

Annual Report and Financial Statements for the Year ended 30th June 2006



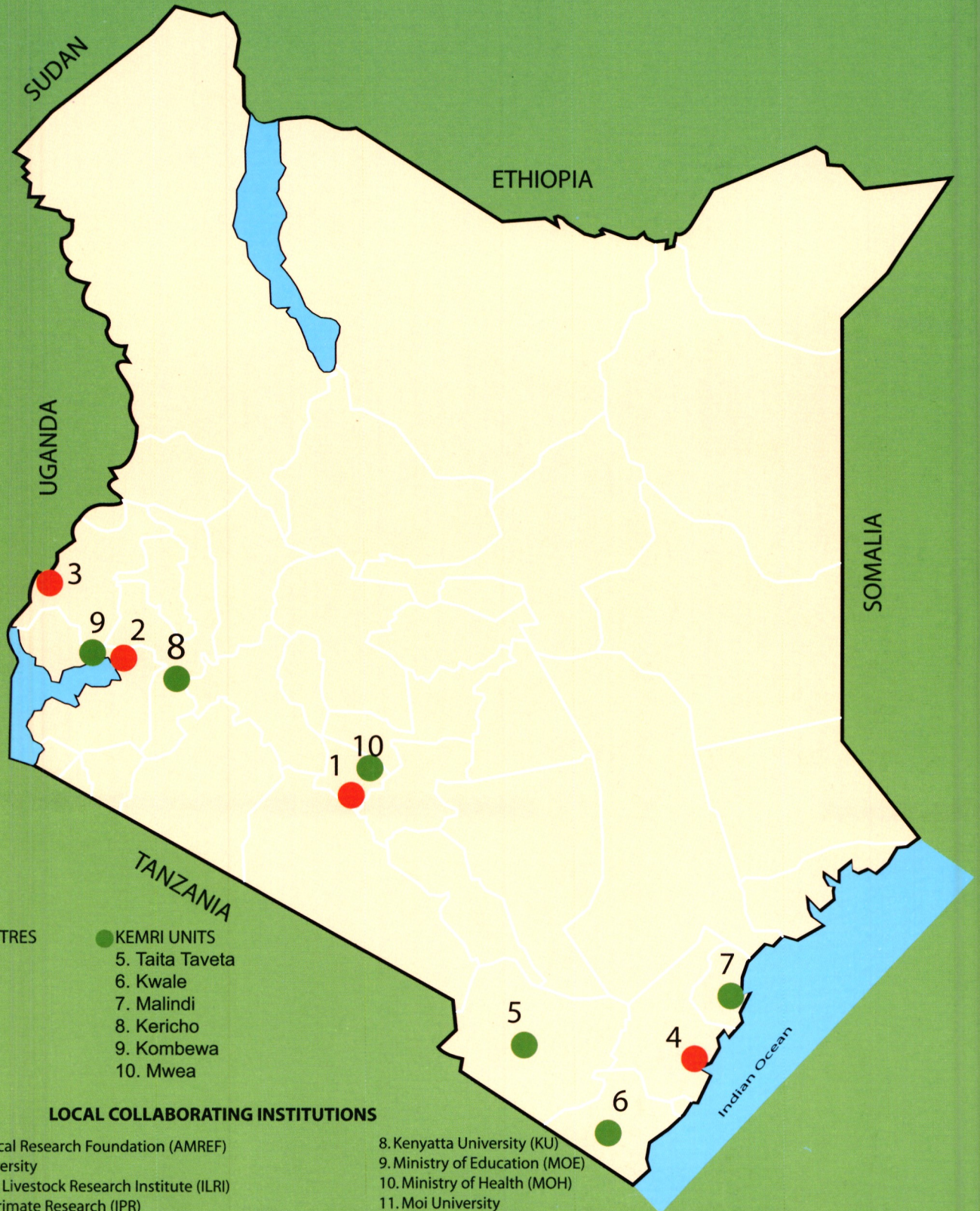
Kenya Medical Research Institute



In Search of Better Health

657.3
KEMRI

KEMRI RESEARCH CENTRES, UNITS AND LOCAL COLLABORATING INSTITUTIONS



- KEMRI CENTRES
- 1. Nairobi
- 2. Kisumu
- 3. Busia
- 4. Kilifi
- KEMRI UNITS
- 5. Taita Taveta
- 6. Kwale
- 7. Malindi
- 8. Kericho
- 9. Kombewa
- 10. Mwea

