



NATIONAL AIDS COUNCIL SECRETARIAT

Papua New Guinea

United Nations General Assembly Special Session on HIV/AIDS

**MONITORING THE DECLARATION OF COMMITMENT ON
HIV/AIDS**

January 2004 – December 2005

Contents

Abbreviations	3
Acknowledgements	4
I HIV/AIDS Status in PNG at a Glance	5
II Overview of HIV/AIDS Epidemic in PNG.....	7
2.1 Introduction	7
2.2 New HIV cases detected each year	7
2.3 Causes of HIV infection in PNG	8
III. The National Response to the AIDS Epidemic	10
3.1 Roles of Leadership	10
3.2 Government Budgetary Allocations for the Response	11
3.2.1 Other Budgetary Allocations for HIV Response	11
3.3 Prevention 2004 – 2005	12
3.3.1 Prevention among groups in high risk settings	12
3.3.2 Prevention among Young People	12
3.3.3 Prevention Programs at the Workplace	14
3.3.4 Prevention of Mother to Child Transmission	15
3.3.5 HIV/AIDS Prevention at the Community Level	15
3.4 Treatment Care and Support.....	16
3.4.1 Treatment	16
3.4.2 Sexually Transmitted Infections	18
3.4.3 Care and Support	18
3.4.4 Voluntary Confidential Counseling and Testing	19
3.4.5 Blood Safety	19
3.5 Knowledge and Behavior Change	20
3.5.1 Young People in Urban Settings	20
3.5.2 Young People in Rural Settings	20
3.5.3 HIV infection among urban and rural people.....	22
3.6 Impact Alleviation	22
3.6.1 Treatment Opportunities for PLWA	22
3.6.2 Prevention of Mother To Child Transmission of HIV	23
3.6.3 Orphans and other Vulnerable Children	23
IV Major Challenges Faced and Actions Needed to Achieve UNGASS Targets...26	
4.1 Data collection to Monitor HIV Programs in the Country	27
4.2 Life Skills Education in HIV/AIDS for Young People	27
4.3 Workplace HIV/AIDS Programs	27
4.4 Monitoring of STI Treatment Procedures	27
4.5 Scaling up PMTCT and Introducing PMTCT into Rural Areas	28
4.6 Scaling up ARV Treatment	28
4.7 Families Affected by AIDS and Orphans	29
4.8 Changing Young People’s Behavior to Minimize HIV Infection	29
V Support Required from Country Development Partners	30

Abbreviations

ADB	Asia Development Bank
AIDS	Acquired Immune Deficiency Syndrome
APLF	Asia Pacific Leadership Forum
ARV	Antiretroviral
AusAID	Australian Agency for International Development
COMATAA	Community Mapping and Theatre Against AIDS
EU	European Union
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HIV	Human Immuno-deficiency Virus
HRSS	High Risk Settings strategy
IMR	Institute of Medical Research
JAICA	Japanese International Cooperation Agency
MSM	Men who have Sex with Men
NACS	National AIDS Council Secretariat
NCD	National Capital District
NDoH	National Department of Health
NGO	Non-Government Organization
NHASP	National HIV/AIDS Support Project
NSP	National Strategic Plan
OVC	Orphans and other Vulnerable Children
PAC	Provincial AIDS Committee
PE	Peer Educator
PLWA	People Living With HIV/AIDS
PMGH	Port Moresby General Hospital
PMTCT	Prevention of Mother To Child Transmission
PNG	Papua New Guinea
STI	Sexually Transmitted Infection
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
VCCT	Voluntary Confidential Counseling and Testing
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Acknowledgements

The National AIDS Council Secretariat would like to acknowledge the expert assistance provided by many individuals and organizations that help to produce this document.

In particular we would like to acknowledge assistance given by the AusAID funded National HIV/AIDS Support Project for making it possible for the Special Team responsible for the production of this document to have access to relevant information needed.

We would also like to thank the PNG Institute of Medical Research for support in re-analyzing data collected during the specified period to suit the requirements of the report.

We would like to thank the Private Sector HIV/AIDS Project attached to the PNG Chamber of Mines and Petroleum, the EU HIV/AIDS Project for providing all the information on Workplace HIV/AIDS Programs.

We acknowledge the following NGOs: Anglicare (STOP AIDS), Hope Worldwide, Friends Foundation and Save the Children Sapot project for providing valuable information for the report.

We would like to thank the Antenatal Clinic and the Blood Bank attached to the Port Moresby General Hospital for their assistance in the collection of the information required.

Finally we would like to thank the UNAIDS for continuously supporting and monitoring the progress of the report and providing the necessary advice.

Dr. Ninkama Moiya
Director
National AIDS Council Secretariat
Port Moresby
Papua New Guinea.

I. HIV/AIDS Status in Papua New Guinea at a glance

- ❖ National Population (2004) 5.8 million, [males 3.0 million Females, 2.8 million]
- ❖ Young People aged 15 – 19 years, 617,719 [males: 326,725, Females: 290,994]
- ❖ Young People aged 20 – 24 years, 528,951 [males: 267,219, Females: 261,732]

- ❖ Reported HIV cases Cumulative total, 1987 – June 2005 – **12, 341** [males: **5909**, Female: **5,784**
Sex not stated: **648**]
- ❖ New HIV cases reported annually continued to rise and there was no evidence of decline in 2003 - 2005: 2003: **2299**, 2004: **2490**, June 2005: **1089**.
- ❖ National Consensus Workshop, 2004, Estimated Adult HIV estimates; median **47,000**; **25,000 to 69,000** prevalence rate: **0.9% - 2.5%**, median **1.7%**
- ❖ Modeling Study: 2005, Number of people infected with HIV by the end of 2005: **64,000**, 54% of those infected are in urban areas with a prevalence rate of **3.5%**

- ❖ More pregnant women are testing positive for HIV, the estimated rate of HIV infection among pregnant women is 2%.
- ❖ In a study conducted by the Institute of Medical Research in 1998 – 1999, 17% female sex workers tested positive to HIV and only 22% of sex workers were free from 4 other STIs that came under the study. In 2004 – 2005 World Vision conducted a study among 204 sex workers in the capital city and 14% tested positive to HIV.
- ❖ Information on HIV prevalence rate in the country is scanty and new HIV surveillance site had just been established.

- ❖ The increase in the prevalence rate of HIV can be attributed to the following conditions in the country.
 - *The 2000 National Census showed a high proportion of the population to be in the reproductive age group*
 - *Early initiation of sex (15 years for both boys and girls)*
 - *Condom use among young people who engage in casual sex is very low*
 - *High levels of sexual activities including multiple partner relationships*
 - *High illiteracy rate and low knowledge about HIV transmission and prevention in both urban and rural settings*
 - *Lack of employment opportunities for young people especially young women*
 - *High prevalence of curable STIs in both urban and rural settings. (WHO estimates over 1 million cases a year)*
 - *Rapes including gang rapes and other forms of violence against women are rife*
 - *Stigma and discrimination against PLWA is common and not many people are willing to access the few VCT services established*
 - *Cultural practices that can contribute to the spread HIV among a large number of the 800 different ethnic groups in the country have not been addressed under the national response.*

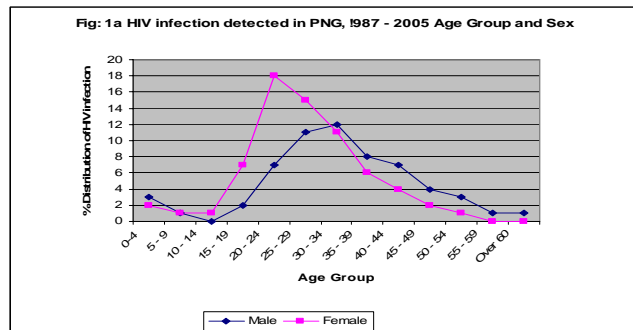
- ❖ The National response to the HIV/AIDS started to receive political support in 2003 – 2005 with an increase in budgetary allocation for HIV activities and endorsement of the HIV/AIDS Management and Prevention Bill.
- ❖ AusAID through the Australian Government is the major funding agency for HIV/AIDS prevention and care programs in PNG. 60 million Australian dollars was allocated for HIV/AIDS activities from 2001 - 2005

