized sex man known as "MWESYA" in view that when the process has taken place; a widow becomes socially accepted as a clean person in a society.

This gentleman in the process of performing the ritual, becomes a good spreading agent of HIV/AIDS.

vi) Night dances and conversations between Youths:

In Bunda District there's a common tradition of allowing boys and girls to go for night conversations called "CHIJOEANE"; a practice that serves as a starting point for two parties to get familiar to each other before they play sex.

Also in some villages night dances called "GERONA" are being played where boys and girls are allowed to participate over night. These activities are normally accompanied by sex abuse practices that may result into spread of HIV/AIDS.

vii) Forced Marriages

Here a child girl is forced to get married (even before she completes STD VII) to an old man who has cows to pay for dowry – the end result of which as time elapses a lady runs out of the old man's home and starts mongering in towns and fishing camps, an act which spreads HIV/AIDS.

2. Fishing Camps

The district has thirty-five villages, which are allocated along the lakeshore zone. Each of these villages has two to three fishing camps. An in flock of women and men go to camps for fishing activities and other petty businesses (cooking selling the daily necessaries, etc); thus necessitating interactions which later lead to un safe sexual contacts.

3. Market days

Routine market days in several villages of the District which (in fact) attract many business workers in the region provide favorable opportunities for sexual practices, since they are associated with excessive drinking.

4. Too many bars and guest houses

The district is encroached by a fleet of bars and guesthouses, which provide meeting opportunities for sexual practices. Many men drink over night; while ladies especially bar maids hunt them to supplement their meager payments they get from bar owners (usually ten to fifteen thousand shillings a month) a practice that leads to spread of HIV/AIDS.

5. Bunda Town - a junction for road ways

Bunda Town is a junction for major roadways to Arusha; Mwanza; Musoma; Kenya and Nansio (Ukerewe). The town therefore hosts lots of transit vehicle drivers and businessman, who through social interaction approach ladies or get approached by ladies for sexual deals; a transaction which perpetuates a spread of HIV/AIDS.

This situation for sure retards back district's efforts for development, since the disease attacks the most productive part of the manpower requirement (i.e. people of 15-49 years of age). Social and Economic difficulties, as a result of the above epidemic have taken place, hitting livelihood of the families concerned as well as District Council economy.

2.2.4.2. Measures taken by the District to reduce the HIV/AIDS spread:

The District is taking the following steps in trying to curb the increase of HIV/AIDS spread:-

1. Fighting against traditions practices and customs that perpetuate the existence and spread of HIV/AIDS. These include polygamous practices, Nyumba Ntobhu issues; FGM practices and traditional circumcision; widow inheritance, Kusomboka and Chijoeane practices, forced and early marriages. Awareness creation campaigns, meetings and workshops are being conducted in trying to educate communities on bad effects of these practices. Also the application of the law on some other persistent issues like the FGM practices has been done.

2. Intensification of Educational Programmes to Communities on HIV/AIDS control measures

Strategic training programmes on HIV/AIDS control have been developed and delivered to all HIV/AIDS strategic areas. A follow up mechanism has been developed to ensure the implementation of the control measures that have been agreed upon during training. Some of these measures are: - Changes of behavioral attitude, availability of condoms, establishment of specific time for drinking; banning night dances and night mongering and voluntary screening to know ones health position.

3. Encouragement of Women and Youth to establish Income Generating Activities (IGAS)

It has been noted that at times women and youths are forced to get into sexual practices due to lack of the means of securing their basic needs of life; particularly food and clothing. The District has now embarked on an intensive programme of sensitizing women and youths to establish various Income generating activities to boost their living. Capacity building and Financial support programmes to those who have accepted establishing the IGAs have been developed. Trainings and loans of small interest rate are now availed to women and youths through:-

- i) The District Council Women and Youths Development Fund.
- ii) AMREF Youths support Programme.
- iii) Bunda District Council Development Programme (D.D.P) under Sida support and
- iv) The NGOs Community Support programme run by FISEDA, FINCA, (TANZANIA) and Pride (Tanzania).

4. HIV/AIDS a permanent Agenda in every Bunda District meetings, Forums and Trainings:

The Bunda District Development strategic workshop held in July 2004 passed a resolution that HIV/AIDS epidemic has to become a permanent area of address in all District development meetings forums and training programmes, wherever they are being conducted in the District. Also District ward and village HIV/AIDS Committees to coordinate the HIV/AIDS control measures have been established.

Encouragement of the Voluntary Agencies to participate in the HIV/AIDS_control exercise

Voluntary agencies have been encouraged to participate in the exercise of providing HIV/AIDS control measures as well as giving assistance of any kind to the affected.

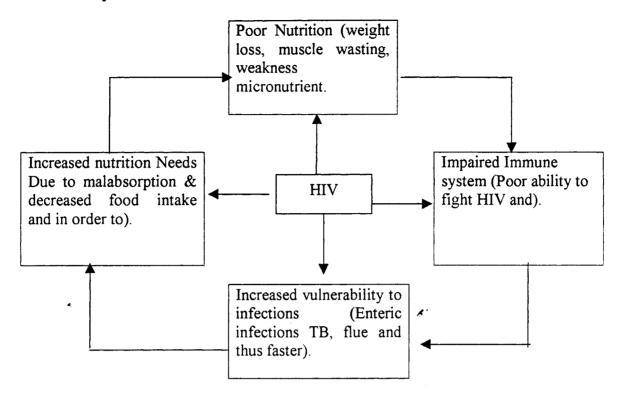
It is from this ground that BWSCCS wants to take up a measure of reducing sufferings of the affected, through provision of Nutritional care support which-if adequately administered, delays the progression of HIV to AIDS and also reduces body sufferings.

2.3. HIV/AIDS and Nutrition:

The interaction between HIV and AIDS, and Nutritional status has been a defining characteristic of the disease since the early years of the epidemic. HIV and AIDS are associated with poor nutritional status and weight loss, and weight loss is an important predictor of death from AIDS. These linkages suggest that nutrition has an important role to play in slowing progression of the disease.

The central relationship of these two is demonstrated by the following figure, which indicates the cycle of malnutrition and infection in the context of HIV/AIDS:

Figure No.4: The cycle of malnutrition and infection in the context of HIV/AIDS:



Source: Hand book – Developing all Applying National guidelines on Nutrition and HIV/AIDS, RCQHC and FANTA Project (2003).

As the above figure indicates, poor nutrition leads to impaired immune system, which leads to increased vulnerability to infections, which leads to increased nutrition needs.

Several researchers have reported on close interdependency between the disease and nutrition: Scrimshaw and San Giovanni (1997) reported that ... no matter how mild the infectious disease is, it affects the nutritional status and also, almost any nutrient deficiency, if sufficiently severe, will impair resistance to infections. Like wise is the case of nutrition and AIDS, which is further acerbated, as AIDS suppresses body immune system (Semba and Tang, 1999), to the tune that the body is not able to withstand a whole range of infections, including HIV viral strains. Further more; HIV/AIDS results in an increase in the risk of malnutrition, which in turn acerbates the impacts of HIV/AIDS resulting in further deterioration of the nutritional status (WPF Policy Issues, Agenda, Item 4,2003).

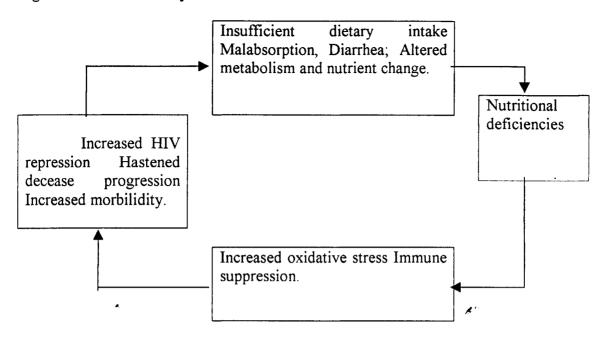
Infections affect nutritional status by-reducing dietary intake and nutrient absorption; increasing the utilization and excretion of protein and micronutrients. They further affect the nutritional status by promoting anorexia, fever and catabolism of muscle tissue; releasing of pro-oxidant cytokines and other reactive oxygen species, leading to increased utilization of "antioxidant" vitamins as well as minerals, which are used to form antioxidant enzymes (Friis and Michaelsen 1998).

Infections affect nutritional status also due to oxidative stress, because of imbalance between the prooxidants and antioxidants resulting to further cell, protein and enzymatic damage (Schwarz 1996)

2.3.1. Impact of HIV/AIDS on Nutrition:

HIV/AIDS has a significant impact on nutrition at the level of an individual. As the Semba and Tang's (1999) diagram below indicates; the nutritional requirements of the HIV/AIDS infected patient changes tremendously, not only in their micronutrient requirement; but also with regards to protein and energy consumption levels.