LOCAL COLLABORATING INSTITUTIONS

- | | |
|---|---|
| 1. African Medical Research Foundation (AMREF) | 8. Kenyatta University (KU) |
| 2. Egerton University | 9. Ministry of Education (MOE) |
| 3. International Livestock Research Institute (ILRI) | 10. Ministry of Health (MOH) |
| 4. Institute of Primate Research (IPR) | 11. Moi University |
| 5. International Centre of Insects Physiology & Ecology (ICIPE) | 12. National Council of Science and Technology (NCST) |
| 6. Jomo Kenyatta University of Agriculture and Technology (JKUAT) | 13. University of Nairobi (UoN) |
| 7. Kenyatta National Hospital (KNH) | |

KENYA NATIONAL ASSEMBLY LIBRARY

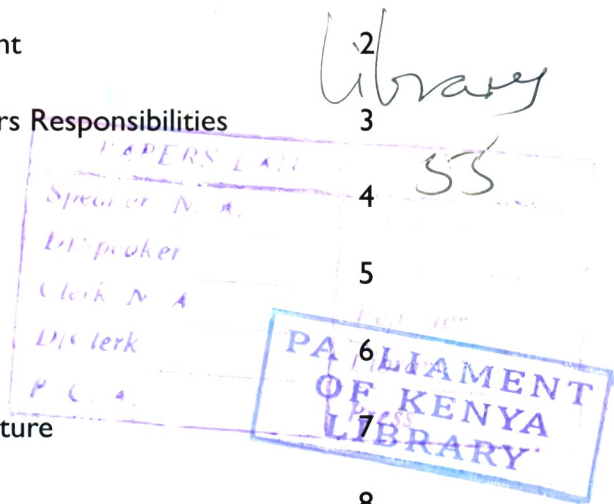
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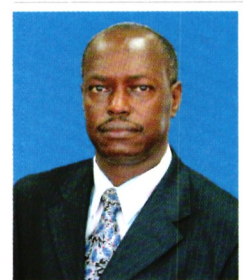
KEMRI Board of Management



Dr. Malachi D. Owili



Dr. Joel D. Achiba
Chairman, Board of Management



Dr. Davy K. Koech
Chief Executive Officer &
Secretary Board of Management



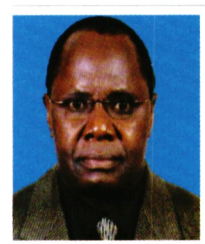
Mrs. Jacobed Asike



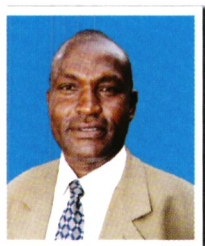
Prof. Jacob T. Kaimenyi



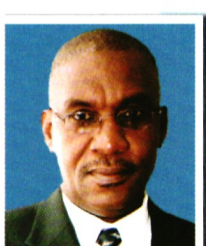
Prof. Battan M. Khaemba



Dr. Patrick M. Ndavi



Mr. Richard B. Bwogo



Mr. G. K. Somba Kivalya
Rep. PS Min. of Home Affairs
& National Heritage



Ms. Kezzie W. Muniu
Rep. PS Min. of Trade and Industry



Mr. S. Indimuli
Rep. Inspector-General
Corporations



Mr. D. K. Komen
Rep. PS Ministry of Finance



Dr. Simon Kimani
Rep. Director of Veterinary
Services



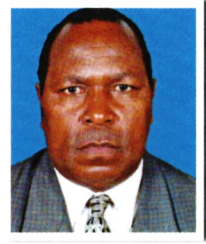
Mrs. Rose Nyamori
Rep. PS Min. of Water
Development



Mr. F. K. Karimba
Rep. PS Min. of Health



Dr. Rispah N. Oduwo
Rep. Secretary National Council
of Science & Technology



Dr. Francis Kimani
Rep. Director of Medical
Services

Statement of Board Members Responsibilities

The Board Members are required as per Section 18(4) of the Science and Technology Act Cap 250 to prepare financial statements which give a true and fair view of the state of affairs of the Institute as at the end of each financial year and of its surplus or deficit for that year. The Board Members are required to ensure that the Institute maintains proper accounting records which disclose, with reasonable accuracy, the financial position of the Institute. They are also responsible for safeguarding the assets of the Institute.

The Board Members accept responsibility for the financial statements, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgements and estimates, consistent with previous years, and in conformity with International Financial Reporting Standards. The Board Members are of the opinion that financial statements give a true and fair view of the state of the financial affairs of the Institute as at 30 June 2006 and of its surplus for the year ended. The Board Members further confirm the accuracy and completeness of the accounting records maintained by the Institute, which have been relied upon in the preparation of the financial statements, as well as on the adequacy of the internal financial controls.