- ❖ In 2005 PNG was successful in applying for GFATM. US\$ 30 million had been allocated to cover a period of 5 years.
- ❖ Innovative programs to combat HIV/AIDS had started to emerge. High risk setting strategy that targets high risk groups including sex workers, MSM, sailors, members of the defense and the disciplinary forces, truck drivers and dockside workers were established in 2003 – 2005.
- ❖ PMTCT that was confined to the main hospital in the capital city in 2003 has expanded to 6 other hospitals in the country in 2004 - 2005. Only 2.5% of HIV positive pregnant women were given ARV treatment to prevent mother to child transmission of HIV compared to none in previous years.
- ❖ Only 11 large business enterprises and government departments have established HIV/AIDS comprehensive workplace policies.
- ❖ HIV/AIDS prevention and care at the community level that involves the participation community members is now receiving some form of attention in the country.
- ❖ Treatment for PLWA with antiretroviral combination therapy started in February 2004. Only 0.6% of people in the advanced stage of HIV infection are currently on treatment for the past 12 months. Treatment is confined to 2 major hospitals in the country. But there are plans to expand treatment to other hospitals in the country. The survival rate for PLWA on ARV therapy for 12 months is 56.2% for both sexes.
- ❖ There are around 60 nominated VCCT sites in the country. Only 3 sites have been accredited as VCCT sites based on guidelines established for accreditation of VCCT services in PNG. More than 1000 counselors have been trained all over the country using a VCCT curricular developed for the purpose.
- ❖ In 2003 – 2005 there was a massive awareness campaign in the country that reached more than 90% of the population. Despite the intensity of the campaign there had been no evidence of changes in people's behavior and HIV prevalence rate has continue to rise.
- ❖ Condom use rate among young men in the capital city was 24.2% among and 12.6% among young women
- ❖ There is disparity between urban and rural dwellers knowledge about HIV transmission and prevention. Urban dwellers know more about HIV/AIDS than their rural counterparts
- ❖ It was estimated that the number of orphans and children infected and affected by HIV/AIDS to be 158,454. A study funded by UNICEF on the situation of orphans in the country predicted that by 2010 17% of children under 15 years will be affected by HIV/AIDS
- ❖ Government support for programs to mitigate the orphan situation in the country does not exist and only few NGOs with donor support are carrying out work with orphans in the country.
- ❖ Major challenges that will be faced by the response are the development and implementation of innovative prevention and care programs suitable to the PNG context.
- ❖ Strategies to minimize stigma and discrimination need to be developed and implemented to encourage people to access VCCT to support the scaling up of combination ARV treatment for those who will test positive to HIV
- ❖ The introduction of HIV/AIDS Life skills education in both primary and secondary schools is a major challenge that need to be addressed to minimize HIV infection among young people
- ❖ Scaling up PMTCT to rural communities where a greater proportion of deliveries take place in homes should also pose some challenges.
- ❖ In PNG the increasing trend of HIV infection seem not to be responding to the increasing funds and efforts that have been put into programs to address the issue. There is a need for an effective M & E framework to critically examine which programs are failing to make impact and to suggest adjustments in programs to help in the reduction in the rate of the epidemic.

II Overview of HIV/AIDS Epidemic in PNG

2.0 Introduction

After the first detection of HIV/ AIDS in the country in 1987 the number of HIV infection has increased dramatically over the last eighteen years. At the end of 2002, HIV/AIDS epidemic in PNG was considered to have reached a generalized state. The total number of reported cases in 2002 was 1715 and the annual reported cases of HIV for 2003 and 2004 were 2299 and 2490 respectively. By June 2005 the number of reported cases had reached 1089 in that year. The cumulative total of HIV infection from 1987 to June 2005 was 12,341. Reported cases do not give a true reflection of HIV/AIDS epidemic in a country but all the same there have been continuous increases in the rate of reported cases of the epidemic annually. All provinces in the country have now reported cases of HIV/AIDS. Fig 1a shows the percent distribution of cumulative HIV infection rates in PNG among males and females in the various age groups from 1987 to 2005. The peak of female infection (20 – 24) is at a much earlier age than males (30 – 34).



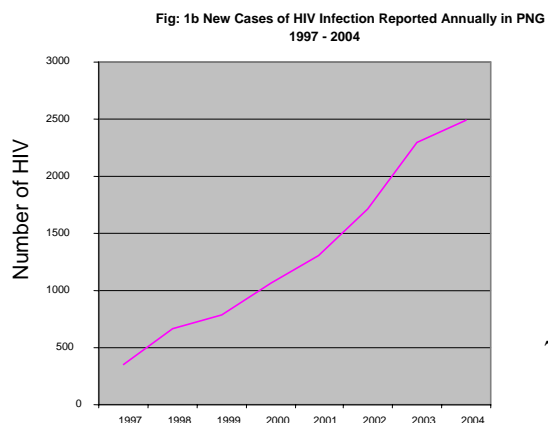
Data collected in the country to provide evidence on the progress of the disease are not very reliable and surveillance studies in strategic areas including second generation surveillance have just been established in 22 centers in PNG. Reports from the surveillance sites have been sketchy and not disaggregated into age groups and in some cases the sexes of those tested for HIV were not reported. This makes it difficult to follow the trend of HIV infection in the general population.

2.1 New HIV Cases Detected Each Year

Annual cases of new HIV infection reported over the years have continued to rise. Figure 1b below shows the new HIV cases in the country recorded annually from 1997 – 2004.

Figure 1b also shows that more new HIV cases are detected each year than in previous years.

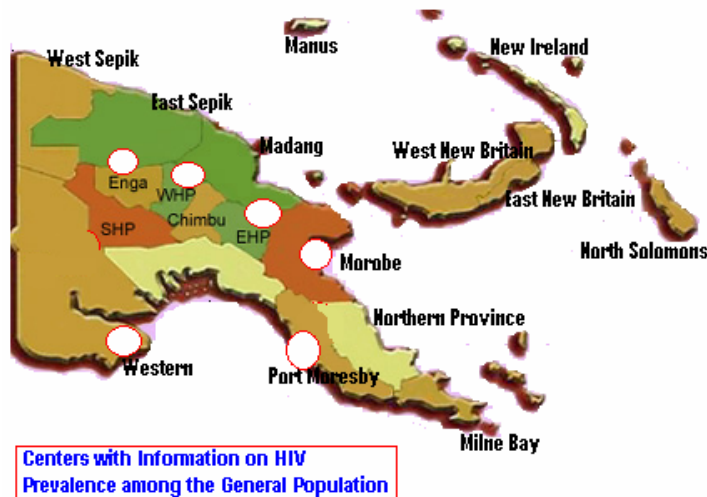
In a modeling study funded by AusAID it was estimated that by the end on 2005, 64,000 people in PNG were living with HIV/AIDS. The study also estimated that



54% of those infected are in urban areas with an overall urban prevalence rate of 3.5%. The model used in the study predicted that the number of people living with HIV/AIDS will increase to 120,000 in 2010 and to 537,000 in 2025. A similar study conducted by WHO, The National AIDS Council Secretariat {NACS} and the Department of Health in February 2006, estimated people living with HIV and AIDS at the end of 2005, to be in the range of 23,154 to 90,909 with a mean of 57,000.

In 2003 more pregnant women tested positive for HIV thus confirming the generalized state of the epidemic in the country. Statistics released lately after routine sero-surveillance study carried out at the Port Moresby General Hospital showed that in 2003 1.35% antenatal mothers tested positive for HIV. The corresponding figure for 2004 was 1.24%. These figures showed almost a four fold increase from 0.33% in 1999 to the 2004 figure. The majority of antenatal mothers who tested positive were in the age group 15 – 35 years. Similar trends of HIV infection among pregnant women in 2003 have been reported in Goroka (Eastern Highlands Province) 2%, Lae (Morobe Province) 2.5% and Daru (Western Province) 0.6% 17% of sex workers (N= 207) in the capital city (Port Moresby) tested positive for HIV in a study conducted by the Institute of Medical Research (IMR) in 1998 – 1999. Only 22% of sex workers were found to be free from four other sexually transmitted infections that came under the same study. Other studies conducted recently by the Institute in 2003 – 2005 in some mining enclaves and surrounding villages and in settlements in the capital city and some urban centers found that HIV prevalence rate ranged from 1.1% - 8.4%. Not many quantitative studies on HIV/AIDS have been carried out in different areas in PNG. Map 1 shows the few areas in the country with information on HIV prevalence rates among some specified groups.

Map 1



2.2 Causes of HIV Infection

The increase in HIV infection in the country can be attributed to the following conditions that favour transmission:

- The 2000 census in PNG showed a high proportion of the population to be in the reproductive age and are sexually active

- Early initiation of sex is common among both boys and girls (< 15 years of age) and in some societies in PNG; this behavior is condoned by tradition.
- Condom use rate for casual sex among young people aged 15 – 24 years of both sexes is very low.
- Multiple sexual partners are practiced by both single and married couples.
- High levels of STIs are prevalent in both urban and rural areas.
- High levels of poverty among both urban and rural dwellers are common, resulting in the use of sex as a means of accessing cash and other goods.
- High illiteracy rates and inadequate knowledge about HIV/AIDS are the norms in many societies in PNG.
- Lack of employment opportunities for young people, but worse among young women.
- High levels of sexual activities including multiple partner relationships in enclaves where employment in the mines, logging and plantations (oil palm, cocoa, coffee and coconut plantations) are the main source of income for a given family.

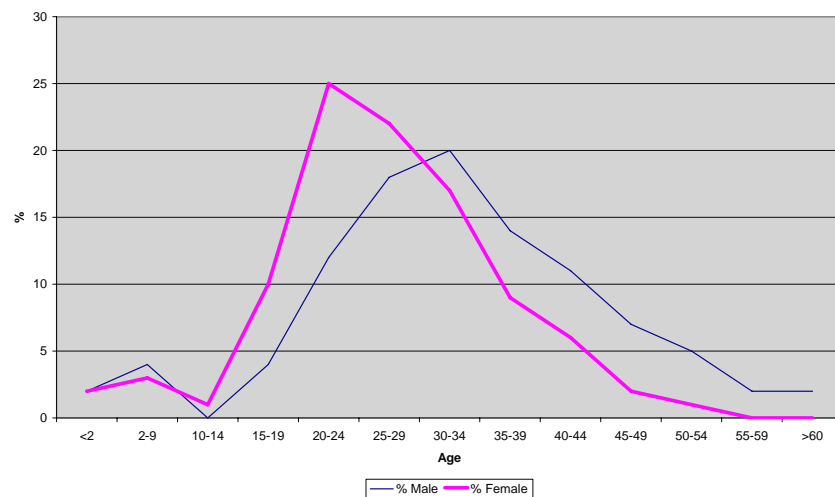
In addition to the above conditions, there had been an increase in the influx of young people especially young women from rural centers to urban centers. Living standards are worsening in the country, the population is increasing rapidly, and income-earning opportunities are decreasing while government support is very scant. While some services may be better accessed in urban centers the same does not hold for rural dwellers. All these have led to migration to urban centers resulting in an average urban growth of 15 – 17% in 1994. During the previous census period (1980-1990), the number of small urban centers rose from 67 to 80. Several medium-sized towns lost people, while the capital Port Moresby, continued to gain relative to others. By 2000, urban population had grown again by several percentage points. More importantly, the sex ratio, which was 112 in favor of males, had decreased showing that an increased number of female migrants have left their rural homes for the city. In addition the current age structure of the population contributes to the nation's social problems. While in rural areas 43% of the population is in the age group 15 to 39 years, in urban areas about 53% of the population fall within this age group.

