



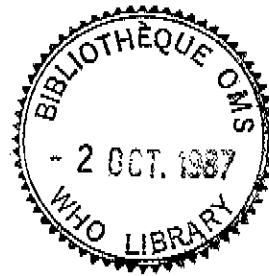
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THE PROVISIONAL MILITARY GOVERNMENT OF SOCIALIST ETHIOPIA

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MINISTRY OF HEALTH

Addis Ababa

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A FIVE YEAR PLAN FOR AIDS CONTROL
IN ETHIOPIA

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A FIVE YEAR PLAN FOR AIDS CONTROL IN ETHIOPIA

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AIDS Control in Ethiopia
A Proposal for a Five Year Plan

Executive Summary

The Provisional Military Government of Socialist Ethiopia has recognized that the AIDS epidemic poses a threat to the health of the population of Ethiopia and thus to the economic and social development of the country. By early 1986 the National AIDS Control Programme of Ethiopia (NACP) was established through the formation of a National Task Force (NTF) on the prevention and control of AIDS.

By March 1987 the Ethiopian NACP was reviewed by a team of WHO consultants, who in collaboration with the NTF formulated a Short Term Plan (STP) for AIDS control. The proposal in this report is the result of a second WHO consultation to develop a Medium Term Plan (MTP) which defines the responsibilities, structures, staffing and required resources for the NACP for the five year period 1988-1992.

The overall aim of the NACP is to reduce the impact of HIV infection on the community by reducing the frequency of infection and its associated morbidity, by ensuring optimum efficiency and effectiveness of programme strategies, and by minimizing social consequences on infected individuals and on the community.

There are 11 objectives to be attained:

- To assess the current status of the epidemic
- To monitor progression of the epidemic
- To develop and coordinate research
- To decrease sexual transmission
- To decrease transmission by blood transfusion
- To decrease transmission by contact with blood and blood products
- To decrease transmission by injection or other skin piercing practices
- To decrease transmission from mother to child
- To improve diagnosis
- To improve individual management
- To strengthen information, education and communication

The strategies proposed to achieve these objectives are detailed in the document. These strategies will be integrated into the existing health care infrastructure.

The National National Health Committee on AIDS (NHCA) which is an intersectoral body and represents an expansion of the existing NTF will be responsible for advising the Ministry on AIDS policy. The Department of AIDS Control (DAC) will be the implementing body, under the supervision of the Ministry of Health. Approximate full-time staffing requirements include 15 professional staff and 19 support staff.

The total proposed budget for five year is US\$ 7.2 million.

An overall evaluation of the NACP will be conducted after 1 year, 2 years and 5 years by a team appointed by the Ministry of Health and WHO.

ABBREVIATIONS

AEPA	All Ethiopian Peasants Association
AETU	All Ethiopia Trade Union
AFRO	World Health Organization
AHRI	Armauer Hansen Research Institute
AIDS	Acquired Immune Deficiency Syndrome
BTS	Blood Transfusion Service
CHA	Community Health Agent
DAC	Department of AIDS Control
EDP	Essential Drugs Programme
EMPDA	Educational Materials Production and Distribution Agency
EPI	Expanded Programme on Immunization
FGA	Family Guidance Association
HA	Health Assistant
HC	Health Centre
HIV	Human Immuno Deficiency Virus
HLMPC	Health Learning Materials Production Centre
HMD	Health Manpower Development
HS	Health Station
HSD	Health Services Department
IEC	Information, Education, Communication
KAP	Knowledge, Attitude, Practice
MOH	Ministry of Health
MTP	Medium Term Plan
NACP	National AIDS Control Programme
NHCA	National Health Committee on AIDS (formerly NTF)
NRCA	National Red Cross Association
NRIH	National Research Institute of Health
NTF	National Task Force
PHC	Primary Health Care
RHD	Regional Health Department
REWA	Revolutionary Ethiopian Women's Association
REYA	Revolutionary Ethiopian Youth Association
STD	Sexually Transmitted Disease
STP	Short Term Plan
TBA	Traditional Birth Attendant
UDA	Urban Dwellers Association
WHO	World Health Organization

1. INTRODUCTION

The Provisional Military Government of socialist Ethiopia has recognized that the AIDS epidemic poses a threat to the health of the population of Ethiopia and thus to the economic and social development of the country.

By early 1986 the National AIDS Control Programme of Ethiopia (NACP) was established through the formation of a National Task Force (NTF) on the prevention and control of AIDS (Annex 1).

An amount of US\$ 100,000 was allocated to the NACP by the Government in support of the initial phase of the programme.

The NTF has developed a national strategy for the control of AIDS in Ethiopia, based on the general principles of the WHO Special Programme on AIDS (SPA). This national strategy is described in a policy document entitled "Principal Components of the National AIDS Control Programme in Ethiopia".

Initially the national strategy focused on the creation of a system for collection and dissemination of information on AIDS and on an assessment of the epidemiological situation regarding AIDS and HIV transmission in Ethiopia.

The NTF has also described and analyzed the existing resources, available for the implementation of the NACP in terms of health care facilities and health manpower, epidemiological services and facilities for laboratory diagnoses and blood transfusions.

On the basis of this status analysis the future strategies of the NACP and the priorities for a strengthening of existing resources for prevention and control have been identified.

The overall strategy to be adopted is an integrated, multidisciplinary approach, whereby different governmental and mass organizations will participate actively. International donor agencies will be called upon to support the control programme and WHO will be given the role of coordinating this support in accordance with the principles, generally approved by the meeting of Participating Parties at WHO Geneva 28-29 April, 1987.

The NACP will have the following components:

A. Epidemiological assessment, surveillance and research

This control component will include strategies for current assessments of the epidemic and monitoring of its progression as well as development of clinical, behavioural and epidemiological research.

B. Prevention of transmission

This component comprises specific strategies for the reduction of HIV transmission through sexual contacts, through blood transfusions and blood products, through injections and other skin piercing practices and transmission from mother to child.

C. Information, education and communication

The NACP states, that health education is the most important tool for the prevention of AIDS and HIV transmission, and should be directed to both health-workers, the general population and specific target groups.

By March 1987 the Ethiopian NACP was reviewed by a team of WHO consultants, who in collaboration with the NTF formulated a short term plan (STP) for AIDS control and identified the objectives and strategies which required immediate support for their implementation. An amount of approximately US\$ 360,000 was allocated by WHO to Ethiopia in support of the short term plan covering costs for diagnostic and protective equipment, production of health educational material, conduction of research and educational seminars.

During the consultations, resulting in the formulation of the STP, it was agreed that WHO would send four consultants to Ethiopia by mid-May 1987 to cooperate with the Ministry of Public Health and the NTF in order to formulate a comprehensive medium term plan (MTP) for AIDS control in Ethiopia.

The present proposal represents the results of this latter consultation, and defines the responsibilities, structure, staffing and required resources for the NACP for the five year period 1988 - 1992.

The proposal is based on the components and strategies for control, already developed by the NACP of Ethiopia, and is adjusted according to the MTP outline, developed by WHO.

The ambition of the proposal is to represent a practically oriented, cultural and social specific plan for AIDS control in Ethiopia.

It will, however, require continuous adjustments and revisions in the course of its implementation.

2. BACKGROUND

Ethiopia covers an area of 1.22 million square kilometres divided into 2 major areas - the central highlands and surrounding lowlands. Its boundaries are the Red Sea, Sudan, Kenya, Somalia and Djibouti. The population of 42 million is predominantly rural (85%) with 43% aged 0-14 and 33% 15-34. Approximately 46% of eligible children are enrolled in primary school and 13% in secondary school. The official language is Amharic but English is taught to all primary school students. However, many languages are spoken by different ethnic groups throughout the country. Major ethnic groups include the Amhara, Galla, Tigre, Afars, Issas, Somalia, Gurage, Wolaita, Kembata and Hadia. There is population mobility both within the country and to the neighbouring countries of Somalia, Djibouti and Kenya as a result of nomadic life style, seasonal work, weekly markets and religious festivals.

Life expectancy at birth is 45 years and the infant mortality rate is 172/1000. The major health problems relate to communicable diseases and nutritional deficiencies. About 75% of the country has endemic malaria and about 3% of the population may be infected with tuberculosis.

The country is divided into 16 administrative regions (Figure 1) which are further divided into 102 awrajas and 586 woredas. The regions are grouped into eight zones for planning purposes. Community participation in problem identification and solution is achieved by workers' cooperatives. Currently there are over 23,000 Peasants Associations (AEPA) with an average of 2,500 people in each.

At the central level the Minister of Health is responsible to the Government for all health matters. In health service delivery large referral hospitals occur at the central level, regional hospitals in the regions, health centres at the awraja level and health stations at the woreda level. The smallest administrative unit (kebele) is served by a health post with one community health agent (CHA) and one traditional birth attendant (TBA). There are 81 hospitals, with 8600 beds (1 per 3,800 population); 156 health centres and 2081 health stations. There are 1241 doctors (1 per 30,000 population), 194 health officers, 2982 nurses, 230 sanitarians and approximately 9034 health assistants, 8040 CHAs and 9020 TBAs. About 95% of deliveries are assisted by TBAs.

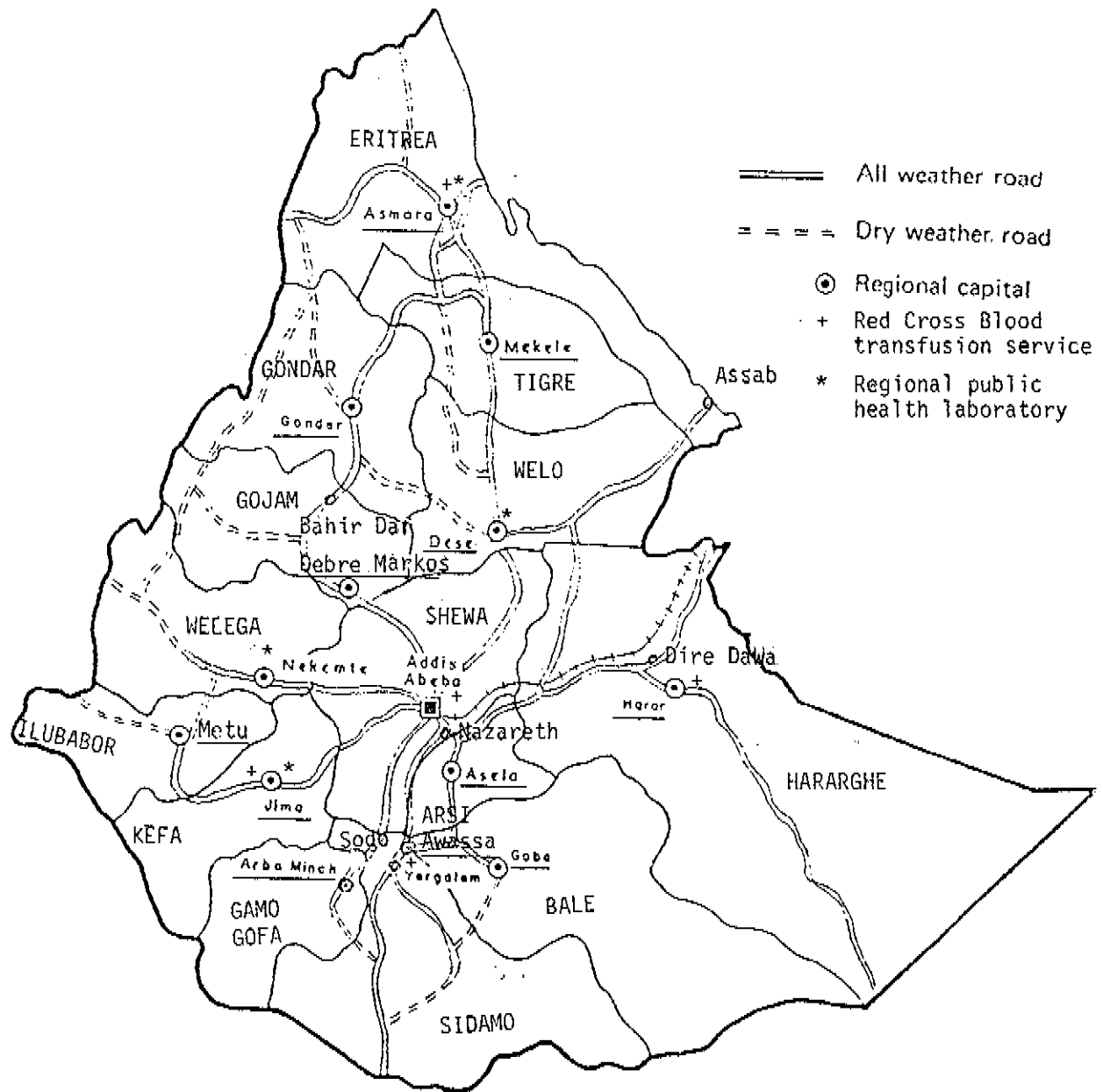


Figure 1. Blood Transfusion Services and Public Health Laboratories in Ethiopia

About 40% of the population live three days' journey from the nearest health centre and another 30% need one or two days to reach it. Only 15% of the rural population consult curative personnel at these facilities during a year. This problem necessitated extension of the health system to the grassroots (kebele) level.