Figure No. 5: Vicious cycle of Malnutrition and HIV:



Source: Semba and Tang (1999) Quoted from the Pakistan Journal of Nutrition 2 (4): 210 – 220, 2003 – The Nourishing Nutritional Answer to HIV/AIDS by Gomes Shoma.

For HIV/AIDS affected individuals; it is recommended that

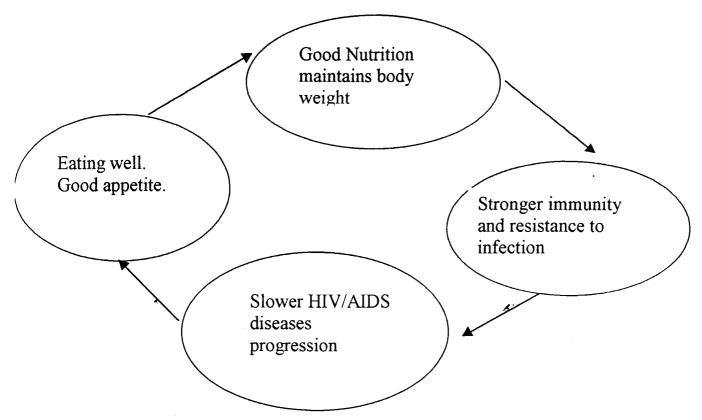
- More energy (10 15% increase) and protein (50% increase) is a nutritional requirement for them.
- Also the increasing consumption of food containing antioxidants, like Vitamins A, C and E, carotene; B vitamins selenium and Zinc and support of indigenous foods and traditional herbal therapies have to be given special attention (WFP Policy Issues, Agenda Item 4, 2003; Sherlekar and Udipi 2002, Statement SADC meeting 2003. FANTA and AED, 2002).

ACC/SCN (1998) reported that the chance of HIV infection can be reduced in individuals with good nutritional status. The progression of the disease to AIDS and even death may be delayed in well-nourished HIV patients. Timely nutrition interventions can mitigate HIV/AIDS (Haan etal, 2003) and such interventions should be resorted to. (Loevinsohn and Gillespie, 2003; Piot and Pinstrup Andersen, 2001 – 2002). This is so, as nutritional support prolongs live of HIV/AIDS infected/affected individuals for the patients' own benefit and for those who depend on them (Piwoz and Preble 2000).

AIDS and death might be delayed by well – nourished HIV infected population, because diets rich in carbohydrates;, vitamins and minerals do help to prevent secondary infections. (Gillespie and Haddad, 2001 – 2002).

This is inline with what Piwoz and Prebel demonstrate in the following diagramme, which indicates the relationship between good nutrition and HIV/AIDS.

Figure. No. 6 Relationship between good Nutrition and HIV/AIDS:



Source: Adopted from PIWOZ and Prebel 2000.

Malnutrition on the other hand shortens the a symptomatic period of HIV infection, hastens the onset of AIDS and ultimately death and may also increase the risk of HIV transmission from mothers to babies.

In summary,

- HIV affects nutrition in many ways. The impact begins early in the course of HIV infection, even before other symptoms are observed.
- Nutritional status also affects HIV disease progression and mortality. Improving and maintaining good nutrition may prolong health and delay HIV disease progression.
- Counseling and other interventions to prevent or reverse weight loss are likely to have their greatest impact early in the course of HIV infection.
- Nutrition supplements, particularly anti oxidant vitamins and minerals may improve immune function and other HIV related outcomes, especially in nutritionally vulnerable populations; although care has to be taken when giving supplements, especially during pregnancy and breast feeding; because excessive amounts of certain nutrients (including Vitamin A, Vitamin E, Zink and iron) impair rather than improve the immune system and can cause harm to mother and infant.

2.4. EMPIRICAL REVIEW

2.4.1. Experimentations on HIV/AIDS and Nutrition

Since the 1980's there have been a number of controlled clinical trials studying the effects of nutrition on HIV. Many were on patients with AIDS, but some were also done on patients at early stages of HIV infection. From these studies, we observe that nutrition supplementation and counseling interventions may reduce HIV patients vulnerability to weight loss and muscle wasting.

This effect is conformed particularly when nutrition supplements are given in the early stages, at a time when low dietary intake and poor nutrient absorption are the primary causes of weight loss. Later in the course of infection, when metabolic changes begin to play a leading role in the wasting process; other types of intervention are required. In brief, the following few are some of the trials done in various parts of the world which really confirm that-improving nutrition can impact HIV progression and prolong patient survival.

In South Africa; recent studies that have been conducted (Coutsoudis et al 1999,2000, 2001) confirm that mother to child or vertical transmission of HIV which may occur during pregnancy, at birth or through breast feeding is a major nutritional issue. The studies confirm that there's no significant difference in HIV transmission between babies who were exclusively breastfed by HIV positive mothers for the first three moths of life and babies who were never breast-fed; although babies who received both breast milk and formula were at significantly increased risk of transmission. The studies indicate that by fifteen months, exclusive breast feeders had the lowest transmission of all three groups. It concludes by pointing out that- exclusive breast feeding facilitates enterocyte junction closure of the intestinal mucosal barrier, decreasing exposure to dietary antigens and environmental pathogens which occur with premature introduction of other foods and liquids (and formula) which in turn cause intestinal irritation and inflammation, to allow direct contact of the virus with the infant's blood stream (Smith and Kuhn 2000).

In Tanzania; a study conducted by Harvad University and Muhimbili University college of Health sciences found that --- " an HIV – positive woman with good health and nutritional status is less likely to pass the virus to her child --- 2" A research program undertaken by Dr. Wafaie Tawzi and his team from Harvard School of Public Health found that – a multi vitamin supplement with C and E which is easily obtained from vegetables, fruits and legumes was effective in slowing the progression from HIV injection to AIDS.

The Harvard team which begun its work in 1995 in Tanzania, made the experimentation to 1078 HIV positive pregnant women who were monitored for a period of six years (Stephen Smith, Glove Staff July 1, 2004).

Research findings indicated that patients taking vitamins B, C, and E fared best of all than those who took vitamin A alone or placebo. The latter kept on developing painful mouth inflammations, rashes and fatigue.

Blood tests showed that women on multi vitamin had higher levels of vital disease fighting.

Dr. Ashraf Grim wood a cape Town (South Africa) based HIV practitioner points out after his research that --- "good nutrition and other simple interventions can strengthen a person's immune system and slow the progression from being HIV positive to developing AIDS --- 3". The doctor points out that-as with any disease; good nutrition is needed to support the immune system of HIV positive people (and anyone with chronic disease). He points out that on average; a person with HIV in Africa progresses to AIDS in five to eight years, compared with an average of twelve years in Europe and the United States and that's without antiretrovirals. He concludes by pointing out that-adequate nutrition is only one, but an important reason: clean water, lack of parasites and adequate housing, all have an impact on a person's immune system.

^{3.} HIB/AIDS: Nutrition and HIV/AIDS; PMTCT Pg. 3 Academy for Educational Development (2005).

^{2.} Jeanne Viall: AIDS – delaying nutrition and antiretroviral are needed. Health system Trust 24th July 2005

Also in the same country, (South Africa), in about two years ago, the South Africans: Neill Orr and David Patient who have been HIV positive for twenty years, and have been maintaining their health because of applying adequate nutrition; produced a book let called "Positive Health" indicating the role of nutrition and micronutrients in helping the body to cope with HIV. Several AIDS researchers have used this booklet including Gillian Samuels and Julia Hill a Gipa project coordinator, in trying to support people in maintaining a healthy immune function; delaying the use of medications for up to a period of five years.

The HIV/AIDS notes under the Related Health Topics (July 2003 pg. 5) indicate that several studies carried out in Tanzania and South Africa confirm that vitamin A supplementation reduced diarrhea and mortality and improved several indicators of immune status in HIV infected children. Other studies on men from the United States have shown that improving Vitamin B 12 status improves CD 4 cell counts. One study with Canadian adults concluded that supplementation with vitamins E and C reduces oxidative stress and HIV viral load. Because vitamin E is fat soluble, supplementation in late stage disease may not be effective since it is not absorbed well as shown in one Zambian study.