Cultural controls, including the roles of chiefs and village elders, which keep people under check in rural areas, seem not to operate among migrant rural people in urban settings. Most rural migrants in urban centers and cities in PNG live in settlements. Settlements, although close to towns and cities in PNG, lack the basic amenities such as water and electricity. Houses are over crowded, and without proper ventilation and good toilet facilities, the settlements serve as breeding grounds for all kinds of diseases. In addition to these, job opportunities are scarce especially for migrants who are less educated and even the young educated. Without jobs, no land and no cultural controls many thousands of settlement dwellers turn into prostitution and violent crimes for survival. In some rural settings urban influences in the form of pornographic videos, pornographic magazines, alcohol and marijuana have started to make inroads and to create negative impact on the lives of people residing in these areas. These are all threatening cultural controls that exist in rural PNG and making law and order a huge

problem in both rural and urban areas. The roles that traditional leadership system can play in combating the spread of HIV/AIDS have not been tested anywhere in the country.

The gender disparity in PNG that put women especially adolescent girls at risk of contracting STIs including HIV and violence against women still remain unsolved and seem to escalate the vulnerability of women in general to HIV infection. A Gender Audit Report on HIV/AIDS Strategic Plan for PNG (2006 – 2010), revealed that the HIV epidemic is increasingly becoming younger and feminized accentuating gender inequalities. Adolescent girls and young women with HIV outnumber boys and young men of comparable age. Fig: 1c below show the differences in the infection rates of

Fig. 1 : % HIV Infections in PNG for Cases Recorded by Age and Sex (1987-2003)



recorded HIV cases by sex and age groups.

Stigma, discrimination and human rights violations against PLWA are perceived barriers to prevention efforts and contribute to the acceleration of HIV transmission and have become worrying factors that keep the epidemic hidden and prevent many people from accessing VCCT services.

The African experience that a generalized HIV/AIDS epidemic precedes an increase in the number AIDS related deaths and an increase in orphans and families affected or infected by HIV/AIDS in subsequent years, attempts by the National Government to address the issue of orphans and families affected by HIV/AIDS remain non-existent.

III. The National Response to the AIDS Epidemic

3.1 Roles of Leadership

Whereas global evidence indicates that strong leadership and honest political commitment and advocacy are vital to making a difference in HIV/AIDS epidemic, leadership is yet to become very vocal in advocacy in PNG. The PNG Government was supportive in the establishment of the National AIDS Council (NAC) and the National AIDS Council Secretariat

(NACS) in 1997, this support however was not translated into real commitments for action in the subsequent years that followed the establishment of NAC, until the later part of 2003. In 2003 Political leadership in PNG began to commit support to the national response on HIV/AIDS issues through the following actions:

- i. The legislation of the HIV/AIDS Management and Prevention Bill in 2003
- ii. A special Parliamentary Committee on HIV/AIDS was formed in 2004 with full parliamentary support.
- iii. NACS was relocated to the Prime Minister's Office in 2005 to increase political support.
- iv. A Minister responsible for HIV/AIDS was appointed to assist the Prime Minister in 2005.
- v. The government endorsed HIV/AIDS as a key priority in the *National Medium Term Development Strategy for 2006 – 2010*.

In order to sustain the involvement of leadership in the fight against HIV/AIDS the UN through UNDP initiated a Leadership Development Forum in 2005 and through the efforts of UNAIDS, PNG became a member of the Asian Pacific Leadership Forum (APLF) in 2003.

The UNDP Leadership Development Program is designed to equip leaders with skills for leadership with the underlying notion that change can only come from within the society. Leaders who attended workshops organized under this program were expected to identify innovative strategies within the communities and to use community participation to prevent the spread of HIV/AIDS.

The UNAIDS Asia Pacific Leadership Forum (APLF) aims at seeking new leaders and using existing ones to become advocates for HIV/AIDS Awareness and Prevention. Workshops for APLF concentrate on sensitizing participants with information on the epidemic, prevention strategies and how to fight stigma and discrimination with emphasis on evidence informed advocacy.

3.2) Government's Budgetary Allocation for the Response 2004 – 2005

The government funding for HIV/AIDS activities had been sporadic over the years. In 2003 the NACS received an allocation of approximately USD 180,000.00, much of which was used to provide salaries for the staff of NACS at the national capital. Salaries of Provincial AIDS Committees' staff are funded under the National HIV/AIDS Support Program (NHASP) under the general AusAID assistance to the Government of PNG. In 2004, an amount of USD 402,000.00 was allocated to NACS. In 2005 the allocation more than doubled to USD 833,000.00. In all cases salaries and administrative cost used up the bulk of money and not much was left to carry out activities. The budget allocation for HIV/AIDS activities increased to USD 1.33 Million in the year 2006. It can be said that the Government's response to HIV/AIDS is just beginning to emerge as past responses in terms of budgetary allocations were minimal.

3.2.1 Other Budgetary Allocations for the HIV Response 2004 - 2005

The Australian Government through AusAID is the major funding agency for HIV/AIDS programs in the country. In 2001 an amount of 60 Million Australian Dollars was committed for activities in HIV/AIDS prevention, care and support. This fund is to initiate response activities through the National HIV/AIDS Support Project (NHASP). Various donors including the UN, USAID, ADB and the Japanese Government had donated funds for HIV/AIDS programmes during the period 2003 – 2005. In 2005 PNG was successful in applying for funds from the GFATM. PNG was allocated 29.3 Million US Dollars for HIV prevention care and support. A

detailed account of monies used in the fight against HIV/AIDS in 2003 – 2005 is included in Annex A.

3.3 Prevention, 2004 - 2005:

HIV/AIDS Prevention activities during the period 2004 - 2005 were centered on the following programs carried out by NGOs, CBOs and Government Institutions:

- i. Prevention among groups in high risk settings
- ii. Prevention among young people
- iii. Prevention at the Workplace
- iv. Prevention of Mother To Child Transmission of HIV
- v. Prevention at the community or village level

3.3.1 Prevention among groups in high risks settings:

High Risk Settings Strategy (HRSS) is the name given to prevention programs targeted to men and women who by virtue of the work they do or social activities they engage in put them at risk of acquiring HIV/AIDS. The high risk groups in the country include sex workers, Men who have sex with Men, men and women of the discipline force, military personnel, dock workers, sailors, truck drivers and security men. The program is funded by AusAID and the European Union. The AusAID program targets sex workers and their clients and Men who have Sex with Men (MSM). HRSS started in 2004 and the program is being implemented in 14 provinces in 33 sites. These sites include transport routes in the Highlands Region in the country, wharfs where sexual activities are known to be rampant, military barracks, night clubs and markets and at local factories and shops. The prevention activities among these groups include distribution of the following materials among the group members: male and female condoms, pamphlets and brochures on HIV/AIDS. Behavioral change communication workshops are also held among the members to help them change their behavior as an attempt to reduce the rate of HIV infection. Members of the group are also encouraged to opt for VCCT. UNICEF, FHI and AusAID support Save the Children to carry out the program among sex workers, MSM and their clients.

In a study carried out by the PNG Institute of Medical Research (IMR) in 1998 – 1999 in Port Moresby, 17% of female sex workers (N= 207) tested positive for HIV. 34% of sex workers who tested positive for HIV were in the age group 15 – 19 years and 33% in the age group 20 -24 years and 33% in the age group of 25 years and above. The condom use rate among sex workers was found to be inconsistent and only 15% of sex workers used condoms all the time with their clients. In a follow up study conducted in September 2004 by the Institute of Medical Research, it was found out that 62.6% sex workers in Port Moresby (N = 235) were using condoms all the time with their clients. The HIV status of sex workers in Port Moresby did not form part of this study.

3.3.2 Prevention among Young People:

HIV/AIDS programs for young people are made up of (i) prevention programs for young people in schools and (ii) prevention programs for out-of-school youth.

- i.) UNFPA funds the prevention programs for young people in schools. The thrust of the UNFPA funding is towards the development of Reproductive and Sexual Health Curriculum for Primary Schools. The aforementioned curriculum had been developed and teachers have been trained to use the curriculum to teach pupils in primary schools

all over the country. The curriculum contains information on basic facts about HIV and AIDS. Life skills education on HIV/AIDS did not form part of the curriculum and teachers in the country have not been trained on this aspect of HIV/AIDS prevention and care program. Two NGOs namely Anglicare – Stop AIDS and Hope Worldwide (PNG) carry out HIV/AIDS education program for schools in the capital city. Hope Worldwide program covers 44 primary schools targeting school children aged 13 years to 15 years. The program implemented by Anglicare – Stop AIDS covers a similar number of upper grade schools and targets young people aged between 16 – 19 years. HIV education programs in urban and rural areas are poorly developed and in most cases controlled by FBOs that are not very keen on talking about condoms. In all these programs life skills education on sexual health, which forms the backbone of any behavior change communication program on HIV/AIDS Prevention and Care, is not taught in primary, upper primary and high schools in PNG.