Following recognition of AIDS in neighboring countries investigators conducted serological surveys in Addis Ababa in 1984 among prostitutes at the STD clinic, revealing one infection among 171 tested (0.6%). Subsequent surveys in Addis Ababa revealed yields from zero of 5000 military recruits in 1985 to four of sixty (6.3%) prostitutes at the STD clinic in 1986. Recently four suspected patients in hospital met WHO diagnostic clinical criteria and the laboratory confirmative tests are being carried out. In view of the restricted range of serosurveys and the limited clinical experience of health workers the current level of HIV infection in Ethiopia is uncertain. Geographic localities along main communication routes of the country and mobile segments of the population may have much higher rates of infection than those detected in the particular groups tested in Addis Ababa.

3. AIM

To reduce the impact of HIV infection on the community by reducing the frequency of infection and its associated morbidity, by ensuring optimum efficiency and effectiveness of programme strategies, and by minimizing social consequences on infected individuals and on the community.

4. PROGRAMME COMPONENTS

4.1 Epidemiological Assessment, Surveillance and Research

4.1.1 Objective: Assess the current status of the epidemic

As a necessary precondition for the formulation of effective control strategies the current status of the AIDS epidemic in Ethiopia must be accurately assessed.

Currently available data on the prevalence of HIV seropositivity by population group and geographical area together with data on clinical cases of AIDS must be complemented by a number of new serosurveys and active case finding in appropriate geographical areas.

4.1.1.1 Strategy: Assess serosurvey and surveillance data available by 1 January 1988

A. Method of implementation

Information on HIV seropositivity rates in various population groups are available in Ethiopia and provide information about the circulation of HIV in the country (Annex 5.1).

The Department of AIDS Control must critically review the validity, specificity and representativity of the available data as a necessary first step towards the provision of a clear picture of the epidemiological situation in the country.

The short term plan for AIDS control in Ethiopia has made provisions for technical equipment and training of manpower for conducting initial serosurveys involving 5000 samples in selected population groups and geographical areas. Details related to the initial serosurveys are described in the STP.

B. Target

By February 1988 the DAC should provide a critical review of available serosurvey and clinical data and present a status analysis to the NHCA.

4.1.1.2 Strategy: Conduct serosurveys in appropriate geographical areas

On the basis of its status analysis of currently available serosurvey data the DAC should conduct complementary serosurveys.

A. Methods of implementation

Using the equipment and trained manpower, for which provisions were made in the STP, the DAC should extend the serosurvey activities to cover appropriate high risk population groups. Population groups, which may be defined as at risk for the purpose of serosurvey assessments as well as for targeted health

educational activities (see 4.4.1) include the following: STD patients, prostitutes, bar maids, long distance truck drivers, frequent travellers e.g. seamen, airline staff) and certain categories of military personnel.

To these population groups may be added the following groups, from which information on possible HIV seropositivity is comparatively easily available: women attending antenatal clinics, blood donors, TB patients and other categories of patients, admitted to hospital.

Risk groups in Ethiopia are discussed in more detail in Annex 6.

Reviewing the available information, the DAC should elaborate a priority list for its complementary serosurvey activities.

The number of complementary serosurveys required as well as the specific target groups and geographical areas should be determined on the basis of the assessment mentioned above (4.1.1.1). For planning purposes the budget estimates allow for testing 4000 individuals in additional surveys. Detailed serosurvey protocols, including definitions of the sampling methodology and the sample size by population group, should be elaborated by the DAC on the basis of the standard method for conducting serosurveys and the analysis and use of the survey findings described by the WHO (see "Guidelines for the initial assessment of the occurrence of AIDS and HIV infection in a community").

There is merit in using STD patients from clinics throughout the country as the source of the initial serosurveys (described in the STP). This approach is consistent with many of the risk factors which have been discussed and is favoured by logistic simplicity. Screening all STD patients in 27 health centres in Addis Ababa, Nazareth, Dire Dawa, Harar, Dessie, Assab, Bahr Dar, Gondar, Mekele, Asmara, Massawa, Jimma and Sodo for one month would provide about 4000 samples. (An additional 1000 samples should be collected from non-clinic risk groups defined by the NTF.) Identified high risk subsets could be used for subsequent interval serosurveys. Other risk groups should be defined for screening at intervals between the STD surveys. For each health centre a register should be maintained on all tested individuals, recording age, sex, occupation and STD diagnosis.

Provisions for the development of the necessary laboratory infrastructure and health manpower, required for the serosurvey activities, are made in the STP.

As part of its initial assessment of the currently available serosurvey data, the DAC should assess the existing laboratory capability.

The existing resources for laboratory diagnosis and the projected needs for strengthening the laboratory services in Ethiopia are described in section 4.1.2 and Annex 7 to this report.

The DAC, through its mobile teams, should coordinate the serosurveys and secure their optimal implementation.

The DAC must analyze the survey data currently and adjust the survey protocol and routines for specimen analysis.

B. Targets

By October 1988 the DAC should have conducted the planned complementary serosurveys, analyzed their results and submitted a written report, giving a detailed and representative picture of the epidemiological situation regarding HIV infection in Ethiopia to the NHCA.

4.1.1.3 Strategy: Conduct active case finding in all health facilities and communities

A. Method of implementation

It is likely that a number of cases of AIDS have not been recognized in health facilities and have been recorded under other diagnoses.

In order to provide a complete initial assessment of the epidemiological situation, a campaign for active case finding should be conducted as soon as all health workers are trained adequately for this purpose.

This activity should form the initial phase of the implementation of the strategy to establish an accurate case reporting system (see refer to 4.1.2.2).

B. Targets

By December 1988 the DAC should submit a written report with the results of the campaign for active case finding of the NTF.

4.1.2 Objective: Monitor progression of the epidemic

In order to accurately monitor the progression of the epidemic as the basis for targeted intervention and adjustment of control strategies, if required, a system for interval serosurvey conduction and accurate case reporting should be established.

4.1.2.1 Strategy: Strengthen laboratory and diagnostic facilities

A. Method of implementation

At the time of formulation of the MTP ELISA and Western Blot tests are done only at the Armauer Hansen Research Institute (AHRI) and at the National Research Institute of Health (NRIH) in Addis Ababa. The diagnostic capability at the AHRI is estimated at the level of 2000 tests a month and at the NRIH, which is the national referral laboratory at the level of 6000 tests a month. In the Short Term Plan (STP) for AIDS control provisions were made for strengthening of the screening capability at five blood banks in the country: Asmara, Jimma, Harar, Yirgalem and Addis Ababa.

The provision of equipment for HIV screening of blood in these blood banks should cover the need for investigation of specimens, resulting from the serosurveys, which are planned as part of the STP.

A training course for a total of ten laboratory technicians is planned. In addition a training course for staff, responsible for maintenance of the laboratory equipment, should be organized.

The present and projected laboratory capability and diagnostic facilities for HIV testing as well as for other essential investigations is described in Appendix 5.2.

The equipment of five blood banks with HIV screening equipment will cover the short term need for testing of blood for HIV from serosurveys and other investigations in Ethiopia. It is, however, necessary to strengthen the laboratory capability and diagnostic facilities in the regional laboratories, in order to enable them to participate in the diagnostic services, required by the serosurveys, which are planned as part of the five year plan for AIDS control.

The following regional public health laboratories are all staffed by trained biologists: Awassa, Jimma, Asmara, Nekemte and Dessie. Regional laboratories are planned for Dire Dawa and Bahr Dar.

As mentioned above (section 4.1.1.2) the NRIH presently has access to equipment for ELISA and Western Blot testing. The Western Blot equipment, however, is borrowed from the AHRI, and must be replaced.

The capacity for Western Blot confirmation of ELISA positive tests from the regional laboratories at the NRIH is considered adequate in terms of technical expertise and manpower.

Technical equipment for ELISA testing should be provided for the seven regional laboratories mentioned above.
Equipment for Western Blot testing should be provided for the NRIH.

Training courses for laboratory technicians/biologists for the regional laboratories should be arranged.

Training courses for laboratory technicians/biologists for the regional laboratories should be arranged.

Training courses for maintenance staff should also be arranged.

B. Targets

By June 1988 provision of technical equipment for ELISA testing for seven regional laboratories should have been made.

By June 1988 provisions of technical equipment for Western Blot testing for the NRIH should have been made.

By June 1988 a training course for 14 laboratory technicians/biologists from the seven regional laboratories should have been completed.

At the end of June 1988 a training course for maintenance staff from the seven regional laboratories should have been completed.

C. Progress indicator

The level of attainment of the above targets should be described in the quarterly report for third quarter of 1988 by the DAC.

4.1.2.2 Strategy: Establish an interval serosurvey system

A. Methods of implementation

On the basis of the analysis of the findings from the initial assessment of the AIDS epidemic in Ethiopia the DAC should adjust the initial serosurvey protocols and use these for conducting interval serosurveys in the population groups as revealed by the analysis.

The optimal interval for the serosurvey activities will have to be defined by the DAC.

Based on the experience from other endemic areas an interval of six months may be appropriate.

The sample size and methodology will be determined by the DAC in accordance with the experiences from the implementation of the STP and with the guidelines elaborated by the WHO.

The field staff, already trained and employed for the implementation of the STP and the laboratory facilities, which have previously been strengthened as part of this plan, will serve the interval serosurvey activities.

Revisions of the survey protocols, refresher courses for the field staff and further strengthening of the laboratory facilities may be required (see 4.1.3 and 4.2.2).

B. Targets

By January 1989 the DAC should: 1) evaluate the results of the previously conducted serosurveys and develop detailed protocols for the interval serosurvey system as well as determine optimal intervals, sample size and sampling methodology for these surveys 2) evaluate the available laboratory facilities for testing of samples from future interval surveys and elaborate plans for a strengthening of these services, if required 3) evaluate the performance of its survey field staff and elaborate plans for refresher training, if required.

Following the above assessments the DAC should implement the system of interval serosurveys.

By July 1989, and thereafter six monthly the DAC should evaluate the findings from the serosurveys, disseminate them and ensure immediate use of the data for public health intervention.

4.1.2.3 Strategy: Establish accurate case reporting system

A. Methods of implementation

AIDS cases should be reported to the MOH as part of the Notifiable Diseases reporting system. Reporting should be made by radio or telephone from the peripheral to the regional health facilities and from there to the MOH. Where possible a clinical diagnosis of AIDS in a peripheral health facility should be confirmed by a Medical Officer at the Regional level or in a mobile team and should be confirmed by means of a laboratory diagnosis.

A case reporting form for AIDS should be developed by the DAC, and the form printed and distributed to all health facilities. Training of all health workers from the central to the peripheral level in the case reporting system should take place, integrated in the health workers training seminars for AIDS control and prevention.

Each health facility should maintain a register of suspected AIDS cases.

A system for feed back of the information from the AIDS reporting system to the reporting units must be established.

B. Target

By January 1988 an evaluation of the efficiency of the case reporting system should be carried out by the DAC and the reporting system adjusted.

4.1.3 Objective: Develop and coordinate research

Research into the knowledge, attitudes and practices of various population groups in Ethiopia relating to sexual behaviour as well as other fields, related to the transmission of HIV, is vitally important for the guidance of health educational campaigns and other components of AIDS control.

Research on clinical management of AIDS patients is equally important for the development of other parts of the control programme.

Research on HIV transmission and AIDS in Ethiopia must be action oriented and decision linked.

It must be coordinated with other ongoing research activities in the country.

4.1.3.1 Strategy: Define priorities for research

A. Method of implementation

The DAC should review all research, ongoing or already completed, with a relation to AIDS and HIV transmission in a broad sense, and through its surveillance and research unit should elaborate a priority list for action oriented research, required for optimal implementation of the control programme.