In Kenya; Rose Otaye, a Kenyan woman who has been living with HIV/AIDS for several years, depends on good nutrition. Up to this moment; the lady does not display any symptoms of the illness and lives an active, productive life. In her paper – Nutrition and AIDS: The crucial link (2005); Otaye points out that – malnutrition reduces the body's ability to resist invasion by pathogens and disables the ability of the immune system to combat infection...⁴". She further points out that infections interfere with the body's absorption capabilities, which translate into direct loss of proteins and micronutrients. She concludes by qualifying the proper diet that- it helps to maintain the immune system; builds up reserves to help fight off infection; speeds recovery from illness; fights the disease and provides the body energy.

In South Africa again; a study was made on the effect of Vitamin A on viral load (Coutsoudis et al 1997). Pregnant women in Durban, South Africa were enrolled in the study at between 28 and 32 weeks duration and received a daily capsule of Vitamin A or placebo until delivery; each woman received 200,000 IU of rentinyl palmitate to boost the vitamin A content of breast milk. None received antiretroviral or steroid therapy.

As a result viral load did not increase in the treatment group after vitamin A treatment; although it increased significantly in the placebo group. The mean change in viral load was not statistically different between groups.

A study on whether vitamin A prevents anemia, Low brith weight, (LBW), growth failure, HIV transmission and mortality was done in Malawi and involved, 697 HIV- infected pregnant women (Kumwenda et al 2002). These received daily doses of iron and folate, either alone or combined with vitamin A (3 mg retinal equivalent) from between 18 and 28 weeks gestation until delivery. As a result, in the vitamin A and control groups, respectively the mean (\pm SE) birth weights were 2895 \pm 31g and 2805 \pm 32g (P= 0.05) the proportions of LBW infants were 14.0 % and 21.1% (P=0.03) the proportions of anemic infants at six weeks post parum were 23.4% and 40.6% (P<0.001), and the respective cumulative proportions of infants who were HIV infected at 6 weeks and 24 months of age were 26.6% and 27.8% (P=0.76) and 27.7% and 32.8% (P=0.21). Vitamin A improved birth weight and neonatal growth and reduced anemia but did not affect the rate of perinatal HIV transmission.

Another study was done in Mulago hospital in Kampala Uganda focusing on the effect of perinatally acquired HIV on somatic growth; the relationship of nutritional status and mortality in HIV infected infants (Berhane et al 1997) where pregnant women attending clinic were enrolled. All babies born alive to HIV-1 sero-positive women and to every fourth agematched HIV-1 sero-positive woman, were followed for twenty five months.

Key findings indicated that the mean weight- for-age and length- for-age curves of HIV positive children were significantly lower than those of HIV controls and seroeverters. Forty five (i.e 54%) of the eighty four HIV positive infants died before their second birth day as compared with 1.6% and 5.6% in HIV negative infants and seroeverters. HIV-positive infants with an average weight-for-age-z-score below-1.5 in the first year of life have a nearly five fold higher risk of dying before 25 months of age than non-infected controls. Perinatally acquired HIV infection is associated with early and progressive growth failure. The severity of growth failure is associated with an increased risk of mortality.

All these are empirical evidences that confirm the slow progression of HIV to AIDS due to Healthy and balanced nutrition.

The proper diet providing adequate Sources of macronutrients, vitamins, minerals and antioxidants include:

- Staple foods that supply good amount of energy and protein. These include
 - Cereals such as rice, maize, millet, sorghum, wheat and barley.
 - Starchy roots such as potatoes, sweet potatoes, cassava and yams and
 - Starchy fruits such as plantains.
- Legumes that provide proteins needed to develop and repair the body and build up strong muscles. These include: beans, peas, lentils, groundnuts and Soya beans.
- Vegetables and fruits that supply vitamins and minerals that keep the body functioning and the immune system strong. These include – green leafy vegetables such as spinach, pumpkin, carrots, yellow peaches, papaya, mangoes, tomatoes, cabbage, orange, mandaris, grape fruit, lemon, guavas mangoes, passion fruit, pineapples, garlic, onions, asparagus, broccoli and cauliflower.
- Fats and oils as well as sugary foods.

These are also good source of energy and they help a person to gain weight. They include:- butter, hard; margarine, cooking oil cream; mayonnaise and coconut cream.

Sugar and sugary foods include: Honey Jam, Table sugar, Cakes and Biscuits.

• Drinking plenty of clean water (at least 1.5 liters per day) and limiting taking alcohol.

2:4:2: Herbal medicines in the treatment of HIV/AIDS:

Studies also indicate that there are some herbs, which are immune stimulant and/or antioxidant, (Fish man RHB. 1994 pg. 344; Greenspan HC 1993 pg. 40; 85) These include: Aloe (Aloevera); Astragalus (Astragalus membranaceus); suberian ginseng (Eleutherococus senticosus) Sutherlandia (suther landia frutenscers); African potato (Hypoxis hemerocallidea); Fo – ti (Polygonum multiforum), turmeric (curuma longa) garlic (Alimm satium); licorice (Glycyrrhiza glabra); golden seal (Hydrasis Canadensis) grape fruit seeds (vitis vinifera), peace flower (Passiflora incarnata); Valerian (Valeriana Officinallis); and mint. (menta sativa).

To make a deeper analyses to some of the above; let us have a detailed overview on three types of herbs; the Hypoxis hemerocallidea (African potato); Sutherlandia and Gurlic (Alimn Satinum)

HYPOXIS HEMEROCALLIDEA

Hypoxis, easily recognizable by its bright yellow star-shaped flowers and strap-like leaves has a long history of medical use in African continent; particularly South Africa; where it is used as an immunostimulant for patients with HIV/AIDS. A use of 2400 mg of raw plant is purported to be therapeutically effective. (Albrecht. C.F.et al 1995). Rootstocks of this plant have been used by Zulu traditional healers for centuries in the treatment of urinary infections, heart weakness, internal tumors and nervous disorders (Singh Y 1999). The corms of H. hermerocallidea are now being used for immune related illnesses such as the common cold flu, orthritis, cancer and HIV/AIDS. There's some indirect evidence as pointed out by Bouic.P.J. (2001) and Etsebeth. S. (1996) that sterols and sterolins, which are found in the roots of Hypoxis have the potential to enhance immunity.

Chemical Constituents

The plant constitutes a nor-lignant glycoside called hypoxoside, which once in the human gut, readily converts to the agloycone, rooperal, a biologically active compound that is purported to have medicinal properties (Albrecht. C. F. et al 1995 and Theron E.J. 1995)

Pharmacology and Pharmacokinetics

Hypoxoside is not absorbed into blood stream. Once in the body, it is converted into its aglycone, rooperol, a potential anti oxidant (Dietzsch. E. et al 1999). This conversion is mediated by beta-glucosidase, an enzyme found predominantly in the gastrointestinal tract. This particular enzyme is released by rapidly dividing cancer cells.

Toxicity:

A trial that has been made (done to cancer patients) failed to establish any clinical, hematological or biochemical toxicities that could be ascribed to the ingestion of hypoxoside.

SUTHERLANDIA

The Sutherlandia Frutescens subspecies microphlla, commonly known as Insiswa, Unwelle, Mukakana and canser bush, is a flowering shrub of the Febacea family. Its dose in humans is 9 mg/kg/ per day (Seir JV et al 2002). It has been used in the treatment of cancer, tuberculosis, diabetes, chronic fatigue syndrome, influenza, rheumatoid arthritis, peptic ulcers, gastritis reflux esophagitis, menopausal symptoms, anxiety, clinical depression and HIVinfection (Gericke N et al 2001; Dalvi. S. 2003 pgs 23-25). The plant grown in South Africa has been confirmed by the South African Ministry of Health that it is a safe product based on premate safety studies.

Constituents:

The principal constituents of the plant that are purported to be active include L-canavanine; GABA and D- pinitol. L-canavanine is a non protein animo acid that is the L-2 animo-4-guani dinooxy structural analogue of L-arginine.

D-pinitol is a type of sugar found in many types of legumes and is classfied as a chro-inositol. It is also known as 3-0-mentyl-1,2,4 cis-3,5,6 trans- hexahydroxy-cyclohexanol. GIBA (gabba-animobutyric acid) is both an animo acid and inhitory neurotransmitter. It is found at levels of 14 mg per gram dry leaf of sutherlandia frutescens (Gericke et .al 2001)

Pharmacokinetics and Pharmacology

The Pharmacokinetic properties of sutherlandia as Seier J.V and Mdhuli M (2002) point out have langely not been assessed.

Toxicity:

Sutherlandia has relatively long history of seemingly safe usage in Africa. Known side effect include occasional mild diarrhea; dry mouth, mild diuresis and dizziness in cachectic patients (Gericke. N. et al 2001; Dalvi S. 2003). An extensive toxicology screening in a primate model using dosages up to 9 times greater than the recommended dose of 9mg/kg/per day did not identify clinical, hematological or physiological toxicity with sutherlandia (Capasso. R. et al 2000).