UNICEF, in collaboration with the Education Department and the Provincial AIDS Committee in Milne Bay Province developed a school based HIV/AIDS program that targets school teachers and parents of young people in school and out of school. The program uses a set of printed materials to teach teachers about HIV and AIDS. Teachers are motivated through a series of exercises and role plays that make it easier for them to handle subjects on sexuality and HIV/AIDS without feeling shy. The teachers use the teaching materials to prepare teaching notes to teach the students. The same printed materials are given to the students to be given to their parents in their homes. The teachers then organize a meeting with the parents using the captive audience that exist in all schools in PNG known as the Parent and Citizens (P & C) group to discuss issues on HIV/AIDS and to plan how to assist young people to fight against HIV/AIDS. The program had been piloted in six provinces and it has helped parents to air their views about HIV/AIDS.

Evaluation of the school programs in the capital city and other provinces is yet to be carried out.

Attempt to reach out-of-school youth have been through programs funded by EU, AusAID and UNICEF. The AusAID and EU funded programs are implemented by the Provincial AIDS Committees (PACs), NGO Anglicare - Stop AIDS and Hope Worldwide. These organizations use peer education strategy to reach out-of-school youth with basic information on HIV/AIDS. More than 300 Youth Peer Educators (PEs) in HIV/AIDS have been trained in the capital city and surrounding settlements and Central Province. Condoms are distributed by the PEs to young people in the settlements and in other communities in the country involved in the out-of-school youth HIV/AIDS prevention program. From August 2005 NHASP with funding from AusAID installed 3,270 condom dispensers in all the 20 provinces in the country. The dispensers are looked after by the peer educators. The dispensers have contributed to the uptake of condoms but it is difficult to tell whether the increase in condom uptake has a corresponding effect on condom usage as no study has been conducted to measure this.

Table 1 shows the total number of free condoms distributed in the country by NHASP/NACS in 2004 and 2005. Almost 6 million condoms were distributed in 2004 and 2005.

Table: 1 Total number of free condoms distributed in PNG 2004 & 2005

<u>Year</u>	<u>Total number of condoms distributed</u>
2004	2, 386,718
<u>2005</u>	<u>3, 517,279</u>
TOTAL	5, 903,997

A study conducted by the IMR among urban dwellers in Port Moresby in 2005 showed that 25% of male urban dwellers used condom with their non-cohabiting partners in their last sexual encounter with the partners. Among female urban dwellers only 12.5% used condoms with their non-cohabiting partners in their last sexual encounter. In an earlier study conducted in 2003 by IMR and UNICEF among rural dwellers in Trobriand Islands and Karkar Islands 23% young men aged 15 – 19 years and 27 % young men aged 20 – 24 years had ever used condoms with their casual partners. Among young women in the same location and of comparable ages the figures were 13% and 15% respectively. Social Mapping studies conducted by NHASP and NACS showed that although many young people interviewed in all the 20 provinces in the country are sexually active and have multiple sexual partners and know about the use of condoms, condoms were hardly used to cover sexual acts.

3.3.3 Prevention Programs at the Workplace:

One hundred and forty two (142) private sector and public sectors employers were reached with information on HIV AIDS Workplace Policies in four target Provinces namely, NCD, Morobe Province, Madang Province and Milne Bay Province. The 142 employers are made up of 34 from the public sector and 108 from the private sector. Eleven companies and organizations comprising of 4 from the public sector and 7 from the private sector have so far developed their HIV/AIDS workplace policies that meet the requirements of UNGASS. Among the private sectors that have developed their HIV/AIDS Workplace policies are mining, petroleum and large scale plantation companies. In the public sector the following organizations namely, Education Department, Treasury Department, Department of Personnel Management and Defense Force have developed their workplace HIV/AIDS policies. All the 11 employers surveyed have developed HIV/AIDS anti-discrimination policies. Only 2 private companies have their own clinics and provide VCT and STIs treatment services. The companies also do provide HIV/AIDS related drugs for treatment of opportunistic infections. The remaining companies access VCT and STI treatment services from the public hospitals. Treatment with ARVs is provided by the Port Moresby General Hospital and two other hospitals in two provinces in the country free of charge for PLWA.

By the end of 2005 about eight to ten thousand workers and people living in communities around the workplaces have taken part in education programs organized by individual workplaces on HIV and AIDS.

3.3.4 Prevention of Mother to Child Transmission of HIV/AIDS (PMTCT)

UNICEF in collaboration with WHO and the Catholic Health Services in NCD, Simbu and East New Britain support the Prevention of Mother to Child Transmission of HIV. The program which started in 2002 has expanded to 5 other provinces namely; Milne Bay, Western Highlands, Eastern Highlands, East Sepik and Bougainville in 2005. ART prophylaxis for pregnant women started as a pilot project in 2004. In 2005 about 17,000 pregnant women came under the Voluntary Confidential Counseling and Testing (VCCT) programs attached to antenatal clinics conducting PMTCT. 60% of the mothers acquiesce to be tested. In Port Moresby General Hospital 8000 pregnant women were tested and 100 mothers received ART prophylaxis to prevent mother to child transmission of HIV. Thus only 2.5% of pregnant women out of an estimated number of 4000 HIV positive pregnant women in the country were given ART to prevent mother to child transmission in 2005.

The PMTCT program is integrated with HIV/AIDS treatment facilities provided by the HIV/AIDS clinic called Heduru clinic which comes under the Port Moresby General Hospital. The integration makes it possible to treat pregnant women who test positive for HIV with ARV.

The main constraints that will hinder the future scaling up of the PMTCT program in the country are difficulties faced by pregnant women to reach antenatal clinics due to the terrain and unavailability of motor vehicles in many rural areas of PNG. In 2004 42% of pregnant women did not attend any antenatal clinic, particularly in the rural areas of PNG. The second constraint is the inability for all pregnant women to deliver at health institutions in the country. In 2004, only 39% of deliveries were supervised by trained health personnel. 61% of deliveries took place outside the health care system in the country. In order to fill this huge gap, UNICEF has set a target to establish PMTCT programs in all the major 48 health institutions in the country within the next five years and to organize mobile PMTCT antenatal clinics to cover pregnant women in rural areas.

Table: 2 below show the percentage of HIV infected pregnant women receiving complete antiretroviral prophylaxis to reduce the risk of mother to child transmission of HIV.

Table 2: Percent Pregnant women who received ART for the prevention of Mother to Child Transmission of HIV

1. Number of HIV infected pregnant women who received ART in 2005	100
2. Number of women who gave birth in PNG in 2005	200,000
3. HIV prevalence among Pregnant women in PNG	2.0%
4. Estimated number of HIV infected pregnant women in PNG	4,000
5. Percent HIV infected pregnant women in PNG receiving ART (indicator score)	2.5%

3.3.5 HIV/AIDS Prevention at the Community Level

Although HIV infection rate in urban centers is estimated to be 3.5% and about 54% of those living with HIV are in urban centers, PNG rural dwellers account for 85% of the total population. In terms of HIV/AIDS intervention very little has been done to initiate programs in rural areas. In 2003 – 2005 new HIV/AIDS prevention and care programs were initiated with use of community people own initiatives and ideas to develop and implement HIV/AIDS programs. UNICEF piloted the Community Mapping

and Theater Against AIDS (COMATAA) program in 4 provinces. Based upon this UNAIDS elaborated on a Community Mobilization Strategy that will be implemented to provide the basis for all HIV/AIDS intervention activities. The main idea is to empower community members to identify people in their communities who are more at risk of acquiring and to collect information on situations including traditions, cultures and practices that contribute to the spread of HIV and to find their own way of responding to them.

Under these community initiatives condoms have been stored by selected young people in the communities and made available to young people upon request. In 2006 plans have been made to expand the program to cover other provinces in the country.

3.4.0 Treatment, Care and Support

3.4.1 Treatment

In February 2004, WHO, ADB and the National Department of Health (NDoH), embarked upon the 3 x 5 Initiative, to introduce ART in PNG. The 3 x 5 Initiative set a target to put 1500 people on ART by the end of 2005. ART is currently confined to two sites in the country, namely Port Moresby General Hospital in the capital city and Angau Hospital in Lae, Morobe Province. By the end of 2005, 320 people have been given treatment through this program which represents 13% of the target and another 677 are on the waiting list to receive treatment. Not all the patients have been on treatment for past 12 months.

The minimum survival rate for both males and females on ART for 12 months from February 2004 to December 2005 was 56.2%. (see table 3)

A Consensus Workshop carried out by WHO, NDoH and NACS in January 2006 estimated that 57,000 people aged 15 years – 49 years in the country are living with HIV/AIDS. Out of this number an estimated 15% or 8,550 people are in the advanced stage of HIV infection and will need ART. Using the data from table 3 below it can be estimated that only 0.6% of PLWA are currently receiving treatment for the past 12 months.

Treatment protocols for ART have been developed and 78 medical officers and nurses have been trained to administer ART. Only 3 medical officers are currently treating PLWA. Many of the doctors trained have moved on to other positions and are not available to treat patients. Despite this setback, preparations have been made to initiate ART in some 6 sites in the country (3 public and 3 private) to augment the work carried out by the 2 hospitals currently treating PLWA.