The DAC should consider the following research topics for its priority lists.

1. Information on the pattern of sexual behaviour by ethnic, socio-cultural and religious population groups related to age of sexual debut, views regarding pre- and extramarital sex, prostitution and multiple partners.
2. Information on the existing level of knowledge about transmission of STDs, including AIDS by population group as above.
3. Information on knowledge, attitudes and practices regarding condom use.
4. Information on knowledge, attitudes and practices regarding the use of injections as medical treatment.
5. Information on the present role and practice of various types of traditional healers and traditional midwives with a view to their potential role in AIDS case management and in the prevention of HIV transmission.

B. Target

By January 1989 the DAC should analyze all AIDS-related research, ongoing or completed, in Ethiopia, as well as compile a list of research priorities as defined by the programme.

4.1.3.2 Strategy: Coordinate research

A. Methods of implementation

On the basis of its priority list for AIDS related research the DAC should develop these priorities into researchable questions. This may be achieved through cooperation with individual researchers from the various university departments or research interested health workers.

Research in the field of knowledge, attitudes and practices (KAP) is particularly important for the implementation of the AIDS control programme.

The Department of Social Sciences at the University of Addis Ababa should be approached to develop relevant research protocols, which may subsequently be submitted to the Research Council at the MOH for approval and funding.

Epidemiological research may be conducted through collaboration with the Community Health Departments at the Universities of Addis Ababa, Gondar and Jimma.

Research project protocols may also be developed by staff members of the DAC and submitted for funding as above.

An important role for the DAC will be to function as a referral body for the MOH Research Council in order to assess research proposals, related to AIDS. The DAC should ensure that research proposals are in line with stated research priorities and make optimal utilization of manpower and financial resources for research.

The DAC may assist to analyze and ensure the use of AIDS related research findings in the implementation of the national control programme.

B. Targets

By January 1989 a framework for initiating, assessing, coordinating and funding AIDS related research proposals by external or internal researchers should be established by the DAC in collaboration with the MOH Research Council and the University.

C. Progress indicators

By January 1990 the established mechanisms for research coordination and funding and status report on ongoing and planned research activities, related to AIDS, should be described as part of the annual report of the DAC.

4.2 Prevention of Transmission

4.2.1 Objective: Decrease sexual transmission

4.2.1.1 Strategy: Maintain non-risk behaviour

Non-risk behaviour should be encouraged within the messages transmitted to the general population. In Ethiopia increase in urbanization of the population has eroded traditional values and behaviour (i.e. non/low risk behaviours). There still remains within Ethiopia a strong network of religious and other leaders who are actively trying to promote traditional values and beliefs. This network may provide an additional channel to maintain non-risk behaviour.

A. Method of implementation

The NHCA should invite members of religious and cultural groups to be represented on the Committee. A series of specially devised 1/2 day seminars should be organized and run for religious and cultural leaders at national, regional and district level.

The NHCA should give religious and cultural leaders access to radio and television to support the HIV/AIDS control programme.

B. Targets

By March 1988 religious and cultural leaders should be represented on the NHCA.

By May 1988 religious and cultural leaders should submit plans to NHCA for seminar outlines.

By August 1988 1/2 day seminars should be conducted at national, regional and district level.

By November 1988, access to radio and television for religious and cultural leaders should be established.

4.2.1.2 Strategy: Reduce high risk behaviour

High risk behaviour is confined to sexually active groups within Ethiopia. Information, education and communication (IEC) strategies offer the only operational way to interact with high risk groups in an effort to modify their behaviour and so reduce risk. Consequently the objective to decrease sexual transmission by a reduction of high risk behaviour is fully considered and expanded under section 4.4.1.2 and Annex 7.2.

4.2.1.3 Strategy: Promote the use of condoms

A. Method of implementation

The knowledge, attitudes and behaviour in the Ethiopian population regarding condom use should be assessed. The number of condoms presently used in Ethiopia, should be assessed. The supply system should be strengthened where required. The Ministry of Health should involve staff at all levels in promotion of the use of condoms.

Supply and distribution of condoms should be integrated into existing distribution systems within the Public Health Services and the Family Guidance Association (FGA). Condoms should be supplied and distributed to high risk groups. Where costs are defined as a barrier to condom use, these should be subsidized. Alternative distribution channels should be established.

IEC strategies regarding condom use should be developed with due respect for prevailing attitudes in various ethnic and religious groups. Possible cultural/religious antipathy to condom use should be defined. Where this antipathy relates to birth control, the attitude to condom usage as a disease control mechanism should be encouraged. Seminars on HIV transmission and high risk groups should be organized for religious leaders. Women's mass organizations should be involved to encourage women to have condoms available.

B. Targets

By April 1988 the DAC should compile a report describing the current number of condoms imported into Ethiopia as well as existing distribution channels.

By April 1988 the DAC should establish alternative channels to health services for condom distribution to high risk groups.

By July 1988 the DAC should run seminars for religious leaders.

C. Progress indicators

Assess on a monthly basis the (increase in) demand for condoms from source of supply. Assess effectiveness of IEC as related to condom use through assessment of KAP in high risk groups and include this information in the DAC's quarterly report by the above target dates.

4.2.1.4 Strategy : Promote early effective treatment of other STD's

Other STD's may facilitate the transmission of HIV infection as well as hasten the onset of clinical AIDS in those infected. Consequently early effective treatment of STD's may reduce HIV transmission and reduce morbidity in those infected.

A. Methods of implementation

The documents "Guideline for the control of sexually transmitted diseases" Ministry of Health, April 1987, and "Plan of Action" Ministry of Health 1987/88 provide details of the programme for strengthening STD's control. This system will initially apply to 27 clinics in 13 towns (Addis Ababa, Nazareth, Dire Dawa, Harar, Dessie, Assab, Bahr Dar, Gondar, Mekele, Asmara, Massawa, Jimma, Wolaita Sodo). Subsequently it will be extended to other towns.

In 1987/88 the estimated cases in these clinics will be 49,000 of gonorrhoea, 12,000 of syphilis, 11,000 of chancroid, 6,000 of lymphogranuloma venereum and 11,000 of other STD's including trichomoniasis.

For HIV prevention and control to be effective the STD control programme should be supported.

The approved plan makes provision for laboratory diagnosis of all these conditions and management according to WHO guidelines.

To enable assessment of this system for AIDS control a patient register must be maintained in each clinic with details of age and sex of patient, duration of symptoms before seeking treatment, result of laboratory test, treatment given and result of test of cure.

Following counselling, all STD patients should be tested for HIV infection during one month each year (see 4.1.1.2).

A health promotion programme should be conducted in the 13 towns stressing the indications for seeking immediate testing for STD's viz. genital symptoms, unprotected exposure to a new sex partner or identified STD in a sex partner (see 4.4.1.2).

B. Targets

By April 1988 the DAC should request a donor agency to conduct a feasibility study for strengthening STD control.

An assessment of the above activities should be included in the DAC's annual reports.

By October 1988 the plan should be implemented in the 13 towns. (Stage I).

By June 1989 the plan should be extended to include all clinics in at least one town of each region. (Stage II).

By June 1990 the plan should be extended to include all clinics in at least two towns in each region. (Stage III).

By June 1991 the plan should include all health centres. (Stage IV).

By October 1988 The health promotion programme should commence in the 13 towns and in all other towns 6 months after introduction of the plan to clinics in that town.

C. Evaluation

6 months after the commencement of the plan in each clinic (March 1988 for the initial 27 clinics) the DAC should conduct a field evaluation of clinic performance. By direct observation, clinical specimen collection and laboratory interpretation for 5 patients with indicators of each of the 5 common STD's (gonorrhoea, syphilis, chancroid, lymphogranuloma venereum and trichomoniasis) should be monitored (i.e. 25 patients in all). The appropriateness of therapy should also be assessed.

The duration of symptoms, the follow up rate and treatment success for each of the 5 diseases should be assessed from the patient register. This same assessment should be conducted 9 months after the commencement of the health promotion programme when the data for the preceding 6 months should be reviewed in the DAC's annual report.

4.2.2 Objective: Decrease transmission by blood transfusion

A safe system of blood transfusions, available on vital indications, is an important component of AIDS control.

4.2.2.1 Strategy: Assess blood transfusion activities and services currently available

A. Method of implementation

In the Short Term Plan (STP) for AIDS control provisions are made for HIV screening equipment for the five major blood banks, listed in Annex 5.2, and for training of their staff.

As part of its initial activities the DAC should make an assessment of the actual capability for screening of blood for transfusions.

B. Target

By February 1988 the DAC should have made a detailed assessment of the existing blood transfusion services in Ethiopia.

C. Progress indicator

A report with a status analysis as above should be included in the first quarterly report from the DAC to the MOH.

4.2.2.2 Strategy: Restrict the overall number of transfusions

Even after the establishment of an effective screening system for all blood for transfusions the risk of HIV transmission through blood cannot be totally excluded.

In order to minimize the risk it is consequently necessary to restrict the overall number of transfusions to a necessary minimum.

The planned expansion of BTS in Ethiopia (see Annex 5.2) should be guided by a reappraisal of the indications for blood transfusions and a needs assessment, based on an evaluation of the incidence of diseases and emergencies, requiring treatment with blood.

A. Methods of implementation

The present indications for blood transfusions and the current number of transfusions countrywide should be accurately assessed through an examination of patient records from all centres, involved in blood transfusions.

For planning purposes a rough estimate of the projected needs for blood transfusions at the planned NRCA centres has been made (see Annex 7.1).

This rough estimate of the projected needs should be reassessed by the DAC on the basis of calculations of incidence rates for diseases and emergencies, requiring blood transfusions.

When appropriate the use of fluids other than blood for emergency treatment should be promoted.

Plasma, normal saline and lactate solutions are effective and cheap alternatives to blood and blood products in some situations. Information of this nature should be included in the above list by the DAC.

B. Targets

By July 1988 the DAC should have elaborated a review of the present indications for blood transfusions in health institutions in the country, based on examination of patient records.

By July 1988 the DAC should have elaborated an estimate of the projected needs for blood transfusions, based on a list of such conditions and emergencies, requiring this type of treatment, and on an estimate of the projected incidence of these conditions and emergencies in the country.

C. Progress indicators

A review of the level of attainment of the above targets should be included in the annual report by the DAC by December 1988.

4.2.2.3 Strategy: Exclude high risk donors

A. Methods of implementation

In order to keep the costs of screening blood donations at a minimum level, the feasibility of excluding donors through completion of a questionnaire prior to donation should be examined.

The DAC in cooperation with the NRCA should make an evaluation of risk factors, associated with HIV transmission in Ethiopia. Such risk factors might include the following: previous history of STDs, history of multiple sexual partners, history of exposure through sexual contacts with members of high risk groups in known, endemic areas.

The DAC should revise the present registration form for blood donors and introduce it for use in all blood transfusion centres, train the staff in these centres and make use of the form for exclusion of candidate donors, assessed as being at risk in accordance with the information obtained through the form.

B. Target

By July 1988 the DAC should have elaborated revised forms for registration of blood donors and introduced those at all NRCA blood transfusion centres in the country.

C. Progress indicator

An assessment of the level of attainment of the above target should be included in the quarterly report from the DAC by June 1988.

4.2.2.4 Strategy: Provide effective HIV screening of blood

As mentioned above (section 4.2.2.1) and listed in Annex 5.2 blood transfusion services in Ethiopia are rendered at five NRCA institutions and in addition at the majority of 81 hospitals. None of these centres presently have access to HIV screening equipment.

As part of the implementation of the short term plan for AIDS control the five NRCA centres will be equipped with ELISA readers. Confirmation of positive tests may be performed by the NRIH in Addis Ababa.

The above measures are considered sufficient in the short term. Additional investments in screening equipment and training of staff must be made in order to secure effective HIV screening at the new blood transfusion centres, planned by the NRCA (see Annex 7.1).

Adequate facilities for blood drawing, handling and storage of blood are included.

It is suggested that blood donations are confined to the eleven NRCA blood transfusion centres, distributed over the country, wherever possible, and that blood donations outside of these facilities, where appropriate screening cannot be made, are discouraged except on vital indications.

A. Methods of implementation

The six planned NRCA blood transfusion centres should receive technical equipment for ELISA testing of all blood, donated at the centres. Confirmation by means of Western Blot should be referred to the NRIH in Addis Ababa.