GURLIC (ALIMN SATINUM)

Not much is known on this herb; but tests done (in test tubes) confirm that Garlic may assist in combating opportunistic infections. In one trial; administration of an aged garlic extract reduced the number of infections and relieved diarrhea in a group of patients with AIDS (Abdulah TH. Et al 1989; 21:52-3). Garlic's active constituents have also been shown to kill HIV in the test tube; though these results have not been confirmed in human trials (Shoji.S. et al 1993; 1994: 610-21).

From this information as obtained from both theoretical and empirical literature reviews; it is evident that the use of food, micronutrient/antioxidant supplements and herbal remedies can reverse the effects of AIDS and can prevent the progression of HIV – positive individuals to AIDS. Their use can avoid the transmission of what is known as HIV mother to child during pregnancy, delivery and breast-feeding. Their use can as Roberto points out; --" arrest HIV viral loads and reverse AIDS dementia 5" what BWSCCS is trying to develop therefore is not a new venture. Other people have done it and it has been clinically proved possible.

2:5: POLICY REVIEW:

2:5:1: TANZANIA NATIONAL POLICY ON HIV/AIDS

The overall goal of the National Policy on HIV/AIDS is "To provide a framework for leadership and coordination of the National multi-sect oral response to the HIV/AIDS epidemic ⁶." This includes formulation (by all sectors) of appropriate interventions, which will be effective in preventing transmission of HIV / AIDS and other sexually transmitted infections, projecting and supporting vulnerable groups; mitigating the social and economic impact of HIV/AIDS. The Policy also provides for framework for strengthening the capacity of institutions, communities and individuals in all sectors to arrest the spread of the epidemic. Being a social, cultural and economic problem; prevention and control of HIV/AIDS epidemic much depends on effective community based prevention; care and support interventions.

2:5:2: Specific objectives of the Policy

Specific objectives of HIV/AIDS Policy in Tanzania fall under the following seven (7) variables:

(a) Prevention of transmission of HIV/AIDS

Here the Policy aims at:-

^{5.} Roberto Giraldo M. D. (New York). Southern African Development Community (SADC) meeting on Nutrition and HIV/AIDS – Johannesburg. Nov. 28th – 29th 2002 pg. 4.

^{6.} Tanzania National Policy on HIV/AIDS pg. 9

- i) Creating and sustaining increased awareness on HIV/AIDS through targeted advocacy; information, education and communication for behavior change at all levels by all sectors. This rests on effective community involvement and empowerment to develop appropriate approaches in prevention of HIV Infection, care and support to those infected and affected by the epidemic, including widows and orphans.
- ii) Preventing further transmission of HIV/AIDS through: -making blood and blood products safe and promoting safer sex practices through faithfulness to partners, abstinence, non-penetrative sex and condom use according to well informed individual decision.

Early and effective treatment of STIs in health facilities with special emphasis on highrisk behavior groups, and early diagnosis of HIV infection through voluntary counseling and testing

(b) HIV Testing:

- The Policy promotes early diagnosis of HIV infection through voluntary testing with pre-and post-testing counseling The main aim is to reassure and encourage the 85-90% of the population who are HIV negative to take definitive steps not be infected and those who are HIV positive to receive necessary support and care to cope with their status, prolong their lives and not to infect others.
- Develops training programmes aimed at making minds of the Tanzanians to view counseling on HIV/AIDS as a common code of practice.

(c) Care for People Living with HIV/AIDS:

The Policy aims at: -

- i) Providing counseling and social support services to people living with HIV/AIDS and their families
- ii) Combating stigma and strengthening living positively
- iii) Providing adequate treatment and medical care through an improved health care system which aims at enhancing quality of life
- iv) Establishing a system of referral and discharge that links hospital services to community services
- v) Ensuring the availability of essential drugs for treatment of opportunistic infections; including the Highly Active Anti-Retroviral Drugs (H.A.A.R.D)
- vi) Ensuring that the cost of counseling and home care is reflected in the National and District Council budgets for Health care and Social welfare services
- vii) Involving and supporting Communities in the provision of community based and home care services.

(d) Sectoral Roles and Financing:

The Policy:-

- i) Strengthens the role of all sectors, public, private, NGOs, Faith groups, CBOs and other specific groups to ensure that all stakes are actively involved in fighting the epidemic
- ii) Ensures strong and sustained Political and Government commitment, leadership and accountability at all levels

- iii) Establishes a framework for coordination of fund raising activities, budgeting and mobilization of human and material resources for HIV/AIDS activities through out the country.
- iv) Influences all sectoral policies to address HIV/AIDS and also
- v) Encourages and promotes the spirit of Community Participation in HIV/AIDS activities

(e) Research:

Under the research variable; the policy:-

i) Advocates participation in National and International HIV/AIDS research and establishment of a system that will help to disseminate scientific information resulting from the research; while upholding ethics that govern interventions in HIV/AIDS

(f) Legislation and Legal issues:

The policy here creates a legal framework which:-

Establishes multisectoral response to HIV/AIDS, addresses legal and ethical issues in HIV/AIDS and revises legal situation of families affected by HIV/AIDS in order to enable children to have access to family properties after the death of their parents.

(g) Other Objectives:

The Policy also:-

Monitors community mobilization efforts towards Living positively with HIV/AIDS. It identifies human rights abuses in HIV/AIDS and protects people living with HIV/AIDS against all forms of discrimination and social injustice. It advocates the provision of appropriate and effective treatment for opportunistic infections at all levels of the health care system and finally prohibits misleading advertisements of drugs and other products for HIV/AIDS prevention; treatment and care.

CHAPTER THREE

3:0: RESEARCH METHODOLOGY:

3:1: RESEARCH DESIGN, APPROACH AND STRATEGY:

Several issues were taken as major areas of concern in developing the Research design for testing the validity and relevance of establishing a nutritional care project in Bunda Township. These briefly included:

- Determining/ Identification of respondents that we would use to get the information we need for the study. These included the society members themselves; partner NGOS in the area that are already engaged in HIV/AIDS related activities; the society committee members and government officials whose work responsibilities are close to our area of research.
- Determining of methods for collecting information. The methods we determined here included

 questionnaire and focus groups dissuasions. We decided to use questionnaire method
 because it has less expensive procedure and also does not require much skill to administer.
 Moreover the interpersonal nature of the questionnaire; its standardized wording; its
 standardized order of questions and order for recording responses influenced us to choose this
 method. Focus groups discussions were also identified as a method to apply because they
 create ample time for each participant to share her/his views freely without tension-and they
 are good supplements of what has been obtained from the questionnaires.
- Conducting the survey
 The design also showed ways that would be used to conduct the survey. These included-Administration of questionnaires to identified respondents and conducting Focus groups discussions.
- The survey was followed by collecting the raw data, processing it to an information, which was used to determine the findings and recommendations.

3:2: SAMPLING

The sampling technique we used is purposive sampling. We used such type of technique because we wanted to capture ideas of all participants in the study. Also given small size of the targeted population, (twenty one society members, nine NGO representatives and three government officials); purposive sampling method appeared to be more appropriate.

We did not interview the affected at this juncture though they are in fact our major target group, because it was not easy for us to get them at such an early stage. Original trials of getting them seamed to stigmate the situation. We therefore decided to use the partner NGOS to whom they are already free to express themselves.

3:3 DATA COLLECTION:

The data we used for the research was obtained from two major sources: i e the responses from our respondents and secondary sources from the literature. Respondents included BWSCCS members; the society Executive committee; district officials (from Natural Resources, Agriculture and Health) and nine partner NGOS- AMREF, HUYAMU, SHIDEPH + KMH/CRS, BAKWATA, KKKT. BUNDA, IA Mara chapter; HUMAWAYA and Anglican church of Tanzania (AIDS-ABC). These throught questionnaire and focus groups discussions produced primary data which enabled the research team to learn more on the insides of the CBO, its profile, Objectives and the potentiality of the Society to establish and run a Nutrition al care project. Responses from the NGOS also assisted us to know the ideas these NGOS have about the project and also to learn if the project has public and client support. The project expects to operate through sale of nutritious foods and a mix of recommended herbs to the

affected at a reasonably low price, so that these may help to delay the progression from HIV to AIDS related diseases.

Among the questionnaires we used; most of them were unstructured to allow the respondents to give brief explanations. (Cfr. the attached questionnaires - Appendix 4-6).

Others were either purely structured or semi structured. For instance; in Appendix 4; Questions 3, & 7 are purely structured; Questions 5, 6, 12, and 14 are Semi structured; but Questions 2, 4, 8, 9, 10, 11, and 13 are purely unstructured. (Cfr. The attached questionnaires in Appendix No. 4-6).