Table: 3 Number of people with advance HIV infection who survived after 12 months on Antiretroviral Combination Therapy (Port Moresby General Hospital, February 2004 – December 2005)

Month and Year Treatment started	Number of patients started on ART each month			Number of patients who died in the first 12 months while on ART			Number of patients who dropped out from treatment before the end of 12 months			Number of patients who continued on treatment at 12 months from start			12 Months
	Male	Female	Total	Male	Female	TOTAL	Male	Female	Total	Male	Female	Total	
Feb – 2004	5	0	5	2	0	2	0	0	0	3	0	3	Jan -05
Mar – 2004	6	13	19	3	8	11	0	0	0	3	5	8	Feb -05
April - 2004	1	8	9	0	2	2	0	0	0	1	6	7	Mar -05
May – 2004	4	2	6	3	2	5	0	0	0	1	0	1	Apr -05
June – 2004	0	3	3	0	0	0	0	0	0	0	3	3	May -05
July - 2004	1	0	1	0	0	0	0	0	0	1	0	1	Jun -05
Aug - 2004	3	3	6	1	1	2	1	0	1	1	2	3	Jul -05
Sep – 2004	1	2	3	1	0	1	0	0	0	0	2	2	Aug -05
Oct – 2004	3	2	5	1	0	1	0	1	1	2	1	3	Sep -05
Nov – 2004	2	2	4	0	1	1	0	0	0	2	1	3	Oct -05
Dec - 2004	7	6	13	1	3	4	2	0	2	4	3	7	Nov -05
Jan - 2005	4	11	15	0	4	4	1	1	2	3	6	9	Dec -05
TOTAL	37	52	89	12	21	33	4	2	6	21	29	50	

From Table 3 above it can be deduced that:

% of Men >15 years with advanced HIV infection on ART surviving for the past 12 months: $21/37 \times 100 = 56.8\%$

% of Women >15 years with advanced HIV infection & on ART surviving for the past 12 months: $29/52 \times 100 = 55.8\%$

% of people > 15 years with advanced HIV infection & on ART surviving for the past 12 months = $50/89 \times 100 = 56.2\%$

More than half of the people with advanced HIV infection were still alive after 12 months on antiretroviral combination therapy.

Treatment of opportunistic infections as a result of AIDS is not readily available in many public health care settings especially at the district levels. Efficacy of some drugs used in treating opportunistic infections was found to questionable. In addition staff

skills in management of opportunistic diseases at the district levels were found to be very poor and needed immediate attention to rectify the situation. Only few major hospitals and well established STI clinics in the country are able to handle opportunistic infection as a result of AIDS. The GFATM had a large component that deals with treatment of opportunistic diseases.

3.4.2 Sexually Transmitted Infections

The World Health Organization estimates that PNG generates in excess of one million new cases of curable STIs annually. These STIs comprise of a minimum of 363,000 cases of gonorrhoea, 750,500 Chlamydia cases and 10,000 syphilis cases. The management of STIs in PNG is based on comprehensive case management. One of the key strategies adopted in 1998 - 2002 as part of the Medium Term Plan and as a response to increased rates of HIV infection in the country is to review training protocols and to train health workers in STI clinics on the following procedures:

- History taking
- Examination
- Diagnosis and treatment
- Effective counseling on partner notification, condom use and HIV testing.

Under the AusAID assistance to the national response, new STI clinics were established in the provinces and existing ones were refurbished.

There are currently 12 well established STI clinics in the country and another 38 are proposed for construction. VCCT centers are attached to these clinics and in 2005; 5% - 20% of patients who attended four of these clinics attached to 4 major hospitals in the country, tested positive to HIV.

Under the current HIV/AIDS Strategic Plan (2006 – 2010) it is envisaged that in future HIV treatment, VCCT services and support for home based care will be strengthened through these facilities.

3.4.3 Care and Support

Increased stigma and discrimination against PLWA in many Papua New Guinea societies make it difficult to care and support those affected or infected with HIV. In some rural areas however, churches and some community groups have established a number of community based care centers that have taken the workload of caring for PLWA from their immediate family members. These community based care givers have organized support services for PLWA and have trained family members of those living with HIV/AIDS on home based care skills. These community based care centers do not administer drugs and have very little or no affiliation with major hospitals that treat people living with HIV/AIDS.

Appropriate technology home based care kits have been developed by a small NGO in Eastern Highlands Province in the country to support community care capacity and to reduce the work burden on families caring for terminal cases of PLWA. Three hundred (300) of these kits were purchased during the period 2004 – 2005 and distributed among all the PACs in the country. The use of the kits by community members depends on how well they are informed about the kits existence and how to access them through the PACs and community groups working with PLWA in the provinces.

There is only one PLWA organization in the country called '*Igat Hope*'. The capacity of the organization to facilitate the representation of PLWA in national and international forums and to advocate for the rights of PLWA in the country is lacking. There is a need to support *Igat Hope* to strengthen its capacity in financial management, governance, leadership skills as well as opportunities to improve income security and nutritional support.

The plight of orphans as a result of HIV/AIDS is yet to receive appropriate and relevant attention. Information on orphans and vulnerable children (OVC) in the country is sketchy or not available. In a study funded by UNICEF in the earlier parts of 2005, it was estimated that 17% of all children in the country will be affected by HIV and AIDS by 2010. These children will be affected either as orphans or as children living with HIV/AIDS affected families. There is lack of information on orphans' school attendance or the kind of support that orphans receive through government or NGO grants. There are already church supported initiatives to tackle the problems of OVC. These initiatives are confined to the capital city and have been found to be narrow as they do not stretch beyond feeding programs to issues like life skills education, school attendance and future integration of orphans into the indigenous society where they belong.

3.4.4 Voluntary Confidential Counseling and Testing (VCCT)

There are around 60 nominated VCT sites in PNG. These are mostly attached to health institutions in the country but most of them are not functional as testing sites, because they are not accredited as VCCT centers. One third of these sites are government centers, half are under church run facilities and the rest are under private or NGO clinics. Only 3 sites in the country have been accredited under the guidelines established for accreditation of VCCT services in PNG. In order to qualify for accreditation a site must meet service quality standards as documented under the accreditation guidelines. A national VCCT Committee was established in 2005 to oversee the accreditation and operation of VCCT centers in the country.

NHASP/NACS in 2003- 2005 trained more than 1000 counselors all over the country using a VCCT curricula developed for the purpose. Only few of these trained counselors are currently working.

In 2004, 728 people accessed VCCT through NACS/NHASP supported sites. In 2005 1385 people accessed testing at these sites. Around 10% of the people tested positive for HIV.

Some community based care centers also offer ongoing counseling services to PLWA. The capacity of these centers can be strengthened in future to network with major health facilities offering ART treatment to enable these centers to supervise ART compliance for PLWA.

3.4.5 Blood Safety

All transfused blood units in the country are screen for HIV. The Blood Bank in the capital city that is responsible for the safety of all donated blood units, distributes HIV Rapid Test Kits to both public and private clinics in the country. In 2004 – 2005 the

blood bank screened 6481 blood units for HIV and out of which 5,011 blood units were used for transfusion.

3.5.0 Knowledge and Behavior Change

In both rural and urban PNG the age of sexual debut occurs at 15 – 16 years of age. The traditional practices and gender imbalance which in all cases favour the dominance by men also encourage plurality of sexual partners both in marriage and out of marriage. In addition the use of sex in accessing cash and goods or services is widespread.

3.5.1 Young People in Urban Settings

In 2003 -2005 awareness of HIV and its main mode of transmission have been widely carried out by NACS/NHASP through television, radio and theater among urban and peri-urban populations. In a research carried out by the social marketing project attached to the NACS in 2004 over 90% of the population had heard of HIV/AIDS through television and through the radio. Despite the intensity of the awareness program on HIV/AIDS in urban areas of PNG, there is no evidence of positive behavior change and HIV prevalence has continue to rise. All forms of risky behaviors that contribute to the spread of HIV seem to be on the increase too. In a study carried out by the Institute of Medical Research in two localities in Port Moresby in 2004 showed that 60.6% of men (N = 132) admitted that they had at least once forced women to have sex with them. Among female respondents from the same locations 42.2% (N = 135) admitted that men had at least forced them once to have sex with them. The percent condom use during the last sexual act was found to be 24.2% among men and 12.6% among women from the same locations. Knowledge about how HIV is transmitted is sketchy. While a majority of urban young people of both sexes were able to state that the main mode of HIV transmission is through unprotected sexual intercourse (over 90%), and similar numbers rejected major misconception about HIV transmission i.e. mosquito bites and sharing food with an infected persons, not many of the people were convinced that HIV can be prevented through consistence use of condoms with ones' sexual partner nor were they conversant with the fact that a healthy looking person can have HIV.

3.5.2 Young People in Rural Settings

In rural communities, HIV awareness in the form of public education at market places, and in other important local public gatherings including drama performances form the main mode of dissemination of information on HIV/AIDS. The non involvement of community members in assessing situations, practices and culture that can contribute to the spread of HIV/AIDS had contributed to a wide range of misinformation and discrimination against PLWA. The results of the 2004 study by IMR in 5 urban centers including the capital city in PNG and 5 rural centers were used to estimate the responses that young people gave to the following questions on HIV transmission and prevention.

Table 3 shows the percentage distribution of young people aged 15 – 24 years in selected urban (N = 463) and rural (N = 416) settings in the country who both correctly identified

ways of preventing the sexual transmission of HIV and who rejected major misconception about HIV transmission.