Laboratory and maintenance staff at the planned centres should receive training through seminars.

B. Targets

By January 1989 all six planned NRCA blood transfusion centres should be equipped with ELISA readers and necessary additional technical equipment in order to enable them to perform HIV screening of donated blood.

By January 1989, 12 laboratory technicians and 12 members of the technical staff at the six planned NRCA blood transfusion centres should have received training in screening of blood for HIV and maintenance of the technical equipment.

C. Progress indicators

The level of attainment of the above targets should be described in the annual report by the DAC by January 1989.

4.2.3 Objective: Decrease transmission by contact with blood and blood products

Safe practices should be established in laboratories, clinics and operating theatres in order to protect health workers and give them confidence in handling patients with HIV infection.

Likewise traditional midwives must be protected against HIV transmission through contact with infected placentas and other material during home deliveries.

4.2.3.1 Strategy: Ensure safe blood drawing, laboratory and theatre practices

All health workers should receive information on known modes of transmission for HIV and on potentially hazardous procedures. They should be trained in sterilization techniques, the use of protective equipment and safe handling of blood and blood products. This training should be integrated in the training seminars, planned for health workers (see section 4.4).

Protective equipment such as gloves, aprons, disinfectants and accessories should be supplied to all facilities on a regular basis.

The DAC should make a needs assessment and cooperate with the Central Medical Store in order to secure a regular supply of protective equipment and disinfectants.

Sterilization should be provided wherever a hazardous activity takes place so that waste collection and disposal involves no risk. In practice cleaners and waste collectors should be protected, especially against needlestick injuries, through the provision of protective equipment. All waste from a health facility should be disposed of safely, i.e. burnt or buried in a deep, protected refuse pit.

B. Targets

By January 1989 all health workers should have received information on potentially hazardous procedures in health facilities and be trained in sterilization techniques, the use of protective equipment and safe handling of blood and blood products as part of the health workers training seminars (See section 4.4 and Annex 7.2)

By January 1989 a system for provision and regular supply of protective equipment (gloves, aprons, disinfectants) to all health facilities should have been established by the DAC.

By January 1989 equipment for sterilization of reusable equipment should have been provided to all health facilities.

C. Progress indicators

At analysis of the level of attainment of the above targets should be included in the annual report from the DAC by January 1989.

4.2.3.2 Strategy: Ensure safe practices among traditional birth attendants

In Ethiopia approximately 90% of all deliveries take place at home and with the assistance of a traditional birth attendant (TBA).

The TBAs, through their repeated exposure to blood and other body fluids during delivery, will be at high risk. It is therefore important to secure safe practices among these traditional health workers.

A. Methods of implementation

TBAs should receive information and training in safe handling of the placenta and other potentially contaminated material during delivery as part of their training. The DAC should ensure that this training component is integrated in the TBA training curriculum and in the planned health educational seminars for special target groups (see section 4.4).

The feasibility of providing TBAs with gloves and disinfectants through the local health facility should be assessed.

B. Targets

By January 1989 the DAC should have secured an integration of training components on safe handling of the placenta and other material in the TBA training curricula.

By January 1989 training of TBAs at the planned health educational seminars (see section 4.4) should have covered the areas of safe practices during assistance to deliveries.

By January 1989 the pros and cons of providing gloves and aprons to TBAs should have been assessed and a policy in this respect formulated.

4.2.4 Objective : Decrease transmission by injection and other skin piercing practices

4.2.4.1 Strategy : Reduce injections by unauthorized practitioners

Apart from health/medical personnel working at government and private medical institutions there is an unknown number of untrained and unauthorized persons, who perform injections. This practice has potential to spread HIV.

A. Methods of implementation

A survey of the general population should be conducted to establish the extent of these unauthorized services and major medications which are used by this group.

A message informing the population on the risks involved when injections are performed by unauthorized practitioners should be included in health education material.

Sufficient drugs and injection equipment should be provided to medical institutions to meet their daily needs.

A directive that syringes and needles should be kept in safe places, and that used syringes and needles should be properly destroyed, should be included in the training material for health personnel.

The law, prohibiting unauthorized injections should be enforced.

B Targets

By July 1988 the studies on the above practices in selected regions should be completed.

By October 1988 the necessary information for medical personnel and the public should be included in health education material.

C. Progress indicators

The level of awareness of medical staff and the public regarding the risks related to unauthorized injections should be assessed through a survey by the DAC .

4.2.4.2 Strategy : Ensure sterility of injection and other skin piercing instruments

Nearly two million injections are being performed annually by the staff of The Expanded Programme on Immunization (EPI). The usual practice is to change the needle but not the syringe for every subsequent injection. This practice represents a potential threat in immunization of adults.

In the TB control programme in some instances streptomycin is injected to several persons by the same syringe.

A. Methods of implementation

The current needs for syringes, needles and sterilization equipment of the programmes which use injections as major prevention and treatment methods, should be assessed.

A stable supply and replenishment of injection and sterilization equipment should be ensured.

An item on sterilization technique should be included in the training materials designed for health personnel.

B. Targets

By July 1988 the need for syringes, needles and sterilization equipment by the various programmes should be calculated.

By January 1989 an adequate supply system should be instituted.

By October 1988 training material on sterilization techniques should be distributed.

4.2.4.3 Strategy : Prevent transmission through skin piercing instruments used by traditional healers

Scarification practices occur in various parts of the country. No precise information is available on the type and extent of these practices.

A. Methods of implementation

Studies on traditional scarification practices among major ethnic groups should be conducted.

The potential risk of these practices for transmission of HIV in terms of the instruments used, frequency of scarification by the same instrument and cleaning between scarifications should be assessed.

B. Target

By July 1988 the study on traditional practices and their potential risks should be completed.

4.2.5 Objective : To decrease transmission from mother to child

4.2.5.1 Strategy : Reduce mother to child transmission by preventing pregnancy in HIV positive women

A. Methods of implementation

Counselling and information on pregnancy prevention for HIV positive women should be an integral part of all screening programmes (see Annex 7.2)

As part of the counselling process a method of contraception should be agreed upon and either provided by the screening service or the Family Guidance Association (FGA) or other referral service.

B. Targets

By July 1988 pregnancy prevention information on HIV for positive women should be included in all screening activities.

C. Evaluation

In all screening programmes a register should be kept of all seropositive women and the method of contraception to be used. All these women should be reassessed 6 months and 12 months after initial counselling and their contraception and pregnancy status recorded at this time. The DAC should collate this information as part of its national surveillance and include it in its annual report.

4.3 Improvement of diagnosis and Management

4.3.1 Objective: Improve Diagnosis

4.3.1.1 Strategy: Adapt WHO diagnostic criteria for local use

The clinical criteria established by the WHO should serve as a basis for clinical diagnosis, but it may not be sufficiently specific for use in Ethiopia. Furthermore for meaningful surveillance the mechanism of diagnostic confirmation must be clarified.

A. Method of implementation

This issue should be resolved by a meeting of experts convened by the NHCA.

This committee should decide on:

1. Tentative diagnostic criteria. These criteria may include assessment for the most common differential diagnoses encountered in Ethiopia.

Syndromes are reported from various parts of Ethiopia, which might, at least partly, cover manifestations of AIDS.

2. Whether patients with tentative diagnoses made at the health centre or lower level should be confirmed by a Regional Medical Officer or a member of the DAC mobile team for more expert, clinical assessment, and preferably for HIV testing.

After appropriate approval, the findings of this committee should be expressed as concisely as possible to enable dissemination to all health workers.

B. Target

By February 1988 this committee should be appointed and agree on tentative diagnostic criteria.

A review of the Ethiopian case definition and diagnostic process should be made by January 1989.

4.3.1.2 Strategy: Strengthen clinical diagnostic skills of health workers

A. Methods of implementation

Training for existing health care workers must consider the specific roles of doctors, health officers, nurses, community nurses, sanitarians, health assistants (HAs), CHAs and TBAs.

For all health workers training will involve discussion of the diagnostic process outlined in 4.3.1.1 and health education outlined in 4.4.1.5.

For diagnosticians (doctors and nurses) additional training should involve clinical tutorials with examination of AIDS patients where possible.

Detailed health educational and clinical training for current students should be introduced into the curriculum at all health worker training institutions (3 medical schools, 3 technician schools, 5 nursing schools, 14 HAs schools and 45 centre for CHAs and TBAs.

B. Targets

By April 1988 diagnostic seminars should be completed for the medical staff of hospitals at regional level.

By August 1988 general seminars for health workers should be completed.

By October 1988 HIV training should be incorporated into all health worker training curricula.

C. Progress indicators

Regional medical officers should be responsible for notifying the Department of AIDS Control when training is completed within the region. Within 3 months of completion of training in a particular region, a member of the DAC should visit a randomly selected health centre and 2 related health stations and interview all staff to assess the health workers compliance with the outline of the seminar.

Health institutions should forward copies of their training curricula to the NHCA, when HIV training has been included.

4.3.2 Objective: Improve individual management

Currently in Ethiopia cases of AIDS have not been identified but carriers of HIV have been recognized. The number of AIDS cases will undoubtedly increase in the future. In the absence of effective, curative treatment, patient management must concentrate on the maintenance of an optimal quality of life.

4.3.2.1 Strategy: Develop guidelines for individual management in various settings

The optimal management of patients with AIDS may vary by ethnic, socio-cultural and religious groups of the population of Ethiopia. Guidelines for patient management should therefore take such characteristics into account. Generally institutionalized care and the use of modern drugs for treatment of AIDS patients should be limited and alternative types of care should be identified and supported by the DAC.

A. Methods of implementation

The DAC should elaborate treatment protocols and guidelines for optimal patient management in various settings. The protocol should define the optimal period for initial, institutionalized treatment. This initial phase serves the purpose of establishing correct diagnosis and reporting and of counselling the patient and her/his relatives.

The protocol should define a limited range of modern drugs, which may be used for palliative/symptomatic treatment of opportunistic infections.

Following the initial phase of treatment the patient should be referred (not dismissed) to alternative care.

The type of care may vary according to local characteristics as mentioned above.

Alternatives may be care in the extended family or clan setting. The system of traditional health care should be actively involved in the treatment of patients with AIDS in Ethiopia. The treatment protocols may suggest an involvement of traditional healers and the use of traditional, herbal drugs already in the initial phase of care in a health facility.

Traditional healers should be called upon to administer treatment to patients in the extended family/clan setting.

The Community Health Agents (CHAs) should play a prominent role in the supervision and management of patients care in the community, and should collaborate closely with the traditional healers.

The trained Traditional Birth Attendants (TBAs) should be called upon to participate in the care of mothers and children with symptoms of AIDS. Small grants should be made available to the relatives of AIDS patients to cover expenses such as soap, other hygienic material and herbal drugs, necessary for home care.

Supervision and support to the patient and his/her relatives as well as supply of hygienic material from the nearest health facility, should be the responsibility of the local CHA.

B. Targets

By January 1990 guidelines and treatment protocols for various ethnic groups should be elaborated by the DAC, introduced and discussed with all health workers during their training seminars (see 4.4).

By January 1990 various alternatives for active involvement of the system of traditional health care and the use of traditional herbal drugs for treatment of AIDS patients should be investigated and discussed with traditional health workers in the course of the information- and training seminars, described under section 4.4.

By January 1990 a proposal, including a budget, for the establishment and administration of small funds at the district level to cover cost for soap, other hygienic articles and herbal drugs, should be elaborated and submitted to the MOH by the DAC.

4.3.2.2 Strategy: Maintain optimal quality of life

AIDS is an incurable disease and all efforts should be focused on the prevention of HIV transmission and, in case prevention fails, on the maintenance of an optimal quality of life of the AIDS patient.

A. Methods of implementation

All modern and traditional health workers should receive training in the counselling of AIDS patients and their relatives as part of the training seminars, described in section 4.4

Guidelines for counselling of HIV positive individuals and of AIDS patients and their relatives have been elaborated by WHO. These guidelines should be adjusted to Ethiopian conditions and used for the training of health workers.

The local representatives of the various religious communities in Ethiopia (priests, monks, nuns and clergymen) may play an important role in the counselling and spiritual care of AIDS patients and their relatives.

These groups should be actively involved in various aspects of care through participation in training seminars and continuous communication with the local CHA.

B. Targets

By January 1989 all health workers (modern and traditional) should have received training in counselling and care of AIDS patients after their return to their community.