In constructing our questionnaires we made sure that every aspect needed for the study is identified and given opportunity for inclusion in the research. We usually asked ourselves the following main points in formulating the questions:-

• Is the question necessary? Just how will it be useful?

Does a subject matter require a separate question or can it be integrated with other questions?

- Are several questions needed on the subject matter of this question? Should the subject be subdivided?
- Do the respondents have the information needed to answer the question?
- Does the question need to be more concrete, specific and closely related to the respondent's personal experience? Is it asked in too general form?
- Is the question sufficiently general and free from spurious concreteness and specificity?
- Is the question content biased or loaded in one direction?
- Is the question likely to encounter emotional influences and desires that will lead to falsification of answers?
- Can the question be misunderstood?

Does it contain difficult or unclear phraseology?

Briefly, these are what served as our guidelines in formulating the questionnaires.

Secondary sources are as they appear in some of the tables plus other written texts, as indicated by the footnotes.

3.4: DATA ANALYSIS:

Primary data analysis:

In analyzing primary data we have used the descriptive statistics method. Data has been obtained through targeted respondents who constituted partner NGOS and government officials on one hand and society members plus the society's executive committee on the other. Analytical and frequency distribution tables have been developed and used in the analysis work. The analysis was on data concerning NGOS involvement in HIV/AIDS related activities, NGOS sources of funding; identification of society members capacities on issues related to HIV/AIDS and the marketability of project commodities.

Secondary data analysis

In analyzing secondary data; also the descriptive statistical method was used. Data obtained from tables graph and histogram were used in the analysis to furnish the information we needed on areas of HIV/AIDS – the overview of HIV/AIDS world wide, HIV/AIDS in Tanzania; Mara Region and HIV/AIDS in Bunda district.

CHAPTER FOUR

4:0 RESEARCH FINDINGS AND RECOMMENDATIONS:

4:1 ANALYSIS OF DATA

Before research findings and recommendations were arrived at; a detailed analysis of the collected data was done. This touched all areas of the study which were necessary for us to come up with a recommendation whether the project should really be established or not. The analysis is as follows below:

Analysis of data from NGOS and government officials:

(i) Involvement of NGOs in HIV/AIDS related activities in Bunda District

As it has been noted in the previous chapter; nine NGOs in the District engage themselves in implementing HIV/AIDS related activities. Some engage in one activity; others in two to three activities as the following table indicates:

Table No. 6: NGOs involvement in HIV/AIDS related activities:

		PARTNER NGOs								
NO	TYPE OF ACTIVITY	AMREF	HUYAMU	SHIDEPH+	KMH/CRS	BAKWATA	K.K.T. BUNDA	IAC MARA CHAPTER	HUMAWAYA	ANGLICAN CHURCH TZ
	Home based care				X		X		1	
	Counseling and Testing		X		X	X	X			
	IGAs support	X			X					
	Nutritional care									
	Mobilization					X		X		X
	Home visit			X						
	Support of orphans and windows.								X	X
	Total Activities per NGO	1	1	1	3	2	2	1	1	2

Source:

Own survey:

In analyzing the data obtained from the above table; by using descriptive statistics method; a simple frequency distribution table (indicating the distribution of HIV/AIDS related NGOs) look as follows:

Table No. 7. A simple frequency distribution table

No of HIV/AIDS related activities	Tallying	Frequency	Percentage
1	LH1	5	55.6
2	111	3	33.3
3	1	1	11.1
Total		9	100

Source: Own survey

As it can be noted from the frequency distribution table; five NGOs are engaged in only one activity, which represents 55.6% of the total. Three are engaged into two activities which is 33.3% of the total and one NGO has three activities, which represents 11.1% of the total percentage.

It can also be noted from table No. 6 that **none** of the nine NGOs is dealing with nutritional care services in the district, a situation that accredits BWSCC S to engage in the nutritional support project to people living with HIV/AIDS.

(ii) Assignments of the NGOs

Briefly the NGOs presented in the table deal with the following:-

- 1. The African Medical and research foundation (AMREF) is an international organization dealing with multi cross cutting issues of the community. In Bunda District the NGO is specifically dealing with Education on Sexual and Reproductive health and Support on Income generating activities (IGAs) to youths.
- 2. HUYAMU is a faith-based organization sponsored by the African Inland church. The organization is currently dealing with voluntary counseling and testing.
- 2. SHIDEPH+ This is an NGO organized by the HIV/AIDS affected members. It is currently engaged in Home visit and support to HIV/AIDS patients.
- 3. KMH/CRS a faith based organization sponsored by Kibara Hospital. It is dealing voluntary counseling and testing, home based care services, peer health education, and support of Income generating activities.
- 4. BAKWATA Bunda. This NGO is also faith based; dealing with provision of basic knowledge on HIV/AIDS prevention, orphans support techniques and spiritual counseling.
- 5. K.K.T. Bunda The K.K.K.T. has also a unit dealing with HIV/AIDS related issues specifically on general counseling, testing and home based care services.
- 6. I.A Mara Capter This is also a faith based NGO engaging in fighting harmful traditional practices that engineer the spread of HIV/AIDS,. These practices involve:
 - i) Female genital mutilation (FGM) practices
 - ii) Inheritance of widows
 - i) Women to women marriage, and
 - ii) Cleansing.
- 7. HUMAWAYA This is an NGO sponsored by one private individual. It deals with support of orphans and widows in Bunda town and
- 8. The Anglican church of Tanzania which has a small NGO known as "AIDS-ABC". This NGO is basically dealing with community mobilization and sensitization (through meetings and congregations) on ABCs of HIV/AIDS.

(iii) NGOs' Sources of Funding

In gathering information, we also wanted to know where these NGOS secure funds for running their activities. All NGOs responded promptly, indicating one to three sources of funding, as the table below indicates.

Table No. 8 Source of funding for HIV/AIDS NGOS:

No.	NAME OF NGO	TYPES	SOURCE OF FUNDING
1.	AMREF	Service NGO	• Sida
2.	HUYAMU	Faith organization	 H.B.F. Germany A.M. German Church Church Allianz mission
3.	SHIDEPH+	NGO of the affected.	Bunda District CounselingCommunity contributions.
4.	KMH/CRS	Faith based organization (FBO)	USA (RC) through CRS Tanzania.
5.	BAKWATA (BAPRO)	Faith Organization	 Believers collections Individual contributions Butchery fees
6.	K.K.K.T. BUNDA	Faith based organization.	Bunda DDHNORADBusket Funding
7.	I.A – MARA CHAPTER	Faith based NGO	Raphael Group Germany.
8.	HUMAWAYA	Private NGO	Local contributions.
9.	ANGLICAN CHURCH OF TANZANIA (AIDS ABC)	Faith based organization (FBO)	Bergean Fund

Source:

Own Survey

By using a simple frequency distribution table, in short the NGO's sources of funding indicated above appears as follows:

Table no. 9 Frequency distribution of NGOs Sources of Funding:

No.	Source of Funding	Tallying	Frequency	Percentage
1.	Dona Funding	1111	4	44.4
2.	Government Funding	11	2	22.2
3.	Community contributions.	111	3	33.3
4.	Loans from Financial Institutions	-	-	
5.	Own sources	-	-	
	TOTAL	-	9	100

Source: Own survey:

As it can be noted from the above table; none of the nine NGOs is operating independently without any support from aiding agencies. Four NGOs operate through the assistance of the external aid (donors).

These include AMREF, HUYAMU, CRS and I.A. MARA – CHAPTER.

Two are operating through government sponsorship. These are K.K.T. and SHIDEPH+ and Three are using community contributions. The HUMAWAYA and BAKWATA

This situation indicates how important it is for any organization to engage in HIV related activities; provided the engagement is beneficial to the affected community, which is in need of assistance.

This again stands as a prior indicator for success to BWSCC S. of securing support from various agencies; if at all it discharges its intended functions properly; with the intention of really supporting the community which is living with HIV/AIDS in Bunda Township.

(iv) Market Analysis

In trying to determine the marketability of commodities that will be produced by the project; given that it was not possible for the research team to access the affected; we used NGOS to give us a picture on whether the targeted can accept paying for the commodities.

In making a response; seven NGOS agreed that the affected will for sure buy the commodities, provided their price is affordable. One NGO was not sure and also one NGO rejected the idea; advising commodities to be given free. The presentation of the above is as illustrated by the following table.