Table 4a : Young people's knowledge about HIV prevention

	<u>% of Respondents</u>								
	<u>Males</u>			<u>Females</u>			<u>Both Sexes</u>		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	Nat.
1. HIV can be avoided by having sex with only one faithful uninfected partner	75	70	72.6	78	72	75.3	76.7	71.2	74.1
2. HIV can be avoided by using condoms	20	15	17.6	15	12	13.6	17.3	13.5	15.5
3. A healthy looking person can have HIV	15	10	12.4	10	8	9.0	12.1	8.9	10.6
4. A person can get HIV through Mosquito bites	85	80	82.4	85	80	82.7	85.1	80.0	82.6
5. A person can get HIV by sharing a meal with someone who is infected	90	85	87.7	85	80	82.7	87.3	82.2	85.0
% of respondents (15 – 24) who gave correct answers to all 5 questions	12.0	7.0	9.5	8.0	4.0	5.5	7.0	5.0	7.7

Only 12% young men in urban areas (N = 209) were able to answer the five questions correctly, the corresponding figure for young men in rural areas (N = 201) was 8%. Only 7% of young women in urban areas (N = 254) were able to answer all the five questions correctly as compared to 4% young women in rural areas (N = 215). Not many young people in both rural and urban settings believe that the correct use of condoms can prevent HIV transmission.

Young people in both rural and urban communities have a false idea about the efficacy of condoms in the prevention of HIV/AIDS. This entrenched idea about efficacy of condoms can be attributed to unwillingness by society in PNG in general to talk openly about condoms. In addition to this, the influence by some churches in the country put many people off from the use of condoms even when they are not in a monogamous marriage and have more than one sexual partner.

In the IMR study cited above when young women were asked why they did not use condoms at the last sexual encounter 58% (54/93) answered that they trusted their partners or they were married or will be marrying in future Among young men 60% gave similar answers. Other answers given were; 1. Want children, 2. Not afraid of STDs and 3. Don't know how to use condoms.

In another study conducted by IMR and UNICEF in 2003 in two remote islands namely, Trobriand Islands and Karkar Island it was shown that 59% - 70% of young people aged 15 – 19 years from these islands experienced their sexual debut before they were 15 years old.

3.5.3 HIV infection among Urban and Rural People

Table 4b: HIV Infection rate among selected number of people living in 5 urban centers and 5 rural areas in the different age groups - 2004

Age Groups	Urban Males		Urban Females		Rural Males		Rural Females	
	Number Tested	% Positive	Number Tested	% Positive	Number Tested	% Positive	Number Tested	% Positive
15 - 19	59	1.7	90	4.4	46	0	62	4.8
20 - 24	147	2.7	151	6.6	104	0	110	0
25 - 29	106	1.9	156	6.4	94	1.1	167	2.4
30 - 34	102	4.9	139	1.4	171	0.6	110	0.1
35 - 39	83	4.8	128	3.1	72	1.4	84	0
40 - 44	54	3.7	68	0	62	3.2	38	0
45 - 49	44	0	34	5.9	36	5.6	28	0
50 - 54	27	3.7	7	0	23	4.3	5	0
55 - 59	7	0	9	0	20	5.0	0	0
60 - 64	3	0	0	0	2	0	1	0
65+	3	0	1	0	5	0	0	0
TOTAL	635	3.0	783	4.1	635	1.4	605	1.3

Table 4b shows the percentage distribution of HIV infection rate among urban and rural dwellers of both sexes. Among urban men the peak of HIV infection occurs among 30 – 34, 35 – 39 and 40 – 44 age groups. The peak of the infection among rural female dwellers occurs at a younger age, 15 -19, 20 – 24 and 25 – 29 years. The situation is almost the same with rural dwellers with the peak of HIV infection among males coming at a much older age than females. The infection rate among elderly women in both rural and urban is almost negligible showing that young people especially young girls and middle aged men are more at risk of contracting HIV in PNG than any other age groups. Urban dwellers however are 2 – 3 times more likely to be infected with HIV than their counterparts in the rural areas.

3.60 Impact Alleviation 2004 – 2005

3.6.1 Treatment Opportunities for PLWA

The introduction of ARV Combination Therapy in Port Moresby General Hospital in February 2004 provided opportunities for PLWA to seek for treatment. Although this service was late to arrive lack of publicity did not make it possible for many people infected with HIV in the capital city to seek for treatment. In addition to this discrimination and stigma against PLWA in the city especially among the settlement dwellers made difficult for people living with HIV/AIDS to seek for treatment.

A second treatment facility has just been opened at Lae in the Morobe province and the same constraints that prevent PLWA to seek treatment seem to operate at this new site also.

Using the number of people who have been on treatment for 12 months it can be estimated that survival rate of PLWA aged 15 years and above on ARV in Port Moresby General Hospital is 56.2% for both sexes

Only 11 children aged 15 years and below are currently under ARV treatment for less than 12 months.

3.6.2 Prevention of Mother to Child Transmission of HIV

It is premature to measure any successes or reduction in sufferings that programs initiated to prevent the transmission of HIV from mother to child have had on infected pregnant women and their children and on the general population in PNG. The reasons behind this assertion are as follows:

- PMTC programs started on an ad hoc basis in 3 – 4 health institutions in the country in 2003, and no proper records were kept to follow up cases that received assistance to prevent HIV transmission from the mother to the child.
- The fact that in 2004, 42% of pregnant women in the country did not attend any antenatal clinic and 61% of all pregnant women delivered their babies outside the confines of any health care institution in the country, show how difficult it is to reach pregnant women with programs on PMTC.

Under the current program 100 HIV infected pregnant women were put on ARV treatment during the time of delivery in 2005. This figure represented 2.5% of expected number of HIV infected pregnant women in the country. Thus only 2.5% of pregnant women were reached by PMTC program in the country in 2005. PMTC has started to make an in-road in rural health institutions and there are very few records available for comparative studies with urban centers

Nevirapine is the drug commonly used in the PMTC program. The tablet form of Nevirapine is administered to HIV infected pregnant women during the time of labor and the syrup form of Nevirapine is administered to the baby before 72 hours after delivery. Depending on the condition of the pregnant woman the physician will sometimes administer ARV combination therapy prior to delivery. The combination therapy used in PNG is made up of Zidovudine (AZT), Lamivudine (3TC) and Nevirapine. In case the pregnant woman is anemic, Stavudine (D4T) is used in place of AZT. Babies of HIV infected mothers who were born after prolonged labor are given AZT syrup in addition to Nevirapine.

2.6.3 Orphans and other Vulnerable Children (OVC)

The PNG 2000 National Census reported that there were 104,000 children maternal orphans in the country. This figure formed about 4.2% of children under 18 years and 3.5% of children under 15 years. Data on the death status of the children's fathers were not collected, so it was not possible to know how many children are paternal orphans or double orphans. An international study, "*Children on the Brink – 2004*) used the PNG census data to estimate that 9% of PNG's children under 18 or 220,000 are missing one or both of their parents. Of the total 35% are maternal orphans, 57% are paternal orphans and 8% are double orphans.

In PNG, like other developing countries, OVC can also be estimated using the following parameters:

- HIV infected children and young people
- Orphans with one or both parents dead
- Children living in families with HIV/AIDS infected adults

- Children vulnerable to infection

In 2005 UNICEF used the services of an international consultant to conduct a study on the OVC situation in PNG. The result of the consultation based on the parameters above is shown in table 5 below.

Table: 5 Estimates of Children Infected and Affected by HIV/AIDS in Papua New Guinea

Problem	Number and % of total cases	Sources of vulnerability
HIV infected children and young people	0 – 2 years of age: Reported 115 (2%) Estimated: 1,543	Infected at birth: mother also positive and the father must also be HIV infected
	2 – 9 years old. Reported 235 (4%) Estimated: 3,152	
	10 – 14 years old, Reported 414 (7%) Estimated: 698	
	15 – 19 years old. Reported: 414 (7%) Estimated: 5553	
	Total = 10,946	
Orphans with one or both parents dead	Total Reported deaths: 353, Total estimated deaths: 4,700 Total current orphans: 9,400	Loss of love ones, trauma in caring for dying families, Low family capacity care, Loss of schooling, Loss of access to health care, poverty forces children to work including sex work. Death of caregivers leaves child vulnerable to exploitation and abuse
Children living in families with HIV/AIDS infected adults	Total reported adult cases: 5248, Total estimated adult cases (20 – 60) 69, 054 Total number of children living with HIV/AIDS infected adults: 138,108	Trauma, Exposure to HIV infection by abuse in family or by providing care to infected family members. Removal from school to provide care and household work. Poverty and exploitation
Children vulnerable to infection	All children under 18 who are uneducated about HIV, abused by adults, 30% of children estimated to be most vulnerable = 620,585	Poverty pulls children into high risk situations. Become addicted to drugs that increase high risk activities, that can lead to infection with HIV
TOTAL	779,039	

It is not possible to estimate the number of orphans due to HIV/AIDS in the country because; there are so many unknowns in the current HIV/AIDS data for the country. The current estimate is provisional as it is based on many assumptions. The number of OVC can be summarized as follows:

Infected children	10,946
Orphans	9,400
Children living in AIDS-affected families	138,108
Children at risk of infection	620,585
Total	779, 039

If children and young people at risk of HIV infection are taken out from the estimates the number of orphans and children affected or infected by HIV/AIDS in the country is estimated to be: **158,454**

The problem of orphans and children infected or affected by HIV/AIDS has not been addressed by any national program. The OVC problem is becoming more apparent as people continue to die from HIV/AIDS and its accompanying illnesses in many communities and leaving their children to be cared for by relatives.

The Department of Community Development that is responsible for the welfare of orphans and families affected by HIV/AIDS is grossly under funded. Budget allocation at national and provincial levels barely covers salaries and overheads and government

welfare services with regard to orphans and families affected by AIDS are not in existence. Hence OVCs in the country do not receive special medical support; school related assistance, emotional/psychological support including counseling and social support such as clothing, extra food, child care and legal support from the central government.