By January 1989 representatives of the various religious communities in Ethiopia should have received similar information as part of the seminars for secondary target groups, described in section 4.4.

4.4 Information, Education and Communication

4.4.1 Objective: Strengthen information, education and communication

4.4.1.1 Strategy: Provide information to the general population on the transmission of HIV

The STP contains a strategy for informing the public. The NTF has utilized the mass media (press, television and radio) to address this objective. A cohesive programme coordinated centrally within the MTP would be appropriate if 40% penetration of HIV transmission knowledge is not demonstrated by the action taken in the STP.

A. Method of implementation

A survey of a representative sample of Ethiopians (urban and rural) should be conducted to establish the level of awareness of HIV transmission.

A coordinated public education programme should be designed if less than 40% penetration is demonstrated by the survey,

All materials involved in the public education programme should be prepared in advance.

A 4 week coordinated public information campaign should be planned and implemented, to begin the continuous process of keeping the population informed.

Provide radio and television stations with prepared 1-2 minute updated fillers/triggers to be used subsequent to formal campaign. Provide press with prepared panels for insertion.

B. Targets

By April 1988 KAP survey should be completed.

By April 1988 all health education material for the public, including television and radio scripts and newspaper panels should have been designed.

By July 1988 have all audio/TV fillers produced and all materials printed.

By October 1988 have all materials distributed to the appropriate levels within the health service and to kebele level within mass organizations.

October 1988 a 4-week campaign should have been launched.

C. Progress indicator

An assessment of the above targets should be included in the quarterly reports of the DAC.

4.4.1.2 Strategy: Provide information to target groups with high risk behaviour

The high risk groups in Ethiopia have been discussed in Annex 6. Although the content of information messages to these groups will broadly be the same, the methods of delivery of this information should be designed with direct reference to their heterogeneous lifestyle.

A. Method of implementation

A matrix of high risk groups and appropriate methods of reaching them should be constructed. An infrastructure of supply of information to these groups should be created, where normal channels are ineffective or do not exist. Survey how high risk groups receive information (general/health) currently.

Where risk can be attached to specific employment types e.g. truck drivers, educational/informational materials aimed at employers as well as high risk group members should be designed and distributed. Distribution via the political structures of mass organizations should be tried and evaluated.

Where registers of prostitutes exist, these could be used to facilitate communication and health education.

Seminar on HIV transmission should be arranged for all 1st year university and college students on enrollment.

B. Targets

By April 1988 have an established list of all employers of truck drivers who could be termed long distance (i.e. trips which involve overnight stops in another town or on route) by March 1988.

By April 1988 have established the approximate numbers in each high risk group.

By April 1988 all IEC materials specifically targeted at high risk groups should be designed.

On enrollment in 1988 students seminars should commence.

By July 1988 all IEC materials for high risk groups should be produced.

By July 1988 distribution channels for high risk groups should be defined.

By October i.e. at same time as education campaign for general public is conducted, IEC materials for high risk groups should be distributed.

C. Progress indicator

An evaluation of the programme will relate to numbers of different information packages designed, their number distributed and how many channels of distribution have been established. The DAC quarterly report should describe the level of awareness of HIV transmission among high risk groups.

4.4.1.3 Strategy: Provide information to community leaders

A. Methods of implementation

Links should be established between NHCA and community leaders e.g. the organization of Ethiopian Orthodox Church clergy, Protestant Church clergy organizations, Moslem leaders organizations and the leaders of all mass organizations. A series of seminars for identified community leaders should be run at regional level. The possibility of policy statements from Head of state and every ministry should be explored. Sportsmen, prominent musicians and actors should be canvassed for public support. Seminars aimed specifically at broadcasters (TV and radio) and journalists should be run.

Community leaders should be supplied with IEC materials and encouraged to feed back information from the population to the NHCA.

Badges for community leaders "I am helping Ethiopia fight AIDS" should be made, so that their constituents/parishioners know of their involvement in national campaign. Lists to community leaders of infrastructure of "who to contact" and "where to go if (you) think you may be infected" should be supplied.

B. Targets

By April 1988 community leaders in each region (political and religious) should be identified.

By September 1988 seminars with political community leaders in each region should be held.

C. Progress indicators

The annual report of the DAC should record the number of seminars held, number of participants and the feed back received and impact of the information campaign on community leaders.

4.4.1.4 Strategy: To educate school children

Teachers of children in grades 7 through 12 can provide a valuable tool not only in the education of all school children

but as people of some standing within their communities they can also be a source of information for adults. For this reason the training of teachers in all aspects of AIDS control, transmission of HIV and high risk behaviour is crucial.

A. Methods of implementation

Current mechanisms for "in-service" training of teachers. Assess ability of health educators to train teachers. The ability of health educators to train teachers should be assessed with the cooperation/assistance from Ministry of the Education. Twenty-two (22) teachers from regions to be trained as trainers in Addis Ababa should be identified and recruited.

Training course for trainers (3 days), and 30 sets of training manuals for trainers, should be designed and produced. 1000 sets of abbreviated manuals for trainers to take back to region should be produced 14,000 summary sheets with reply paid card should be provided.

Approximately 1000 teachers country wide should be identified and recruited to come to regional centres for one day training by trainers. Manuals with instructions to take back to school and "train/inform" all other staff members should be distributed.

B. Targets

By March 1988 health education team suitable to train trainers should have been identified.

By June 1988 training course and trainers manuals (i.e. two manuals and summary brochure) should have been designed.

By July 1988 first level trainers from regions (22) and second level trainers should be identified.

By July 1988 trainers course in Addis Ababa.

By September 1988 organize and run regional training courses.

By August 1988, the 14,000 summary sheets should have been distributed to regional centres on a pro rata basis.

By October 1988, coinciding with IEC aimed at the general population, teachers should have trained colleagues and students.

C. Progress indicators

A component in each manual to be a stamped addressed return card to be signed by every teacher in the appropriate schools after they receive training by their colleagues and returned to the DAC.

4.4.1.5 Strategy: Educate health workers

There is a need for the education of health workers of all levels to achieve all of the objectives in the MTP for AIDS control and prevention in Ethiopia. Consequently the initiatives devised to meet the different types of educational input required should be coordinated under one cohesive strategy.

A. Methods of implementation

Areas within the undergraduate curriculum of all medical and health workers should be identified for education about HIV infection transmission and AIDS.

Curriculum inserts on HIV/AIDS for all undergraduate medical and health courses should be designed (see Annex 7.2).

Materials in support of curricular inserts should be produced and supplied to all training/educational establishments.

Current mechanisms for in-service training of all health practitioners should be assessed.

In-service modules on HIV/AIDS for different levels of health practitioners should be designed.

Where in-service provision is weak or sporadic a series of in-service seminars for all health workers should be organized.

Two way communication channels between all levels of health workers and NHCA should be established.

Medical health training sub committee of NHCA should be set up to coordinate all medical/health education and training.

B. Targets

By March 1988 undergraduate curricula for all courses should have been designed.

By June 1988 curriculum support materials should be designed and produced.

By start of academic year 1988/89 curricular material should have been introduced into all courses.

By June 1988 in-service modules should have been designed and produced.

By June 1988 seminars at regional and district level for each level of health worker should have been organized.

By September 1988 regional seminars should have been run.

C. Progress indicators

Monitor implementation of each phase of education/training.
Monitor diagnosis of AIDS pre and post training services for practitioners.

Survey KAP of all health workers in last quarter of 1988 and review in annual report by DAC by January 1989.

4.4.1.6 Strategy: Develop optimal source, channels and content for communication

A. Methods of implementation

A sub-committee of NHCA should be given responsibility for assessing quality and content of all educational and informational material produced, and establish criteria for design.

A design team for all literature and mass media should be established and should include writers/broadcasters as well as graphic designers/artists and copywriters.

The scope and capacity of Health Learning Materials Production Centre (HLMPC) should be developed to act as materials production of NHCA.

The current network of regional health education officers should be strengthened. Vehicles, drivers, maintenance and fuel allowance should be provided to ensure health education penetration to district and sub-district levels and to the rural communities.

Links between NHCA and Educational Materials Production and Distribution Agency (EMPDA) should be established to coordinate introduction of appropriate AIDS information with Ethiopian literacy campaign.

A feasibility study for the introduction of a professional health education course in one of the higher education establishments in Ethiopia should be conducted by NHCA.

New channels of distribution and communication created for AIDS programme should be integrated into current networks in Ethiopia.

B. Targets

NHCA and sub-committees should be established.

By February 1988 the design team should be convened and briefed.

By April 1988 the production facility equipped and operational.

By June 1988 distribution channels should have been analyzed, and strengthened.

By July 1988 all regional health education departments should be equipped with a vehicle, driver and a budget for fuel and maintenance.

By July 1988 feasibility study for provision of professional health education course within higher education in Ethiopia should be started.

4.5 Evaluation of the Programme

4.5.1 Objective: Evaluation of programme development

Current evaluation of the efficiency and effectiveness aspects of the various programme strategies are carried out by the DAC. The results of these evaluations should appear in the DACs quarterly and annual reports.

4.5.1.1 Strategy: To evaluate overall programme efficiency by external bodies.

An external evaluation of the efficiency and effectiveness of the NHCA should be carried out by an external body.

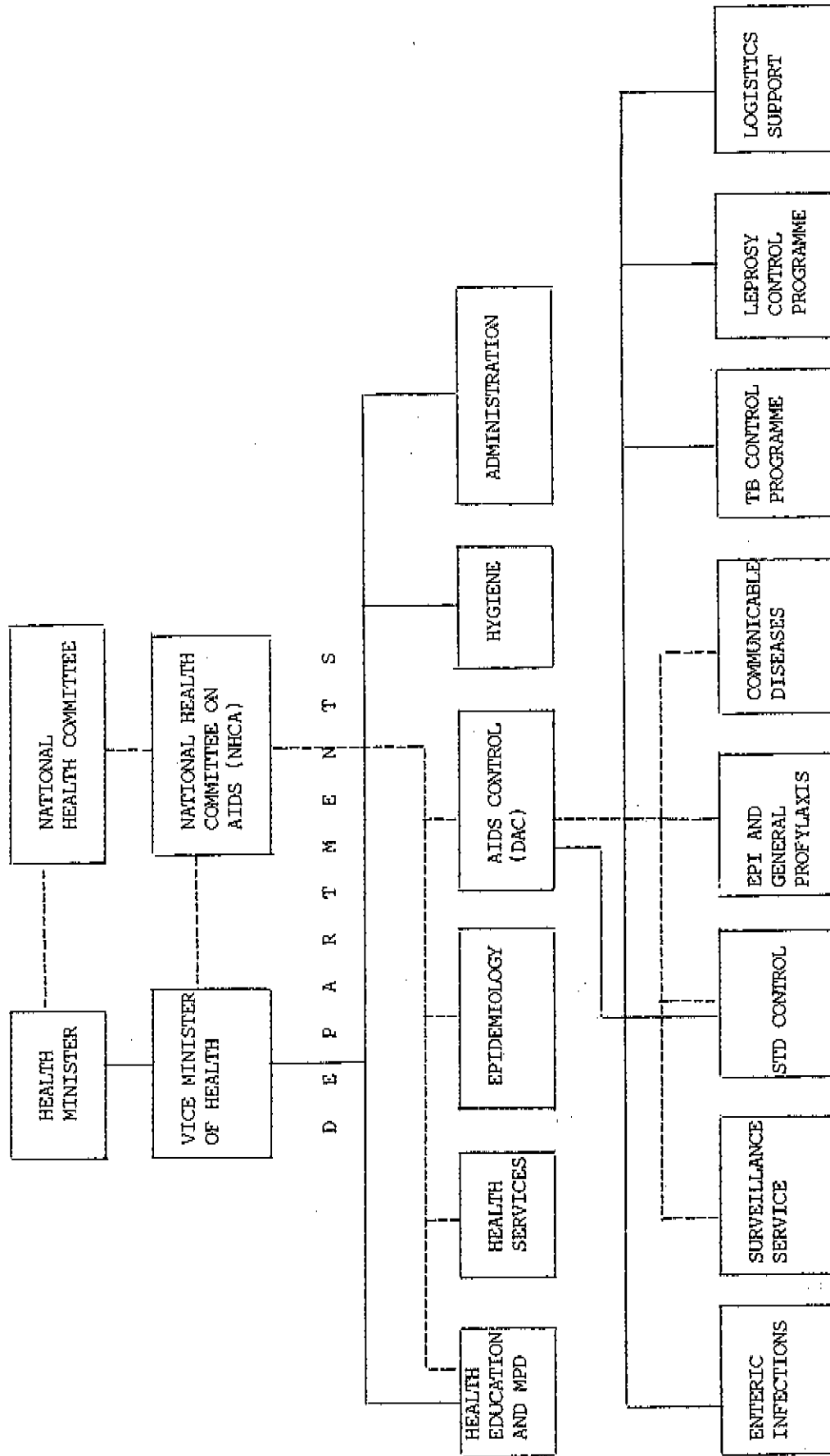
A. Methods of implementation

By the end of the 2nd and 5th years of the programme implementation, a joint MOH and WHO review based on field assessment should be carried out and the report submitted to the Minister.