Table no. 10... Response of NGOS on marketability of project commodities

No	Type of	Partner NGOS										
	Response									h.	TOTAL	Percentage (%)
		Amref	Huyamu	Shideph +	KmH/CRS	Bakwata	KKKT Bunda	IAC Mara Chapter	Humawaya	Anglican Church. TZ		
1.	Agree	X	X	X	-	X	X	X	 -	X	7	77.8
2.	Do not Agree	-	-	-	-	-	-	-	X	-	l	11.1
3.	Not sure	-	-	-	X	-	-	-	-	_	1	11.1
		Total									9	100%

Source: Own Survey

As it can be learned from the above table seven NGOS have a positive predictability on the market of project commodities, which is 77.8% of the total prediction, when two other NGOS, one not agreing and another not being sure have 11.1% each. This gives us hope that other things remaining equal; the commodities to be produced will be accepted and hence purchased by the affected.

Analysis of data from the Society Executive Committee: (i) Preparedness of the Society to accommodate the project

In responding to this question, the committee pointed out that the society is prepared to accommodate the project, since it had for so long been an objective as well as a mission of the society to provide a development service to Bunda Township communities; only that an opportunity had not been in place. Now that a consensus of the Society members to work on a Nutritional care project has been arrived at, it is in no doubt that the society members will adequately play their role as owners of the project.

Another reason for preparedness is -the possessions they already have, that relate to Nutrition and herbal treatment. The Society already has a garden for vegetables and fruits as well as a tree plantation of two acres. What it needs is to include or plant in some other recommended vegetable plants and recipes so as to have the plantation match with the project requirements.

Another reason for preparedness is the financial ability the Society possesses. Currently the Society has 11,500,000 Tshs. In the Bank, set aside for the project.

The Society also has a competent executive committee; led by the Community Development Officer as chairperson, a Livestock Officer as a secretary and treasurer who is a prominent businesswoman. All these assure adequate preparedness of accommodating a Nutritional care project.

(ii)) Capability of Society members on issues related to Health, HIV/AIDS Councelling, and handling of HIV/AIDS sick persons

In responding to these observations; the committee confessed to have been ignorant on health and HIV/AIDS issues, but strongly emphasized that their project package involves a number of trainings including HIV/AIDS and Health related affairs. Further more, the committee promised to incorporate any technical input at a level of implementation in order to deliver intended services. Four out of six committee members were ignorant on HIV/AIDS issues and the related (which is 66.7%) while two (which is 33.3%) were partially informed, as the following frequency distribution table indicates.

Table No 11: Ability of society committee members on HIV/AIDS issues and the related

NOS Type of response		Tallying Frequency		Percentage
1 Informed		-	-	-
2	Partially Informed	11	2	33.3
3	Ignorant	1111	4	66.7
	Total		6	100%

Source: Own survey

(iii) Society's external funding

In responding to this question, the committee indicated a need of purchasing Milk separators and Oil mill crashers, but was un informed on how much they cost.

(iv) Relevance of the CBO to establish a Nutritional care project:

The Committee responded with confidence that it is appropriate for the Society to embark on the project because-the Society members have interest and commitment of running the project. Also already there are people in the area who need the project service and there's nt any organization in Bunda Township offering the same service.

The Society therefore wants to establish the project so as to fill the vacuum.

Limitations:

It has not been possible for the team to conduct a profitability analysis, since the accounts of the project are not yet clear. We so far have not known exactly what are the Total fixed costs and Variable costs, as well as the Projected revenues from sale, so as to determine the profitability ratios. However this will be attended to immediately before the project takes off.

4.2: RESEARCH FINDINGS:

The purpose of this research was to testify the validity of having the BWSCCS establish a nutritional care project in Bunda Township so as to assist people living with HIV/AIDS through nutritional support. As a result of the above analysis; several findings have been learned out of the study; which encourage the establishment of the project at hand:

- (i) It has been noted that Bunda District already has several NGOs (nine of them) that engage themselves in HIV/AIDS related activities. Some have one activity and others have two to three activities, but none of them is engaged in nutritional care and support services, as illustrated by table no.6 of this document. Two NGOs deal with Home based care services; IGAs support, orphanage and widows support; four deal with counseling and testing; three deal with mobilization against HIV; while one NGO deals with Home visiting. This situation already depicts a need of having an NGO or CBO established to take care of nutritional support services.
- (ii) It was also noted that all NGOs operate with some financial support, either from the government, donors or community contributions. However, this does not at all mean that BWSCCS needs to stay long waiting for donor input to have the project take off. The society already has various resources: land, finance and personnel to enable the project to take off, incase of any delay in donor funding.
- (iii) The study noted high readiness of the society to run the project. It was noted that members have high interest and commitment of establishing and running the project. This was ascertained by responses given by Society committee members as well as the on going financial contribution speed of the Society members which is now at hand. More than ten million Tanzanian shillings have been raised by the society members to assist the take off of the nutritional care project.
- (iv) The findings also indicate that Bunda Women savings and credit Cooperative society is the only CBO in the area that has shown interest to take up the nutritional care assignment. So far there is no any organization in the district, (Bunda Township inclusive) engaged in nutritional care support to people living with HIV/AIDS. Its engagement therefore can assist to fill the vacuum through sale of processed foods and herbs at a reasonably low price.
- (v) It was noted from the responses given by government officials and confirmed by the literature that there are various foods that provide adequate sources of macronutrients, vitamins, minerals and antioxidants. It was also noted that there are herbs which are immune stimulant and/or antioxidant. These two, when adequately applied, they delay the progression of HIV to AIDS disease. A list of these is as indicated on page 24 of this document and finally.
- (vi) The findings indicate that- commodities that will be produced by the project have a great possibility of fetching good market from the target group. This was confirmed by responses given by NGOS where seven (77.8%) against two (22.2%) accepted the marketability of the project commodities.

4:3: RECOMMENDATIONS:

From the above findings plus responses from the NGOs, and society members themselves; the following recommendations are put forward:

(i) It is justifiable that a proposal on Nutritional care be developed to support the society in establishing Nutritional care project in Bunda Township. It is evident that the society already has somewhere to start, but since the project entails purchasing some machineries, which

- might be expensive for the society to afford; there's therefore a need for a proposal to assist the society on that angle.
- (ii) The Nutritional care assignment touches people's privacy. It is recommended that project actors discharge their functions with great integrity and eloquence.
- (iii) Exposure on counseling techniques and other HIV/AIDS related issues to Society members has to be undertaken before the counseling exercise begins, so as to equip the concerned with adequate counseling skills and techniques. It has been pointed out in the analysis that most society members are ignorant on this area, and finally
- (iv) Torrelance, Kindness and Apathy should dominate the behavior of the society members when offering project services.

At times, the society members when discharging their functions may face unpleasant languages from the affected. What is needed here from the members is to bare in mind that these people are already affected. They therefore have to understand the situation, torrelate and play the apathy role.

CHAPTER FIVE

5:0: IMPLEMENTATION OF RECOMMENDATIONS

Introduction:

Implementation of recommendations is the last step of our study which incorporates the development of a project proposal, a major recommendation of our research findings. Our major area of research which was to justify the validity of establishing a nutritional care project, has been successfully testified and recommendations made after the analysis that indeed there's a need of having a project of that nature established in Bunda Township.

5.1. Executive Summary

The Nutritional care project which will soon be launched in Bunda Town to assist people who are living with HIV/AIDS has been a result of the study that was conducted in Bunda Township involving the BWSCCS members; NGOS dealing with HIV/AIDS, government workers, the society's executive committee and the researcher (CED student).

The project is targeting the people who are living with HIV/AIDS. It aims at providing nutritional support through sale of processed foods and herbs which are immune stimulant and or antioxidant in nature; which when used together will assist the affected in delaying the progression speed of HIV to AIDS related diseases; thus making him/ her live longer.

The project which is a two way sourcing (ie internal and external sourcing) is estimated to cost 28,464,920 Tshs equivalent to U\$D. 28464.9. Society members expect to meet Tshs. 8,664,920 equivalent to U\$D 8,664.9 which is 30.4% of the project total cost. The rest (19,800,000 Tshs) will be secured from external sources.

The proposal also indicates how the project will be run; what items need be purchased and what types of training the society members will have to undergo before the project takes off.

Finally the proposal indicates how the monitoring process will be maintained. It shows in details who will be producing reports; to whom and when are reports to be produced.

5.2: PROJECT PROPOSAL:

PROJECT TITLE: NUTRITIONAL CARE TO PEOPLE LIVING WITH HIV/AIDS – BUNDA TOWNSHIP.

5:2:1.OVERVIEW OF THE NUTRITIONAL CARE PROJECT:

Nutritional care is not a new venture to hear to most of the development practitioners but a new exercise to Bunda Women Savings and Credit Cooperative Society members.