In the OVC study funded by UNICEF in 2005, it was observed that when community members were asked about the problems they faced many of the responses they gave among both sexes were related to their level of economic well being. Response to HIV/AIDS was characterized by stigmatization and discrimination even against children, who when orphaned are left in the care of their grandparents or other close relatives. The 2005 OVC study also found out that response for families and children affected by HIV/AIDS varied slightly between rural and urban areas. But in all cases programs initiated to alleviate the sufferings of PLWA, families affected by HIV/AIDS and orphans are very small in size and have just started.

In rural areas the responses to vulnerable families and orphans were limited and came largely from church initiatives and women groups. Generally the responses took the form of mutual assistance and labor-sharing projects where community members make gardens to feed the vulnerable families or sold the produce to meet other needs. In Mt. Hagen in the Western Highlands Province the Catholic Church at the beginning of 2005 assisted communities to build centers where children can come for 3 – 4 days in a week for education and care. At the beginning of 2005 the province had 1,582 reported cases of HIV infection and communities were overwhelmed with care needs for orphans who numbered between 700 and 800.

In urban PNG, responses to vulnerable children and families, including those affected by HIV/AIDS were found to be limited according to the 2005 OVC study. The responses are church or NGO-driven and designed for special risk groups, like street children, and sex workers, although few help families affected by HIV/AIDS.

Table 6 below shows services provided by various organizations in the country and the type of children reached by these organizations.

Table: 6 Orphans and Families affected by HIV/AIDS - Services provided and Type of Children served

Organization	Children who visit the site	# of children who attend the site	Age range of children who visit	Length of stay
Missionaries of Charity, Hanuabada village	Children from poor families, street children and other children from settlements	150 – 200 children	From newborn to 15 years of age. (boys and girls)	3 months and over
Missionaries of Charity, Kerema	Children who need clothing, food and shelter	30 – 100 children	1 year – 17 years, girls visit center regularly for assistance	3 months and over
Missionaries of Charity, Tete and Tokarara	Children from large families, broken homes and street children	165 – 200 children	4 years – 12 years mainly boys	Day care center
Lifeline Waigani	Children orphaned by HIV/AIDS, street children and children faced with violence	50 – 100 children	13 - 18 years mainly girls	1 day – 3 weeks
Friends Foundation, Port Moresby	Children orphaned by HIV/AIDS and children born by HIV infected women	6 – 12 children	From birth to 9 years	3 months and over
General Hospital Port Moresby City Mission	Children in Port Moresby	More than 6000 seen in a year	3 months to 18 years	3 months and over

Hope World Wide (PNG)	Children whose parents have died, or too old to support them or do not engage in any economic venture.	Currently supporting 1,100 children	6 years – 20 years	Provide sponsorship for education
Simon of Cyrene and Bethany Hospice	Parents who are infected with HIV and their children	20 – 50 children	1 month old babies to 18 years old children, adolescent girls often come for assistance	Services are provided on needs basis. And facility does not provide accommodation. The hospice provides accommodation. From one day feeding program to over 3 months for particular groups of children
Four Square Church Kaugere	Street children and orphans as a result of AIDS, also school children	250 – 500 children	9 – 18 years	Street children are kept at the center for 3 months while children orphaned by HIV/AIDS stay for more than 3 months
Maino Heduru, Horse Camp	Street children, HIV affected children and children whose parents died of HIV/AIDS	50 – 100 children	Children 6 – 18 years	From day care to 3 weeks shelter
Igat Hope, Morobe Lae and NCD PAC	HIV affected children	50 – 90 children	10 – 18 years of age mostly girls	

IV. MAJOR CHALLENGES FACED AND ACTIONS NEEDED TO ACHIEVE UNGASS TARGETS

The main challenges that would hinder the achievement of UNGASS indicators can be classified into the following:

- i.) Collection and compilation of data commensurate with UNGASS indicators
- ii.) Absence of life skills education on HIV/AIDS for in-school and out-of-school youth
- iii.) Scaling up Workplace HIV/AIDS programs and reaching out to the small business groups and the informal sector
- iv.) Monitoring of STI treatment procedures in all STI treatment centers
- v.) Scaling up PMTC programs to cover major health institutions in the country and introducing PMTC to rural areas where most deliveries take place outside the confines of health facilities
- vi.) Scaling up ARV treatment
- vii.) Reaching out to families affected by AIDS and orphans with appropriate palliative programs to address sufferings.
- viii.) Implementation of innovative behavior change communication programs that target young people aged 15 – 24 years and ability to measure behavior change when it occurs.

4.1 Data Collection to monitor the progress of HIV/AIDS programs in the country

One of the difficulties experienced in the compilation of data to monitor HIV/AIDS response in the country was the unavailability of data in the form required by UNGASS to assess the progress of programs initiated to combat HIV/AIDS. Although much work had been carried out in HIV/AIDS prevention, care, support, service delivery in the form of counseling, testing and treatment and research, the outcomes of these activities have been poorly documented and in some cases key factors like age, sex and place of residence of recipients of services and respondents of research questionnaires were missing. In order to overcome these obstacles steps have been taken to make available to service providers and research institutions in the country copies of the UNGASS indicators and appeal have been made to these institutions to collect and compile data based on the indicators provided.

Realizing the weakness in the HIV/AIDS monitoring and evaluation system in the country, the UN in 2004 engaged the services of a Monitoring and Evaluation Officer who is currently incorporating the UNGASS indicators into the Monitoring and Evaluation Framework of the National HIV/AIDS Strategic Plan (2006 – 2010).

4.2 Life skills education in HIV/AIDS for young people:

In 2004, the UNFPA assisted the National Education Department to develop a curriculum on HIV/AIDS for schools in the country. The curriculum that was developed did not take life skills education on HIV/AIDS for schools into consideration. As such this important component in HIV education that has a proven record of changing behavior has not been addressed by the curriculum and therefore not taught in schools. PNG was successful in acquiring funds from the GFATM in 2005, and the development of HIV/AIDS Life Skills Education Program for schools was included in the GFATM submission and will be implemented in 2006.

4.3 Workplace HIV/AIDS Programs

Only 34 of public sector employers and 108 Private sector employers in four provinces in the country have been reached with information on comprehensive HIV/AIDS workplace policy. The challenge facing the HIV/AIDS response is how to scale up the development of HIV/AIDS Workplace policies for various organizations and businesses in the country. Only 15% of the adult population in the country work in the formal sector which includes private companies. The informal sector and small business groups and subsistence farmers constitute a large proportion of the population. Plans are needed to reach the informal sector with appropriate programs on HIV/AIDS prevention and care.

UNDP had assisted the Department of Trade and Industries to develop a toolkit on HIV/AIDS prevention and care for the workplace to help business houses to develop and implement they own HIV/AIDS prevention and care programs.

4.4 Monitoring of STI treatment procedures

There is a need to monitor the management of STIs in both public and private clinics in the country to determine whether they conform to procedures as laid down by WHO. Although the AusAID assistance package for HIV/AIDS in PNG included a

component that dealt with training of health workers in these procedures no attempt had so far been made to monitor whether health workers are following the procedures during treatment of STI patients.

4.5 Scaling up PMTCT and introducing PMTCT into rural areas:

UNICEF in collaboration with WHO and Catholic Health Services had been implementing PMTCT in NCD, Simbu and East New Britain provinces since 2003. In 2004 and 2005 the PMTCT program expanded to cover five other provinces namely; Milne Bay, Western and Eastern Highlands, East Sepik and Bougainville. There are plans to expand the program significantly through funding from GFATM. Plans to expand the program include strengthening obstetric care and supervised deliveries as well as inclusion of VCCT into the current mobile health services carried out as part of the activities under Maternal and Child Health (MCH) services in the country. In addition, Traditional Birth Attendants (TBAs) will receive special training on PMTCT. TBAs will be encouraged to advocate on behalf of the PMTCT program in order to increase coverage of VCCT among pregnant women in rural areas.

Key challenges that will be overcome by the implementation of the above strategies are as follows:

- a) Low access to antenatal services in the provinces especially in rural areas
- b) Lack of supervised deliveries in most rural areas. (In 2004 only 39% of pregnant women in the country delivered their babies under supervision
- c) Lack of access to HIV Rapid Test Kits
- d) Lack of sustained supply of ART both prophylactic and therapeutic for PMTCT and Pediatric AIDS.
- e) VCCT capacity is limited or unavailable in most health care facilities

The PMTCT program will be enhanced further through the Global Campaign for Children that was launched quite recently by UNICEF in PNG. Under this campaign pediatric treatment for children living with HIV/AIDS will be established concurrently with the expansion of PMTCT. Currently only 11 children under 15 years of age in the country are receiving ARV treatment at the Port Moresby General Hospital.

4.6 Scaling up ARV Treatment:

The treatment with ARV as by the end of 2005 is limited to only 2 clinics in the country namely Port Moresby General Hospital and Angau Hospital in Lae Eastern Highlands province. Given the fact that increasing number of people are testing positive to HIV, there are plans to expand the program to three provincial hospitals in Mt. Hagen, Goroka and Rabaul. Donors have agreed to fund 15 staff to support the expansion of the program to the 3 sites as an interim measure until the Department of Health is able to fill these positions.