Nothing has come to the attention of the Board Members to indicate that the Institute will not remain a going concern for at least twelve months from the date of this statement.

This statement is approved by the Board Members and is signed on their behalf by:



DR. DAVY K. KOECH
SECRETARY,
BOARD OF MANAGEMENT
Date 24th August 2006



DR. JOEL D. ACHIBA
CHAIRMAN,
BOARD OF MANAGEMENT
Date 24th August 2006

Chairman's Foreword

The Hon. Minister for Health
Ministry of Health
P.O.Box 30016 - 00100
NAIROBI.

Dear Madam,

I am happy to submit to you on behalf of the Board of Management of the Kenya Medical Research Institute, the Annual Report and Financial Statements for the year ended 30th June 2006 in accordance with the provisions of Section 20 of the Science and Technology (Amendment) Act of 1979 (Cap 250 of the Laws of Kenya).

As a Board, we remain grateful to the Government of Kenya for its continued profound assistance and support to the Institute. The Board is also grateful to various foreign governments and organizations that continue to support the Institute in various ways. Through this support KEMRI has been able to focus on its key mandates.



My Board is equally grateful to Dr. Davy Koech, Director KEMRI, and indeed to all members of staff of the Institute for their immense support towards the realisation of the mandates of the Institute

I remain,
Yours faithfully,

A handwritten signature in black ink, appearing to read 'J. Achiba', written over a horizontal line.

JOEL D. ACHIBA, BVM
**CHAIRMAN, BOARD OF
MANAGEMENT**

Director's Statement

The year 2005/2006 provided the Institute with the opportunity for sustaining and consolidating its growth.

As is apparent from our research development activities during the year, we have remained committed and focused on our mission *"To improve on the quality of health and human life through research."* In this we are guided by our vision: *"To be a leading centre of excellence in the promotion of quality health."*

During the year under review, the Institute recorded many achievements in infrastructure development and innovative research. In collaboration with our research partners we were able to complete the construction and equipping of the Production Facility and Training Centre at KEMRI headquarters and research facilities at our Kilifi centre.

Major scientific innovations include the launch of rapid diagnostic kits for TB and HIV. In the meantime the Institute continued to produce and supply the Ministry of Health and other health institutions with KEMRI Hepcell kits for screening of blood for Viral Hepatitis. The Institute is undertaking further developments on this product to provide for rapid test results.

The Institute is also continuing to advance its research on plant based agents for management of HIV/AIDS and various opportunistic infections.

The year also witnessed the conclusion of a very fruitful collaboration with Japan International Co-operation Agency (JICA). This collaboration which spanned a period of 27 years witnessed immense expansion of physical infrastructure and human resource development and skills transfer to KEMRI. We shall always remain grateful to the Government and the People of Japan for their support and friendship.

The cooperation with the government and the people of Japan was given a new impetus when KEMRI signed a new collaborative research agreement with the Nagasaki University's Institute of Tropical Medicine (NUITM).

KEMRI received a number of distinguished awards and international recognitions during the year. The Institute was feted by Kenya Institute of Management



(KIM), at the annual Company of the Year Awards (COYA), winning the Best Overall Parastatal, Creativity and Innovation Management and Environmental Management awards in the Service Sector.

On a very special note, I wish to thank the Government of Kenya through the Ministry of Health for all the guidance, encouragement and support rendered to the Institute over the years.

We are also privileged to have a highly devoted Board of Management whose Chairman, Dr. Joel Achiba, I remain personally grateful, to for his very able stewardship, wise counsel and inspiring guidance in steering the affairs of the Institute.

I would also like to register my sincere appreciation to all our partners and members of staff for their selfless devotion to the Institute. It is through this that we continue to realise our goals.

DAVY K. KOECH, PhD, DSc, SS, OGW, MBS
DIRECTOR, KEMRI

Background of KEMRI

ESTABLISHMENT OF THE INSTITUTE

The Kenya Medical Research Institute (KEMRI) is a state corporation established through the Science and Technology (Amendment) Act of 1979, as the national body responsible for carrying out health research in Kenya. KEMRI has grown from its humble beginning 27 years ago to become a regional leader in human health research. The Institute currently ranks as one of the leading centres of excellence in health research both in Africa as well as globally.

VISION

“To be a leading centre of excellence in the promotion of quality health.”

MISSION

“To improve on the quality of health and human life through research.”