Basically, Nutrition does not cure AIDS nor does it prevent infection. What it does is to help to maintain and improve the nutritional status of a person with HIV/AIDS and also delays the progression from HIV to AIDS related diseases.

It therefore improves the quality of life for people living with HIV/AIDS, especially if undertaken right from the early stages of infection.

The project therefore is aiming at enabling the Society members to have capacity and capability of establishing and running an efficient nutritional care and support programme in Bunda Township, so as to enable Bunda communities live longer.

The project will (as later details will indicate) be implemented through sale of semi – processed foods and herbs at subsidized prices and also since the intervention is new to BWSCCS members; trainings on nutritional care, foods and herbs processing, group leadership and management will be a part of the project package.

5.2.2: **PROJECT CONTEXT**:

Area Profile:

Bunda Township, an area where the project is expected to operate has fourteen hamlets led by hamlets chairpersons. These (hamlets) are:- (i) Kabarimu (ii) Saranga (iii) Bunda Kati (iv) Ukerewe Road

- (v) Balili (vi) Nyamakokoto (vii) Nyasura A (viii) Nyasura B
- (ix) Kilimani (x) Manyamanyama (xi) Mbugani (xii) Migungani
- (xiii) Butakale and (xiv) Bigutu

Location:

In the East the area is adjacent to Ligamba village. In the West it is adjacent to Tairo. In the North it is adjacent to Bitaraguru village and in the south, the area is bordered by Rubana River

Population:

The area has a total population of 16885 people of whom 3323 are men, 4291 are women and 9271 are children below eighteen years.

Major Economic activities:

The Bunda Urban community engages it self in: Limited agricultural activities, petty business practices, public and private employment and Limited livestock keeping.

Topographical features:

The area lies on a slanting land just below Ligamba and Balili mountains. It is covered with natural and adopted vegetation, with loamy sand in the East and South and clay soil in the North and the West.

Social and health services in the area:

The area is characterized by inadequate service delivery system. Starting with Water supply; the area has Lake piped water, which is usually accessed twice or thrice a month. This is aided by household shallow wells and traditional water sources, a greater percentage of which is contaminated by household toilets.

As for Primary Education, the area has five primary schools of Kabarimu, Bunda Miembeni, Balili and Chiringe. These however are faced by shortage of classrooms and teachers residential houses.

To rescue the situation however, primary school classrooms and teachers' houses are being attended through TASAF and DDP programmes which are community

based. Two rooms per school and ateacher's residential house are now under construction. Also two new primary schools have been established in Kabarimu and Migungani hamlets respectively.

Health:

The area has a dispensary, which has insufficient buildings – lacking a delivery room, a maternity ward and two staff houses. These however will be constructed through the DDP programme.

Health Education on the other hand (especially on HIV spread and prevention) is not properly offered to communities.

The community is still ignorant on HIV / AIDS transmission. Luck of transparency about the disease, inheritance of widows, female genital mutilation, the use of one knife in male circumcision, unsafe sex and polygamous marriages are still prevalent in the area.

Much still has to be done on HIV / AIDS – more awareness creation trainings need to be conducted to Bunda Urban communities.

5.3. STATEMENT OF THE PROBLEM

Poor Nutrition to People living with HIV / AIDS is a vital and often neglected component of Home based care. Adequate Nutrition cannot cure AIDS or prevent HIV infection, but can help to maintain and improve the Nutritional status of a person with HIV / AIDS and delay the progression from HIV to AIDS related diseases. BWSCCS members already have noted this problem and have decided to launch a project proposal for establishing a nutritional care project.

5.3.1. Justification:

Bunda Women Savings and Credit Coop. Society has embarked on the nutritional care project with an intention of supporting 482 people who are currently living with HIV / AIDS in Bunda Town. The society has seen it important to work on this project because – it is *very significant* in life to participate in the process of *prolonging one's living*—and also there's nt any organization already in the area engaging itself in nutritional care services. The society finds it also worth while to embark on the project because as the analysis has indicated; its commodities are assured of the market.

5.3.2. Problem significance:

The healthy and Balanced nutrition is very important for people at all stages of HIV infection because: -

- i) It maintains body weight and strength.
- ii) It replaces lost vitamins and minerals in the body.
- iii) It improves the function of the immune system and the body's ability to fight infection.
- iv) It extends the period from infection to development of the AIDS disease.
- v) It improves response to treatment, reducing time and money spent on health care.
- vi) It keeps HIV infected people active, allowing them to take care of themselves, their families and children and
- vii) It enables HIV infected people to become productive. Through good nutritional care, they become strong to work, grow food and contribute to the income of their families.

5.4: PROJECT GOAL AND STRATEGIES

Project goal:

The Primary goal of this Project is – to enable Bunda Urban communities who are infected with HIV live longer through utilization of recommended food and herbal treatment In order to achieve the above goal; the Society intends:

1. To conduct a training programme to its committee and society members on:

- How to prepare required foods for the sick, as directed by the Living Well with HIV / AIDS manual.
- How to mix up herbs suitable for relief of pains to the affected.
- How to adopt and utilize counseling and care taking skills to the affected
- How to maintain records and books of accounts for side incomes obtained out of the exercise

2. To purchase Equipments and working gears:

The society, in the course of preparing nutritious food; it requires proto-type of oils from crashed seeds and fats. It there fore intends to purchase:-

(a) Four Oil mill crashers / screeners which will help in availing ingredients and screened oils needed for recommended mixtures and

A"

(b) Four Milk separators, which will be used to separate fats (cheese and butter) from milk. Cakes obtained after screening will be sold as animal feeds.

The society also expects to purchase working gears -hoes, rakes, wheelbarrows and polythene tubes for gardening and tree planting activities.

5.4.1. Anticipated results and assumptions:

Nutritional care as already mentioned in previous sections is a vital aspect to people living with HIV / AIDS. When recommended foods and herbal treatments have adequately been applied; body weight of the infection will be maintained, the body will build stronger immunity and resistance to infection, more appetite for eating will be developed, progression of HIV to AIDS will be slowed and the infected will become productive, get back to work with their families, enjoy a good quality of life and live much longer with HIV.

5:4:2: Project Proposal Status:

The current status of the project under proposal is on the take off stage.

The society members already have developed means of enabling the project to take off; even before donor support is realized:

- -They already have a two-acre area for gardening and three planting activities,
- -They already have raised enough money (more than Ten million T.shs.) to carter for initial trainings needed for the project take off,
- -They have an office, equipped with Computer and Fax machines, which also contribute in generating funds.
- -The Society is registered (as mentioned before); managed by a team of potential women leaders.

In brief, the position of the project under proposal is rather encouraging. Only that an external support is needed to assist the society in procuring machineries needed to run the nutritional care project.

5.5. PROJECT / IMPLEMENTATION PLAN (WORKSCOPE)

The Implementation of project activities (as the attached project work plan indicates) started in November 2003 when a meeting with selected CBO was held and a project intervention identified by all CBO members. Several other planning meetings have been held, some by all twenty-one members and others by a task force committee of six members. It is in these meetings where the strategic planning process was done, reviewing the CBO's mission; its capabilities; resources; opportunities available and threats in running a Nutritional care project in Bunda Township.

5.5.1. Mode of Implementation

The project as its name so states is an HIV project, targeting the nutritional care to people who are affected with HIV/AIDS in Bunda Township. The project will be implemented through sale of semi processed recipes and herbs at a reasonable price so as to enable whoever is in need to afford purchasing them. The sale however will be preceded by a user training which will be delivered at household level through home visit and at targeted and strategically arranged meetings with the affected.

5.5.2 Implementers of the Project

The implementers of the project will be a team of six women who form a task force committee of the society. Other society members will be given a short training, particularly on areas related to counseling of the affected. The team is led by the Community development officer who is the Madam Chair; assisted by the Secretary who is also a Livestock Officer. Other four team members are business practitioners vested with well experienced business management skills.

This task force committee will be reporting to the Society's full meeting, which according to the CBO's constitution is meeting once per every month.

5.5.3 Issues to be addressed by the project

The project has a number of issues to address. These will involve:

i) Conducting a training to the Taskforce Committee of six people on:

- o How to process required foods and herbs ready for use by the affected
- o How to adopt and utilize counseling skills to the target group finally
- o How to keep society's records and books of accounts for income and expenditures that will take place in the process of implementation.

ii) Purchasing equipments and working facilities:

Here, as already pointed out in section 5.3.2 of this document; the society intends to purchase four Oil Mill screeners which will assist in grinding prototype of seeds to obtain powder that is needed for foods preparation.

The Society will also purchase four Milk separators that will be used to separate fats from milk.