In a site readiness assessment for the scaling up of the ARV treatment the following constraints were identified:

- a) Limited staffing available at these sites.
- b) Lack of good facilities for counseling

- c) Follow up and tracking of patients on treatment outside the clinic setting is a problem
- d) The ability of communities to support patient compliance to ARV treatment
- e) Difficulties in promoting treatment centers because of stigma associated with HIV

These challenges will be tackled in the scale up program that has been planned for ARV treatment. Effective community mobilization to address issues that seem to hinder the implementation of programs will form the main focus of strategies that will be used.

4.7 Families affected by AIDS and Orphans:

In PNG most communities are not prepared to face the impact of HIV/AIDS. Community understanding of HIV and the stigma and discrimination they show towards PLWA means that community members are ill equipped to look after the sick and those dying of AIDS. The same ignorance about HIV/AIDS makes it difficult for some community members to care and support orphans who lost their parents through HIV/AIDS. It has been estimated that about 17% of all children in the country will be affected by HIV/AIDS by 2010. Support and care for orphans and families affected by HIV/AIDS were late to come into the HIV/AIDS response package. As such only few NGOs and churches are implementing programs to address problems faced by orphans and families affected by HIV/AIDS. Key challenges facing the implementation and expansion of community support programs for orphans, families affected by HIV/AIDS and PLWA are:

- a) Reducing HIV related stigma and discrimination at all levels of society
- b) Reducing gender violence and strengthening women's leadership roles
- c) Developing appropriate guidelines for care and support for churches and NGOs working with orphans and families affected by HIV/AIDS.
- d) Expanding pastoral counseling to include issues on HIV/AIDS
- e) Advocating for Government support for churches and NGOs working with orphans, PLWA and families affected by HIV/AIDS.
- f) Strengthening the capacity of *Igat Hope* The NGO working with PLWA

4.8 Changing Young People's behavior to minimize the risk of HIV infection

Young people are becoming increasingly vulnerable to HIV infection in PNG. Research by IMR and NHASP social marketing of condoms project have shown that more than 90% of young people in the country are aware of HIV/AIDS and prevention methods to avert infection. This increased knowledge has however not been translated into behaviors and practices that can minimize the spread of HIV thus leading to the increased rate of HIV infection among young people in the country. The challenges facing HIV/AIDS programs targeting young people in the country are as follows:

- a) moving beyond awareness to the development of programs that promote behavior change with direct involvement of young people in the design of the programs
- b) introducing HIV/AIDS life skills education in elementary, primary and secondary schools in the country

- c) developing and implementing HIV life skills education programs for out-of-school youth in the country
- d) establishing youth friendly health services for young people in the country
- e) encouraging young people to opt for VCCT and to avail themselves for ARV treatment if they test positive to HIV
- f) encouraging young people to play active roles in programs aimed at minimizing the spread of HIV and STIs among the youth.

Most of the challenges faced by young people's vulnerability to HIV and AIDS are receiving attention under programs that will be implemented under the GFATM. The new AusAID program on HIV/AIDS (2006 – 2010) supports the participation of community members in HIV prevention programs. Programs that will be implemented during this period will focus on initiatives such as improving access to treatment services for STIs and dissemination of messages that are culturally appropriate and well targeted.

V. Support Required from Country Development Partners

The HIV/AIDS Response in PNG from 2003 - 2005 received substantial funding for its implementation. Apart from a modest National Government budgetary contribution to HIV/AIDS programs, funds came from donor agencies like AusAID, EU, JAICA, ADB and the UN (see appendix). Papua New Guinea was awarded GFATM worth US\$ 30, Million in 2005. Despite these financial inputs HIV/AIDS prevention and care programs have been concentrated mainly in urban centers and rural areas where 85% of the country's population resides have not been well covered with appropriate HIV/AIDS prevention and care programs.

In addition to the above, programs in HIV/AIDS prevention and care have been implemented using the piece meal approach and an Expanded and Comprehensive Response does not seem to form the basis of HIV/AIDS programs. Programs seem to be targeted to specific groups perceived to be more at risk of acquiring HIV and to the detriment of other groups who might as well be vulnerable to HIV infection as the targeted group. Programs seem to be monolithic in approach and other HIV/AIDS prevention and care programs do not run concurrently in a given community. In communities where two or more programs are implemented at the same time there is hardly any coordination between programs especially when the programs are being executed by rival NGOs.

There are programs like HIV/AIDS life skills education that have been completely ignored in the HIV/AIDS response thus making it difficult to effect behavior change especially among young people.

Community based HIV/AIDS prevention and care programs using community members' initiative and ideas have also been ignored in the few programs targeting rural people. The traditional hierarchy system in PNG's society has not been involved in the response and roles that traditional leaders should play to minimize the spread of HIV remain an illusion in the minds of many planners.

The increasing trend of violence against women and the concomitant effect it has on the spread of HIV/AIDS in the country seem not to have received the much needed attention it requires to make a difference.

Stigma and discrimination against PLWA, orphans and families affected by HIV/AIDS is rife in many communities and attempt to minimize these practices have not proved very successful.

The new AusAID PNG Program on HIV/AIDS (2006 – 2010) supports the PNG National Strategic Plan on HIV/AIDS in many of the areas mentioned above. The AusAID program has a component that mobilizes communities for HIV prevention and strengthening leadership in the fight against HIV.

Support required from country development partners should be based on the areas specified above in the country's response. The areas of support should include the following:

- a) Implementation of Expanded and Comprehensive Response in HIV/AIDS prevention and care
- b) Establishment of coordination mechanisms among programs executed by NGOs, CBOs and Government agencies
- c) Development of HIV/AIDS Life skills education program for young people in school and out-of-school youth.
- d) Mobilization of communities to combat HIV/AIDS
- e) Involvement of Traditional Leaders in HIV/AIDS prevention and care programs
- f) Development of programs to minimize violence against women and to reduce stigma and discrimination against PLWA, families affected by HIV/AIDS and orphans.

VI. Monitoring and Evaluation Environment

PNG has developed a National Strategic Plan (NSP) for HIV/AIDS and STIs that covers the period 2006 – 2010. The NSP covers the following seven focal areas:

- Treatment care and support
- Epidemiology and Surveillance
- Prevention and Education
- Social/Behavioral Research
- Family and Community Support
- Leadership, Partnership and Coordination
- Monitoring and Evaluation

The NSP 2006 – 2010 for HIV/AIDS was developed as a result of an earlier initiative undertaken by a joint UN/UNAIDS/USAID Team to review the HIV/AIDS Medium Term Plan, 1998 – 2002 that was used to guide implementation of cohesive programs on HIV/AIDS in PNG. The review identified strengths and weaknesses of the previous Medium Term Plan and provided comments to guide the development of the NSP. One of the weaknesses identified by the review was the absence of a strong epidemiological and surveillance program and a Monitoring and Evaluation Framework. Consequently the National Response in 1998 – 2005 lacked a framework of indicators to monitor, evaluate and assess the scope of the epidemic and the activities that were implemented. Thus it was quite difficult for the country to produce a comprehensive

national report on the response. Accompanying the absence of an M & E framework was also a low level of behavioral research on risk settings, risk behavior and behavioral changes as a result of the National Response. This made it difficult to estimate HIV prevalence rates and to provide forecast of the direction that the epidemic is moving in the country.

As a result of these shortfalls M & E Framework was developed over the past two years through a series of meetings by the M & E Technical Working Committee. The M & E Framework that was developed as a result of the exercise will guide the implementation of the NSP 2006 - 2010.

The NSP's M& E Framework consists of a table with objectives based on each of the seven focal areas as stated above and 17 key indicators that relate to national and international indicators like, UNGASS, GFATM, and MDG, that can be used to measure the progress and eventual outcomes of the National Response.

The M&E Framework is undergoing further review to strengthen it by incorporating new UNGASS indicators to facilitate future monitoring and reporting of the progress of the National Response in line with the core indicators as outlined in the UN General Assembly's Declaration of Commitment on HIV/AIDS.

ANNEX A
Funding the PNG HIV/AIDS Control Activities 2003 - 2005

Name of Agency	Type of Agency	Main Programs	Budget and Time Period
National AIDS Council and Secretariat	Government	Multisectoral coordination of the HIV/AIDS program nationwide	US\$ 1.2 Million
AusAID	Bilateral	NHASP supporting NACS, PACS, condom social marketing, counseling training programs, surveillance, STIs, research, STI drugs and clinics refurbishment condom distribution	Aus Dollars 60 Million (2000 – 2005)
USAID	Bilateral	Targeted intervention, sex workers, MSM, in 3 cities. Save the children HIV awareness for fisheries and new	US Dollars 2.25 Million (2004 – 2006) US Dollars 200,000 (2004)
Asia Development Bank	Multilateral	cannery installation, Wewak, purchase of limited ARVs, pilot HIV/AIDS Care Centers	US Dollars 450,000 (2004 – 2005)
European Union	Multilateral	Peer Education, Young people and Workplace HIV/AIDS programs	US Dollars 3.5 Million (2003 – 2007)
UNFPA	Multilateral	HIV prevention among sex workers with World Vision, HIV/AIDS curriculum development for schools	US Dollars 240, 000 (2003 – 2004)
UNDP	Multilateral	Advocacy and policy dialogue at the national level, Workplace program support for legal rights of PLWA, gender and HIV/AIDS	US Dollars 554,964 (2004)
UNICEF	Multilateral	Support for PMTCT, Youth Program, Support Save the Children to target young sex workers, Community Based HIV/AIDS	US Dollars 260,000 (2004)
UNAIDS	Multilateral	prevention programs Support NSP and M & E development	US Dollars 200,000 (2004)
GFATM	Multilateral	Support the country response, PLWA, ARV treatment, Life skills etc.	US Dollars 29.3 Million 2005 – 2009