MOTTO

“In Search of Better Health” *towards the realization of the above stated mission.*

MANDATES

- A. To conduct research in human health.
- B. To co-operate with other organizations and institutions of higher learning in training programmes and on matters of relevant research.
- C. To liaise with other relevant bodies within and outside Kenya carrying out research and related activities.
- D. To disseminate and translate research findings for evidence-based policy formulation and implementation.
- E. To co-operate with the Ministry of Health, the Ministry for the time being responsible for medical research, the National Council for Science and Technology and the Medical Science Advisory Research Committee on matters pertaining to research policies and priorities.
- F. To do all things as appear to be necessary, desirable or expedient to carry out its functions.

Registered Office

Kenya Medical Research Institute (KEMRI)
Off Mbagathi Road
P.O. Box 54840 – 00200
NAIROBI
KENYA

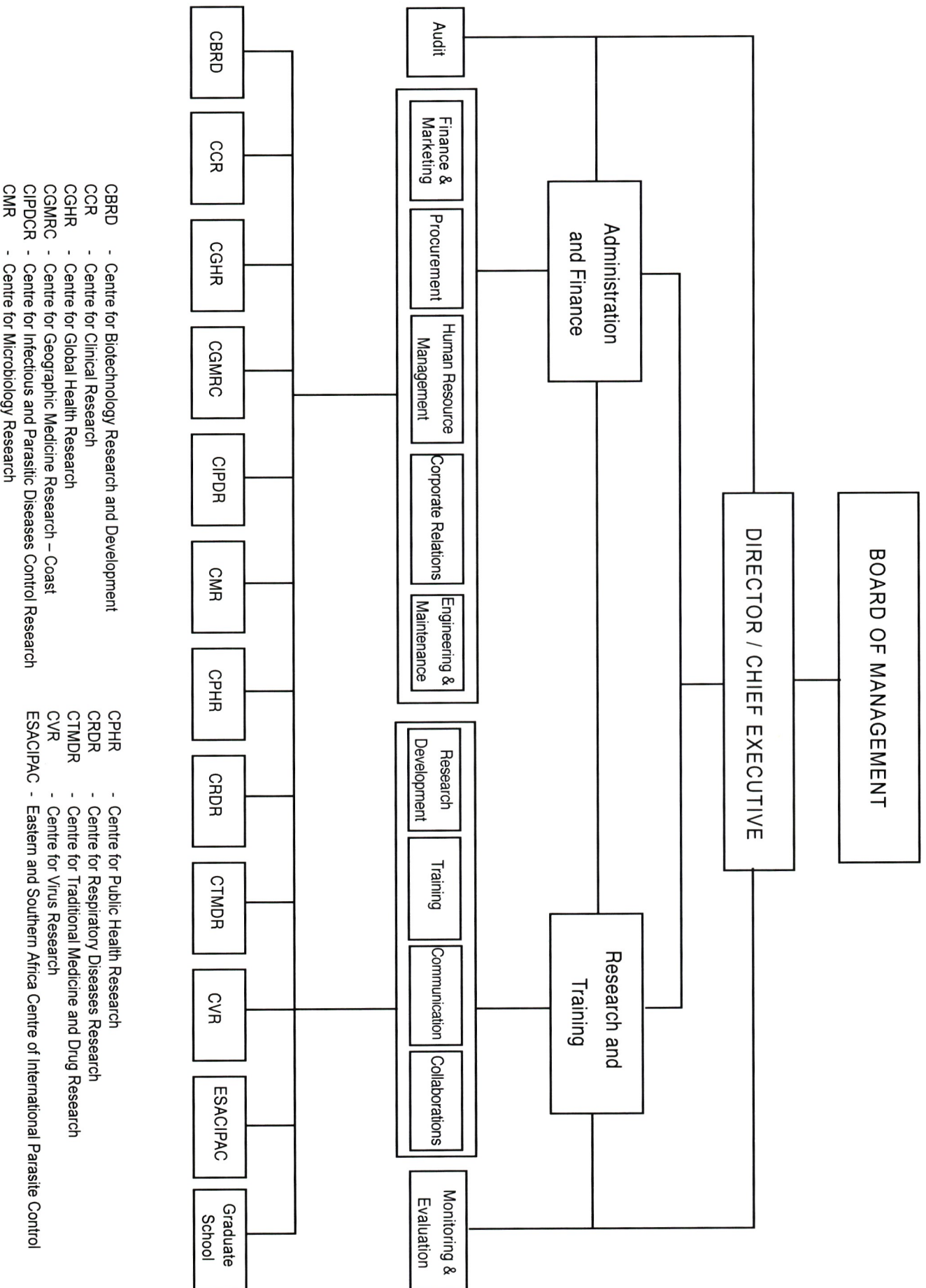
BANKERS

Kenya Commercial Bank, Kipande House Branch,
Nairobi

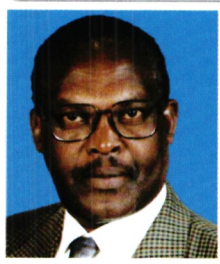
AUDITORS

Controller and Auditor General-Kenya National
Audit Office (KENAO)