Annex 1List of members of the National Task Force (NTF) for the prevention and control of AIDS

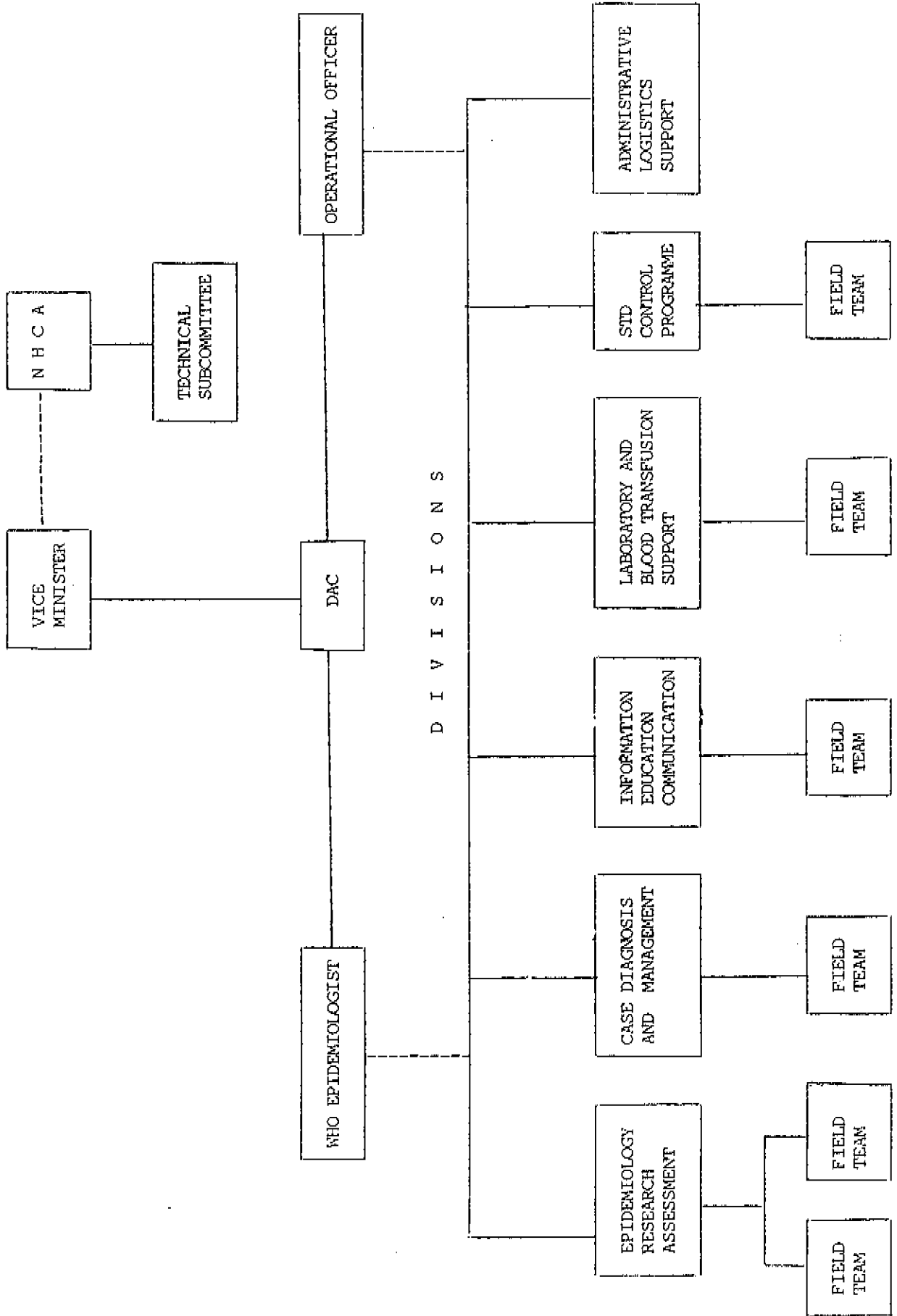
1. Dr. Debrework Zewde - Immunologist - Chairperson
2. Dr. Getachew Gizaw - Epidemiologist - Secretary
3. Dr. Tibebe Yemanbirhan - Veneriologist - Member
4. Dr. Milkias Shamebo - Hematologist - Member
5. Dr. Youhannes Negesse - Pathologist - Member
6. Com. Lakew G/Silasie - Virologist - Member
7. Com. Hailegnaw Eshete - Epidemiologist - Member
8. Com. Mohammed Yesuf - Public Health Officer and Head of STD Control Division - Member

EXTERNAL STRUCTURE OF NATIONAL AIDS CONTROL PROGRAMME



— LINE OF COMMAND
- - - LINE OF COOPERATION

INTERNAL STRUCTURE OF NATIONAL AIDS CONTROL PROGRAMME



Annex 4Lines of responsibility and function of the National Health Committee on AIDS (NHCA)

The existing National Task Force (NTF) includes technical specialists only. In order to establish effective cooperation with various departments of the Ministry of Health as well as with other ministries and agencies involved in implementation of the programme this body should be extended to include representatives of the parties listed below and renamed the National Health Committee on AIDS.

Organizations whose representatives should be included in the Committee:

All departments of the Ministry of Health
Ministry of Information
Ministry of Education
Ministry of Labour and Social Affairs
Ministry of Agriculture
Ministry of Trade
Ministry of Transport
Defence Ministry
Religious organizations
Women's Association
Youth Association
University administration

The agencies listed represent both the expertise and channels for promotion of health education. The Committee will continue to serve as an advisory body to the vice minister of health on subjects related to planning and implementation of the programme. Similar committees will be formed at the regional level.

Considering the urgency of the AIDS problem the control programme should be placed at departmental level (Annex 2). Being directly supervised by the vice minister of health the programme would work in close cooperation with the departments of Health Education and Manpower Development, Health Services and Department of Epidemiology.

The Department of AIDS Control (DAC) will be headed by a member of the NHCA who will be assisted by a WHO epidemiologist and an operational officer. Five divisions of the department will participate in planning of operational activities, training of field staff, research and assessment. The administrative division will provide financial and logistics support.

Each technical division would include a technical officer, one or two technical assistants and co-opted personnel for specialized activities as required. Five teams will be formed to carry out field activities.

Annex 4Proposed staff of the Department of AIDS Control (DAC)

Technical officers	5
Technical assistants	6-10
Accountant	1
Secretaries	5
Drivers	6
Clerks	4
Storekeepers	2
Guards	2

Proposed equipment for the DAC

Office furniture	-
Photocopying machine	2
Refrigerators	3
Personal computer	1
Typewriters	5
Duplicating machines	2
Telephones	5
Stationery	-
Vehicles	6

Annex 5

5. LIST OF PREVIOUSLY INITIATED CONTROL ACTIVITIES

5.1 Serosurveys (all conducted in Addis Ababa)

Year	Population	Number Tested	ELISA/WB positive	
			No	%
1984	STD Clinic prostitutes	171	1	0.6
1985	Military recruits	5000	-	-
1986	STD clinic prostitutes	60	4	6.7
1986	STD clinic males	70	1	1.4
1986	Healthy clinic patients	100	-	-
1986	Prostitutes at Rehabilitation Centre	149	4	2.7
1987	Lumpen groups	202	8	4.0

Annex 5.2

Laboratory and Blood Transfusion Services

A. Laboratory services

1. National Research Institute of Health (Addis Ababa)

This is the central reference laboratory for Ethiopia. It conducts research, teaching of all senior and junior laboratory technicians, and diagnostic services. Departments include Bacteriology, Immuno-hematology, Virology and Training and Regional laboratory services. The present immuno-electrophoretic capability should be able to cope with Western Blot confirmation of positive ELISA tests from all screening facilities.

2. Regional Public Health Laboratories

The most sophisticated regional facility is at Asmara with others at Awassa, Jimma, Dessie and Nekemte. Regional laboratories are planned for Dire Dawa, Bahr Dar and one other centre. These laboratories are directed by a biology graduate and can perform a range of culture and serologic tests. Most of the ELISA diagnostic and serosurvey tests would be performed in these laboratories.

3. Health Centres

All health centres have a small laboratory, usually with one technician but sometimes more. These laboratories have a microscope and centrifuge and mainly perform smear examination of stools, urine, wet preparations for trichomonas or candida and stained discharges (.e.g. Gram stain). RPR tests could also be performed. These centres could facilitate blood collection with separated serum being forwarded to regional laboratories for HIV, syphilis and Hepatitis B testing.

4. Other Laboratories

All other government hospitals, the Armauer Hansen research institute, universities and non-government hospitals have laboratories of varying sophistication. These laboratories are directed to the needs of the institutions. However they can be of help in blood collection and separation. Besides, some regional hospitals have relatively adequately equipped laboratories which can easily be upgraded by providing ELISA equipment and other accessories.

Annex 5.2B. Blood transfusion services available in Ethiopia by 26 May 1987

Estimated annual number of blood transfusions: 17,000

Location	Number of Trained Staff	Present Level of blood transfusions	Equipment for HIV testing
National Red Cross Associations (NRCA) in:			
Addis Ababa	10	10,000	None
Asmara	1	2,000	None
Jimma	3	1,000	None
Harar	3	1,000	None
Yirgalem	1	2,000	None

Blood transfusions are occasionally given at the following hospitals:

Location	Type of hospital	Equipment for HIV testing	Number of hospitals
Addis Ababa	Central hospital	None	4
Regional capital	Regional/zonal hospital	None	13*)
Rural centres	Rural hospital	None	64

*) Four of the regional/zonal hospitals are served by NRCA BTS.

Annex 6

Tentative lists of risk groups in Ethiopia
Classification of population groups and geographical areas in
relation to the relative risk of transmitting HIV

Data on sexual behaviour and the spread of STDs in Ethiopia is scarce and cannot be extrapolated to the general population. Descriptions of the population groups in terms of potential risk of HIV transmission is based on experience accumulated in other countries and supported by several serosurveys carried out in Ethiopia. The recent surveys indicate that HIV is present in various population groups in Ethiopia. Antibodies to HIV were found among prostitutes, among males attending an STD clinic and among male day wage workers. Neither intravenous drug use nor homosexual practices are recognized risk factors in Ethiopia. Based on these data which indicates that the major mode of HIV transmission is heterosexual, various groups of the population and geographic areas were tentatively classified in relation to the risk of HIV transmission, as follows:

1. Population groups

- a. The highest risk groups include prostitutes (institutionalized and unrecognized), bar maids and bar servants (both women and men) and STD patients. (TB patients are not considered a high risk group for transmission, but are included in this group as markers for HIV prevalence.)
- b. The high risk group includes truck drivers travelling on principal roads of the country, and other occupational groups whose profession requires frequent migration, including military servicemen. This group may play an important role in the interurban transmission of the virus. Lumpen individuals can also be included in this category.
- c. Some groups of men and unmarried women aged 15-40 years may represent a medium high risk of HIV transmission.

2. Geographic areas

Frequent multipartner sexual contacts tend to be more common in areas of high population density. Areas of increasing population and routes of population mobility are also sites of sexual activity favouring HIV transmission.

Consequently, priority areas for investigating HIV infection include the urban areas of Asmara, Massawa, Bahr Dar, Assab, Addis Ababa, Dessie, Debre Markos, Nekemte, Mekele, Jimma, Gimbi, Awassa, Gondar, Metu, Nazareth, Awash, Debrezeit, Akaki, Dire Dawa, Yirgalem, Arba Minch, Doukem, Awash Harar, Moyale, Goba, Robi and Asella; and all settlements along along the roads: Assab-Addis Ababa, Harar-Addis Ababa, Moyale-Addis Ababa.