Hand in hand with purchase of equipments; the society will also purchase hoes; rakes, wheelbarrows and poly tubes for gardening and aforestation activities. The society already has enough land (two acres) to practice gardening and tree planting activities.

During training, a manual on Nutritional care and support to people leaving with HIV/AIDS will be re scrutinized in details. A local version that has been adopted will further be discussed and start putting it in practice. Further more, details on special eating needs for the affected and physical preparation of needed foods and herbs, packing and distribution will be dealt with.

5.6: PROJECT BUDGET:

5.6.1: Budget contents:

As I already have indicated in previous chapters; the society intends to conduct two different trainings to its implementers. The first training will be dedicated

- Utilization of the living well with HIV / AIDS manual and
- Preparation / processing of recipes and herbs needed to assist the affected.

The second training will focus on how to adopt and utilize counseling and care taking skills to the affected and maintaining records and books of Accounts for the project.

Other activities that the society intends to include in the budget are: -

- The purchase of equipments and working gears. The budget break down indicated in local and foreign currencies is as follows: -

Table No. 12.

BUDGET BREAK DOWN

				AMOUNT NEEDED					
NO	ACTIVITY	DETAILS	SOCIETY CONTRIBU- TION (OWN SOURCES)	DONA CONTRIBU TION IN TSHS	DONA CONTRIBU- TION IN USD				
1.	TRAINING	(i) Training materials	422,600.=						
	No A:	(ii) Allowances and							
	Preparation/	consultations.	2,060,000.=		-				
	processing of	(iii) Transport costs.							
	recipes and berbs	(iv) Refreshments	300,000.=						
	for the affected	(soft drinks)							
	and studying the	(v) Hall charges.	180,000.=						
	local version	TOTAL FOR							
	manual on HIV /	TRAINING NO. A	240,000.=						
	AIDS	(i) Training materials.							
	No. B	(ii) Transport costs.	<u>3,202,600.=</u>						
	Counceling and care taking	(iii) Allowances and consultations.	163,600.=						
	techniques and	(iv) Refreshments	300,000.=						
	Maintenance of	(v) Hall charges							
	project books of		2,620,000.=						
	Accounts.	TOTAL OF							
		TRAINING NO. B	216,000.=						
_	<u> </u>		240,000.=						

		GRAND TOTAL FOR TRAINING NO A AND B	<u>3,539,600.=</u>		
			<u>6,742,200.=</u>		
	DIDCHACE OF				
2.	PURCHASE OF OIL MILL	• Four machines @ 3,750,000/=	-	15,000,000/=	
	CRASHERS	Transport chargesInstallation	500,000/=	_	
		charges	,	1 000 000/-	
	4	TOTAL COSTS	-	1,000,000/=	
			500,000/=	16,000,000/=	16500.
3.	PURCHASE OF	4pcs x 500,000=	-	2,000,000/=	
	MILK SEPARATORS	TOTAL COSTS	-	2,000,000/=	2,000.
4.	GARDENING AND TREE PLANTING	• Purchase of poly tubes: 100Rm x 1000=	100,000.=		
	ACTIVITIES	• Purchase of 4 wheelbarrows x 100,000=	400,000.=		
		• 10 hoes x 2000	20,000.= 5,000.=		
		5 rakes x 1000=Vegetable seeds			
		(varieties) 10 kgs x 1000/=	10,000.=		
		TOTAL COSTS	535,000.=		
5.	ADMINISTRATI VE COSTS	Lump sum	100,000.=		-
6.	UNFORESEEN			1.000	1000
	AND INFLATION		787,720.=	1,800,000.=	1800
	(10%)	GRAND TOTAL	8,664,920.=	19,800,000.=	18,500
		TOTAL PROJECT COST (society contr.			-
		+ Donor contribution)	****	28,464,920.=	28,464.9

The CBO is therefore forwarding a budget request of Tshs. 19,800,000/=, equivalent to U\$D 19,800. The CBO itself will contribute Tshs. 8,664,920/= equivalent to U\$D 6,664.9, plus an area for gardening and tree planting activities

5.6.2. Management of Funds:

The management of funds will be in hands of the three top executives

Of the CBO i.e. the CBO Chairperson; the Secretary and a Treasurer / CBO Accountant. These however will be producing periodical financial Reports to different organs that need to know the where abouts of the project funds.

These organs include:

- (i) The CBO's General meeting.
- (ii) The CBO Task force committee.
- (iii) Donors and
- (iv) The District Council.

All necessary financial regulations will be observed in managing funds of the CBO.

5.7. PROJECT REPORTING, MONITORING AND EVALUATION

5.7.1 Time for Reporting:

Project reporting will be done by CBO executive team on quarterly basis to all relevant parties mentioned in the previous chapter. The reports will include both fiscal and financial matters; drawing up a thorough picture of the project progress. They will indicate how the monitoring process of inputs is being made and how outputs / results are being achieved. Financial reports will reflect budget description / projected costs and they will also bear Income and Expenditure sections.

5.7.2. Project monitoring and Evaluation:

Monitoring and Evaluation are important tools for programme Management and improvement. Monitoring is ... an ongoing activity to provide a continuous oversight on whether a programme is proceeding according to plan. Evaluation is carried out at intervals; either in response to a problem or when a project phase or project period is completed.

In running the nutritional care project; Monitoring and Evaluation functions will rather take form of an ongoing exercise. Through a reflective approach; The CBO members and the target group will learn from success as well as mistakes along the way; building their knowledge base and capacity to respond to external changes.

In traditional project management; evaluation has for long been left to outside consultants; who assess the results of a project to determine whether a project could keep on being funded or not – But as of time; it has come to be noted that:

Involving of the community or the owners of the project in developing an evaluation process ensures that:

All aspects of concern to the community or project owners are covered, skills and knowledge available in the community or among project owners are identified and utilized for information collection and analysis – and that it reduces dependency on outsiders who may be much more expensive and un informed on the work in question

^{7.} Marieke T. Boat: IRC – International Water and Sanitation Centre – Technical Paper series No. 29 (1991) pg. 132.

The evaluation of the project therefore will be done quarterly through participation of all stakeholders of the project. This will enable the assessment become as transparent as possible so as to see what has been achieved; what needs improvement and how to improve it. Monitoring instruments such as Operational and Performance indicators will be developed to govern the evaluation exercise and whenever the evaluation has been completed; a meeting will be arranged to discuss results and follow up modalities.

5.8. PROJECT SUSTAINABILITY:

Sustainability comes from a word "to sustain; which means – to maintain; to be there to stay; to prolong; to keep going. Project sustainability therefore entails the means and measures that will make the project keep operating.

5.8.1 Sustainability of the Nutritional care project:

The sustainability package of the nutritional care project can be looked at from three angles namely: – the financial sustainability; technical sustainability and managerial sustainability.

Financial Sustainability:

The project will be financially sustainable on the basis that the society's productive projects that are already in place are currently operating very well, assuring continuity of operation. Chicken Rearing and the Tailoring and Tailor training projects currently earn a daily income of Seven hundred and fifty thousand Tshs. for the society.

- Group members' contributions are adequately being made per month.

Also the income obtained from sale of processed foods, herbs and cakes will further ensure the financial sustainability of the project.

Technical sustainability: -

Given the training programmes that are going to be undertaken by the implementing team and the society members as a whole; and also given the exposure of some of the executive committee members; particularly the Chairperson, Secretary and two other committee members; it is in no dought that skill development will have been undertaken; and hence technical sustainability.

The CBO members will have obtained knowledge and skills that will make the project keep on operating even after the dona funding has come to an end.

Managerial sustainability:

Given group leadership skills that will have been obtained out of trainings that have been conducted; the BWSCCS members will continue to manage their CBO by themselves and even be able to expand their nutritional care project to other more productive assignments.

5:9: **CONCLUDING REMARKS:**

The purpose of this proposal as we already have pointed out is to seek for financial assistance to support the BWSCCS in establishing a Nutritional care project in Bunda Township. It is only when the funds we have indicated in the proposal are available in time that the project we intend to establish can run successfully.

It is appropriate to talk of "Prevention of HIV / AIDS transmission"; but we also think that it is equally important to look for means and measures that can make the HIV / AIDS affected community live longer. This can only be achieved by delaying the progression from HIV to AIDS related diseases and one (1) among two answers to this measure is the Nutritional care. The second answer is the use of the anti – retroviral drugs, which is rather too expensive to afford.

We rather very strongly feel that financing the Nutritional care project for the Bunda Women Savings and Credit Cooperative Society will not only benefit the CBO itself; but also serve as a good support and a dedication to the saving of the lives of Bunda Urban communities who are now suffering from HIV / AIDS.