Annex 7.1Proposed Control ActivitiesSerosurveys, laboratory and blood transfusion services

Timing	Population	Samples
October 1987 - April 1988	STD patients, 13 towns, 1 month	4,000
(Short term plan)	Other groups to be defined	1,000
September 1988 - December 1988	Complementary surveys	4,000
March 1989	Non-clinic sample	3,000
September 1989	STD sample	3,000
March 1990	Non-clinic sample	3,000
September 1990	STD sample	3,000
March 1991	Non-clinic sample	3,000
September 1991	STD sample	3,000
March 1992	Non-clinic sample	3,000
September 1992	STD sample	3,000

Blood transfusion centres

The list includes centres, planned by the NRCA in addition to already existing NRC centres (see Annex 5.2).

The projected need for blood transfusions to be performed at all centres by 1988: 40,000

Gondar
Dessie
Dire Dawa
Nekemte
Assab
Mekele

Annex 7.2Proposed Control ActivitiesInformation, Education and CommunicationBackground

The aim of IEC programmes is the modification of behaviours which are designated high risk and the maintenance of low/non risk behaviours. IEC programmes should not be seen as passive.

In the Ethiopian context IEC programmes are as much concerned with establishing mechanisms of implementation as with content and methodology selection.

Health education in Ethiopia was reviewed in 1985 as part of the Primary Health Care Review (WHO February 1985). From impressions gained in Ethiopia in May 1987 it would appear that there have been moves to improve the situation described within the PHC review but many reservations must still remain. At national level the structure for health education is planned to change. Currently health education is a Division within the Department of Health Education and Manpower Development within the Ministry of Health. The plan is to give Health Education, department status within the ministry (Annex 7). However the problems identified within the PHC review are still in evidence "delayed planning, inadequate budget and lack of trained staff". A reflection of this situation at the regional and district level is to be expected.

There are any number of models for health education from prevention to ecological but what is apparent is that from all available models a pragmatic process for health education will have to be adapted in the medium term. Methods of successfully intervening in high risk groups should be tried, tested and either modified or intensified. In the absence of adequate KAP data on sexual mores in Ethiopia, evaluation and refinement of methodology is a crucial step to achieve optimum effectiveness for the IEC objectives contained in the MTP.

Annex 7.2

Part 1

If we define non-risk behaviour as either abstention from sexual activity or sexual activity between adults who have always been mutually monogamous (WHO "Guidelines to manage and counsel sexually active persons) and exclude non-sexually active people then both of the objectives in 4.2.1 and 4.4.1 can be achieved by similar strategies. By providing information to the general public on the transmission of HIV, an essential activity is achieved which makes communication with specific high risk target groups easier.

The Ethiopian NTF have already utilized the mass media (television, radio and Press) in order to inform the general public on HIV and its transmission.

In order to assess the impact of this campaign a survey should be carried out amongst a representative sample of sexually active Ethiopians to establish the level of awareness of HIV transmission within Ethiopia.

These surveys should be carried in 17 cities/towns:

Addis Ababa	Dessie	Wolaita Sodo
Asmara	Bahr Dar	Assab
Harar	Gondar	Awassa
Nazareth	Mekele	Arba Minch
Dire Dawa	Massawa	Metu
Awash	Jimma	

Random samples can be selected with the help of the municipal political authority and each cohort should number at least 100 (one hundred) with one cohorts coming from each city/town.

In the rural areas there should be 10 sites weighted towards rural areas along the Red Sea Coast, Kenya Border and North of the country. Based on a health station two cohorts should be surveyed at 1, 10, 25 and 50 km from health centre. Each cohort should number at least 25 people. Health stations are chosen as a central focus for survey control in the expectation that they have to deliver health services to the rural communities. Health Stations should be identified in the following regions:

Bale	Arssi	Keffa
Gamo Gofa	Assab	Wollega
Sidamo	Tigray	
Hararge	Gojjam	

This plan will give a sample size of 1,300 urban dwellers and 2,000 rural people. The questionnaire should be simple, easily administered and designed to elicit the following information:

1. Level of awareness of AIDS as being incurable
2. Level of knowledge on AIDS transmission
3. Level of knowledge on high risk behaviour
4. Level of knowledge on low risk behaviour,
(abstention, mutual monogamy)
5. Level of knowledge on reducing high risk behaviour,
(reduction in sexual partners and use of condoms)

The data gathered by the survey should be analyzed to give a geographic distribution and the general level of awareness about AIDS within the Ethiopian population. Age/sex and urban/rural variation can also be assessed. Also from this data an indication of the levels of awareness of what constitutes high risk behaviour and low risk behaviour can be inferred.

The analyses will reveal the efficiency of the NTF public education initiatives. If the analysis reveals a less than 40% level of awareness of the dangers of HIV infection and its mode of transmission, then the implementation of a broad based public information campaign utilizing political and social structures as well as the mass media should be undertaken urgently. The campaign should be designed in advance so that all elements of the campaign begin at the same time and are programmed to reach all sections of the Ethiopian population over a four week period. The campaign design could have the following format.

Element 1. Direct access to the public via mass media + educational radio service

- a) television could expect to reach _____ million people or _____ % of population
- b) radio could expect to reach _____ million people or _____ % of population
- c) Press, newspapers/magazines etc. could expect to reach _____ million people _____ % of population

This element of the campaign should be designed using the integrated media approach.

	Week 1	Week 2	Week 3	Week 4
Television		_____	_____	
Radio				
Press				

Radio is the central core of this element of the campaign and radio coverage as with press and television must be planned in relation to peak listening times most popular programmes etc. Coverage should consist of both editorial i.e. in programmes solely about AIDS, or a section on AIDS in news or magazine type programmes, and specially designed public service announcements lasting no more than 60 secs be interspersed throughout all programming. A similar pattern to be used for television and press with special AIDS information panels being designed for the press and 1/2 minute AIDS fillers (i.e. to be used between programmes) produced for television.

If possible opinion leaders, folk heroes would give an added impetus to the campaign and present the right image i.e. AIDS can effect all people and that these messages are presented in the cause of "The good health of all Ethiopian people". All materials should be recorded or designed in advance of the overall campaign. At the end of the formal campaign radio, television and press should be continuously stimulated by updated press releases, TV and radio fillers throughout the remainder of the programme, i.e. monthly from DAC.

Element 2: Posters and leaflets

As with the mass media all posters and leaflets should be designed and printed in advance of the overall campaign and be delivered to main regional distribution centres in advance.

The posters and leaflets should be as pictorial as possible within the bounds of public good taste and cultural constraints. They should be simple and unambiguous. Distribution should be via the public health service to reach down to CHAs and TBAs and via the mass organizations. A message on the leaflet should be included "If your neighbours or friends cannot read, in the interest of health of All Ethiopian people, please read this leaflet to them.

Initially 500,000 leaflets should be printed.

National hospitals 5,000 per hospital	50,000
Local hospitals \$ 4 at 1,000 per hospital	84,000
Health centres 142 at 200 per centre	28,400
Health stations 2000 at 50 per station	100,000
Community Health Agents and TBA's 5,093x10	51,300
	<hr/>
	293,400
	<hr/>
Round up to	300,000

An additional 200,000 to be distributed via mass organizations (most efficient) to kebele level.

Posters should be displayed in every health institution

Government offices, post offices, banks etc.	5,000
Health institutions	5,000
Bus/railway stations	3,000
Kebele centre	6,000

The delivery and distribution strategy could be worked out by the Department of Health Education and Manpower Development at the Ministry of Public Health. The mechanisms of delivery should include all of the currently established means of distribution, not necessarily of printed materials, i.e. drugs, blood, equipment distribution sources be utilized. If gaps appear in the distribution strategy they must be recognized and alternative plans made, for example care organizations like the Ethiopian Red Cross society or the Ethiopian Family Guidance Association be utilized.

The objective of the overall campaign should be straightforward "to provide information to the general population on transmission of HIV and in so doing encourage and praise non-risk behaviour".

To evaluate the impact of the campaign a population survey similar to that described earlier should be carried out approximately six weeks after the official end of the campaign. If they feel that they could not at the present time predict a 40% coverage of the Ethiopian population of their current work, the campaign as outlined could be mounted without a precampaign population survey and this survey used as a post test to examine the efficiency of the proposed campaign.

Element 3: Distribution of posters and leaflets via all government ministries

Seek support from every government ministry and department, national and regional to establish if they would be prepared to give a copy of leaflet to every employee and to display posters.

The campaign to inform the general population of Ethiopia must obviously take into account the specific cultural, political and behavioral patterns within the country. Whereas it is beyond the competence of this mission to delineate the exact content of such a campaign, from impressions gained it can be suggested that most if not all from the following list could be included.

1. Sexual contact is the most significant means of transmission of HIV.
2. HIV is different from other STDs.
3. AIDS is fatal with no vaccine and no cure.
4. The more sexual partners the greater the risk.
5. Condoms can reduce the risk.
6. HIV can also be transmitted through blood.
7. Your illegal injector could give you more than an injection.
8. The unborn child at risk.
9. If you already have any other STD, get checked for HIV.
10. Mutual monogamy is your best protection

Annex 7.2

Part 2

Provide information to groups with high risk behaviour

Patients already infected with other sexually transmitted diseases are possibly the group with the highest risk of HIV infection. This is a heterogeneous group in composition so intervention should be designed for the setting. The other groups classified as high risk have different lifestyles and consequently it is recommended that each group be considered separately to assess the most appropriate IEC content and methodology. The following is offered as a model for consideration. In terms of evaluation, as the high risk groups are most likely to be targeted for serosurveys, result of these will give an accurate measure of IEC effectiveness.

High Risk Groups

Prostitutes

Health education content

- a. To differentiate HIV infection from other STDs i.e. there is no cure, AIDS is fatal.
- b. To give information on high risk behaviour and specify their own behaviour as high risk.
- c. Inform on the risks to children born to HIV positive mothers.
- d. Promote the use of condoms.

Health education methods

- a. Where prostitutes are registered or known give counselling via social workers, kebele leaders, women's organizers and STD staff in health institutions.
- b. Distribute condoms to prostitutes and inform where supplies may be obtained.
- c. Where areas of high prostitution is known ensure posters are prominently displayed

Focus of action

Bars, bus and railway stations, "red-light" districts, STD departments of all health institutions.

Evaluation

Monitor demand for condom supplies.
Record infection and reinfection of STDs at health institution.

Roadside hotels/bars staff both male and female

Health education content

As for prostitutes.

Health education methods

- a. Posters in hotels and bars with relevant information.
- b. Produce series of audio cassettes with modern music with HIV/AIDS messages after every musical piece. Distribute (sell?) to hotels and bars.
- c. Distribute and ensure adequate supplies of condoms in hotels and bars.

Focus of attention

Bars and hotels

Evaluation

- Monitor demand for condoms
- Monitor other STDs among hotel and bar staff

Truck drivers

Health education content

- a. Differentiate HIV infection from other STDs
- b. Give information on high risk behaviour and encourage self analysis of risk.
- c. Outline significance of introducing HIV infection to the home.
- d. Promote the use of condoms.

Health education methods

- a. Develop 'code of the road' leaflet for drivers in form of mock driving license and containing information outlined above
- b. Distribute via employers
- d. Make condoms available at depots and docks.

Focus of action

Work place, depots, docks, roadside hotels and bars

Evaluation

Monitor STDs in truck drivers

University/high school students

Health education content

As for truck drivers with exception of c.

Health education methods

- a. Information of HIV/AIDS should be included in all high school teaching from October 1988.
- b. University students given orientation lecture on enrollment for university. Given by member of regional AIDS committee.

- c. Poster campaign in all high schools and universities, "one test you don't want to pass" a graphic poster.
- d. Ethiopian youth organization and Red Cross youth organization leaders invited to regional health centre for orientation by regional health education coordinator.

Focus of action

Schools, colleges, universities and youth organizations

Evaluation

Monitor cases of STD in this group

Daily Wage workers

This high risk group is difficult to reach by traditional methods. Appropriate intervention methods will have to be devised with direct reference to the habits of this group in Ethiopia.

Men and unmarried women (20-40)

Health education content

- a. Differentiate HIV infection from other STDs i.e. no cure, AIDS is fatal.
- b. Define high risk behaviour.
- c. Encourage self analysis of risk behaviour
- d. Inform on the risks to children born to HIV positive mothers
- e. Promote use of condoms.

Health education methods

- a. The national campaign would in any event be heavily weighted towards this group.
- b. Encourage all sexually active people to have condoms available.
- c. The women's mass organization alerted to the dangers to children born to HIV infected mothers.

Focus of action

Urban, bars and restaurants, kebele, office, women's mass organization. Major sites of employment.

STD patients

Annex 7.2

Part 3

Teachers of children in grades 7 through 12 can provide a valuable tool not only in the education of all school children but as people of some standing within their communities. They also provide an alternative source of information for adults. For this reason the training of teachers in all aspects of AIDS control, transmission of HIV and high risk behaviour is crucial to ensure a continuing programme of education for future generations of school children and also to provide an alternative to health personnel for community enquiries about AIDS. The only viable model is a derivative of the percolation model. This model assumes that because of the skills possessed by teachers that once they have received training at a central location away from their school or college they will be well equipped to facilitate the same learning experience for their colleagues when they return to their schools. This will allow a rapid deployment of health education on AIDS from the centre to grassroots level. It is also efficient and cost effective (see Appendix 2).

It is proposed to design a 3-day training course for approximately 22 teachers who will train as "trainers". In the model there are several levels of training. The trainers will be trained centrally in Addis Ababa. They will return to their regions and with Education Ministry secretarial help at the local level recruit approximately 45 other teachers from schools within the region (exact number recruited will depend on size and number of schools in each region) who will come to a central focal point in the region and receive a 1-day training programme. They will then return to their schools and train their colleagues over 1 week on the materials they have received. In single teacher schools they can begin to teach students immediately.

This strategy if implemented will require close coordination and a major effort in design and production of materials. Evaluation can be built into the various manuals by the device of tear off reply cards which have to be completed by each trainee on

completion of training at each level. Schematically this will work thus:

Dept Health Education and Manpower Development

Identify health educator to train trainers
 Design and produce trainers manuals
 for 3 days course (30) and
 abridged version (1000) for
 trainers to take back to region
 Also design education protocol
 for trainers
 Produce 15,000 sheets with reply paid cards

Identify teachers in regions to come
 to Addis Ababa to train as trainers.
 With Ministry of Education help
 identify 1000 teachers from
 grades 7 through 12 to be trained
 regionally

Give 3 day training course to trainers
 in Addis Ababa

Organize 1 day training courses
 for teachers - distribute manuals.
 Teachers complete tear off card
 and post to Addis Ababa

Teachers return to schools and train
 colleagues and distribute summary
 sheets and reply paid cards
 Who each have card to return
 to Addis Ababa
 Commence teaching to school
 population

Trainers visit selected schools and
 assess effectiveness and report
 to Addis Ababa

Subsequent to this intervention the Ministry of Education should
 include HIV transmission and prevention module in the
 undergraduate training of all teachers. A derivative of the
 modules produced for health workers should be adequate for this
 purpose.

Equipment and supplies for the
 Regional health education departments:

Vehicles	15
Drivers	15
Maintenance/fuel allowances	15

Annex 7.2

Part 4

The need for coordination in the training and education of healthworkers has already been stressed. In order to achieve this, it is recommended that a series of modules be created, to cover all aspects of HIV/AIDS. These modules should be designed so that by combining certain modules the educational/training needs of all health workers can be accommodated. These modules could have the following structure.

Module 1

Background to AIDS

- a. The human retroviruses
- b. HIV
- c. Global situation re HIV infection and AIDS epidemic

Module 2

HIV infection/AIDS in Ethiopia

- a. Epidemiology of HIV infection
- b. Major strategies for HIV/AIDS control and prevention in Ethiopia

Module 3

Clinical information

- a. WHO diagnostic criteria plus additional diagnostic criteria for Ethiopia as these become known
- b. Case finding criteria
- c. Case reporting system operation and management

Module 4

Blood safety 1

- a. Blood sample taking, safe techniques for health workers
- b. Serosurvey field workers and blood transfusion staff, safety procedures in handling and transporting blood and blood products

Module 5

Blood safety 2

- a. Criteria for blood transfusion and injections at surgical departments and blood transfusion centres
- b. Screening of donors guidelines for surgical department and blood transfusion centres

Module 6

Lab safety

- a. Safe laboratory procedures for laboratory technicians, who may handle blood samples or blood products in national regional and district health establishments
- b. Safe laboratory procedures for technicians working with HIV suspected infected material

Module 7

Sterilization

- a. Sterilization guidelines for EPI, TB programme, leprosy, operating theatres, all health facilities where injection/transfusion takes place

Module 8

Behavioural

- a. risk behaviour definition and classification
- b. High risk groups within the community by age, sex and occupation

Module 9

Health education

- a. Methods, messages and aims of health education
- b. Materials for the general population and their interpretation and ways of using them in different settings
- c. Materials for high risk groups and ways of using them with target groups
- d. The chain of prevention, a diagram of the coordinated prevention effort in Ethiopia

Module 10

The STD setting

- a. HIV and other STDs, behavioural relationships and clinical implications

Module 11

Counselling

- a. Counselling technique for
 - a. Patients/people prior to serosurvey testing
 - b. People who are HIV positive
 - c. AIDS patients, their family, friends and community
 - d. Women of child bearing age who are HIV positive.

Module 12

Summary

(May be suitable for CHAs and TBAs)

- a. HIV and AIDS in Ethiopia
- b. Basic hygiene relating to handling blood, taking blood injections, childbirth, first aid
- c. How HIV is not transmitted to reassure relatives and friends of HIV positives and AIDS patients
- d. AIDS and HIV helping the community come to terms

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Annex 8

Budget

<u>Item</u>	<u>Quantity</u>	<u>Time Scale</u>	<u>Cost (US\$)</u>	<u>Remarks</u>
Establishment of DAC				
WHO epidemiologist	1	5 yrs	425,000	
IEC specialist	1	5 yrs	425,000	
Operational officer	1	5 yrs	325,000	
Short term consults	15	Manmonths	105,000	Including travel
Secretary/computer operators	3	5 yrs	72,000	
Per diem for mobile teams (members)	5	5 yrs	112,500	Based on 20 days/month in the field. 5 teams of 4 members
Per diem for coopted personnel of DAC	15	Manmonths	7,000	
Furniture			20,000	
Photocopiers	2		10,000	
Refrigerators	3		2,380	
Computer (printer of software)	1		8,000	
Duplicators	2		3,500	
Typewriters	5		5,000	
Stationery			60,000	
Telephone	5		30,000	Including installation and charges for 5 years
Mobile radio (communication)	6		12,000	
Vehicles	7		98,000	Including 3 for eventual replacement during the 3-year period. Ethiopian government disallows importation of small vehicles. Vehicles should be 4 wheel drive diesel Toyotas.
Clinomobile - 4WD car equipped with refrigerator and some lab. facilities i.e. centrifuge	1		30,000	
Cold box (Savopak) - 1 week cold life	5		1,300	
Cold box (Coleman) - 72 hrs. cold life	5		250	
Maintenance of vehicles		5 yrs	45,000	
Fuel			130,000	30,000 km/year per vehicle
Miscellaneous expenses			15,000	
Total			1,964,550	
Contingency at 10%			196,455	
Total			2,161,005	

<u>Item</u>	<u>Quantity</u>	<u>Cost (US\$)</u>	<u>Remarks</u>
4.1 Epidemiological Assessment Surveillance and Research			
ELISA tests	28,000	35,000	For complementary and interval serosurveys
Elavia 1+2			Calculation based on assumption 50% ELISA positivity for complementary and interval serosurveys
Western Biot tests	1,500	22,500	
Laboratory reagents		500	
Gloves	500	1,000	Reusable
Disinfectants		1,800	
Blood drawing equipment	32,000	3,800	
Printing and distribution of case report forms	25,000	3,500	Includes paper printing and distribution
Establishment of AIDS research fund		30,000	Covers KAP and epidemiological research projects
Miscellaneous		5,000	
Total		85,000	
Contingency at 10%		8,500	
Total		112,000	

Item	Quantity	Cost (US\$)	Remarks
4.2 Prevention of transmission			
ELISA readers	13	26,700	For 7 regional laboratories and 6 NRCA centres
ELISA washers	13	4,000	" " " "
Western Blot equipment	1	3,500	For NRH
Training courses for laboratory technicians	2	34,000	For 26 technicians from 13 centres. Includes transport per diem and consultants costs
Training courses for maintenance 1+2	2	26,000	For 26 technicians for 13 centres includes transport, per diem, (manufacturer to provide consultancy)
ELISA tests	200,000	300,000	Calculations based on average annual number of blood donations
Elavia tests			of 40,000 per year over 5 years
Western Blot tests	10,000	150,000	Calculations based on 5% ELISA positives
Laboratory reagents		12,000	Equipment for sterilization without adequate facilities
Protective clothing (gloves, aprons)	100,000	198,000	
Needles and syringes	500,000	260,000	
Condoms	5,000,000	300,000	Representing a subsidy 10c each over 5 years
Miscellaneous		30,000	
Total		1,619,200	
Contingency at 10%		400,000	
Total		2,019,200	

4.3 Improvement of Diagnosis and Management			
Establishment of small funds for home care		100,000	Calculation based on 1,000 AIDS cases by end of 2nd year

Item	Quantity	Time Scale	Cost (US\$)	Remarks
4.4 Information, Education and Communication				
Design team for all materials 4 people	4	5 yrs	60,000	
Materials for design team			30,000	
Per diem for educational consultant	1	3 manmonths	1,400	
Per diem for medical consultant	1	3 manmonths	2,000	
Per diem for nurse consultant	1	3 manmonths	1,400	
Vehicles support for	15	5 yrs	850,000	Includes vehicles, drivers, maintenance and fuel (30,000 km/yr) for 5 years
Regional Health Education				
Department Seminars/training courses (Medical staff and Health Officers)	45	1 day	60,000	Quarterly refers to number of courses
Regional Nurses Health Assistants (district and sub district)	120	1 day	135,000	"
Teachers as trainers (courses)	300	1/2 day	160,000	"
Teachers regional (1,000)	1	3 days	10,000	22 teachers trained as trainers
Community leaders (district)	50	1 day	80,000	1,000 teachers trained by trainers
			25,000	Meal allowance only
Materials Production Health Personnel				
12 modules				
1	3,000		6,000	
2	6,000		9,000	
3	10,000		15,000	
4	20,000		30,000	
5	20,000		30,000	
6	1,000		1,500	
7	20,000		30,000	
8	20,000		30,000	
9	30,000		45,000	
10	10,000		15,000	
11	10,000		15,000	
12	60,000		60,000	

Teachers		
Training manual	60	600
Training manual (abbreviated)	1,000	3,000
Return paid cards + summary	15,000	30,500
Risk groups		
Leaflets (truck drivers)	20,000	40,000
Audio tapes (bars and hotels)	1,000	13,500
Posters (bars and hotels)	1,000	1,500
Posters (university students and high school students)	1,000	1,500
Posters (STD clinics)	1,000	1,500
General population		
Leaflets	500,000	500,000
Posters	50,000	75,000
TV fillers	23	60,000
Radio fillers	25	30,000
Press panels	60	12,000
Distribution		50,000
Miscellaneous		100,000
Total		<u>2,513,500</u>
Contingency at 10%		251,000
Total		<u>2,764,500</u> *****

Budget summary

Total over five years	<u>7,200,000</u> =====
First year	3,137,090
Following four years (per year)	1,015,728

Budget Annexes

NACP Support and Complementary Activities

<u>Item</u>	<u>Quantity</u>	<u>Time Scale</u>	<u>Cost (US\$)</u>
STD support programme			
Equipment and materials and training (for 27 clinics)	27	5 yrs	775,000
Manpower			
54 laboratory technicians	54	5 yrs	810,000
External consultant (epidemiologist)	1	5 years	425,000
			<u>2,010,000</u>
Miscellaneous			100,000
			<u>2,110,000</u>
Total			210,000
Contingency 10%			
Total			<u>2,320,000</u> =====

Health Learning Material Production Centre (HLMPC)
(equipment and staff as per separate project proposal)

<u>Item</u>	<u>Cost (US\$)</u>
	545,468
Contingency at 10%	54,000
Total	<u>600,000</u> =====

Health Manpower Development
(fellowships, grants, short courses)

<u>Item</u>	<u>Time Scale</u>	<u>Cost (US\$)</u>
	5 years	489,000
Contingency at 10%		48,900
Total		<u>537,900</u> =====