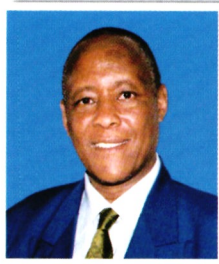
KEMRI Organisation Structure



KEMRI Chief Officers



Dr. Peter Waiyaki
Deputy Director
(Research & Training)



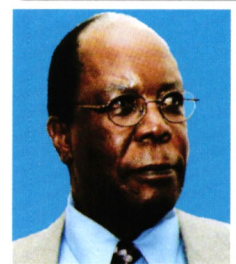
Mr. Dunstan M. Ngumo
Deputy Director
(Administration & Finance)



Mr. Renison A. Kirui
Assistant Director,
Finance



Dr. Winfred M. Kofi-Tsekpo
Assistant Director,
Communications



Dr. Peter M. Tukei
Assistant Director,
Collaboration & Consultancy



Mr. John N. Kariuki
Assistant Director,
Research Administration



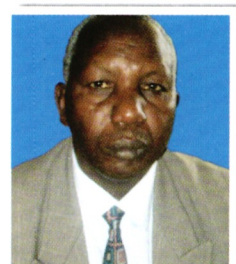
Mrs. Esther W. Ngari
Assistant Director,
Personnel



Dr. Phoebe Josiah
Chief Research Officer &
Head, Corporate Relations



Ms. Nancy Kamau
Chief Librarian



Mr. James Lelei
Chief Institute Engineer



Dr. Charles Mwandawiro
Chief Research Officer &
Head, ESACIPAC



Dr. Monique K. Wasunna
Chief Research Officer &
Head, CCR



Dr. Njeri C. Wamae
Chief Research Officer &
Head, CMR



Dr. Solomon Mpoke
Chief Research Officer &
Head, Graduate School.



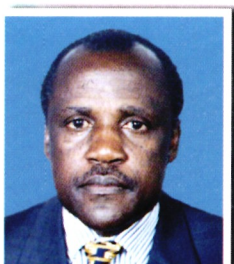
Dr. John M. Vulule
Chief Research Officer &
Head, CGHR



Dr. Norbert Peshu
Chief Research Officer &
Head, CGMRC



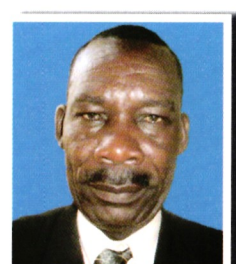
Dr. Geoffrey M. Rukunga
Chief Research Officer &
Head, CTMDR



Dr. Fredrick Okoth
Chief Research Officer &
Head, CVR



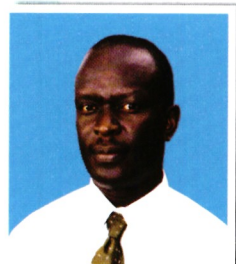
Dr. Gerald M. Mkoji
Chief Research Officer &
Head, CBRD



Dr. Nick I. Adungo
Chief Research Officer &
Head, CIPDCR



Dr. Yeri Kombe
Chief Research Officer &
Head, CPHR



Dr. Evans Amukoye
Chief Research Officer &
Head, CRDR

Pictorial Highlights



Dr. Davy Koech, Director KEMRI addressing the press during the Drugs for Neglected Diseases Initiative (DNDi), Research and Development appeal to governments



KEMRI sponsored street lights



KEMRI Training Centre



Freedom from hunger walk



KEMRI Production Facility



HIV/AIDS awareness

Research Programmes



1 | Infectious Diseases

The prevalence of infectious diseases in this region has been increasing with HIV being the highest at 15%. Other infectious diseases, which include diarrhea, are responsible for about a quarter of all infant deaths, as safe water is not generally available. Diseases like TB, fuelled by the ongoing HIV epidemic increased six fold in Kenya during the 1990s. In 2005 over 100,000 cases of TB were reported, with Nyanza alone having a fifth of the country's reported cases.

“...there is no infectious disease in the world that can be eradicated without the doubt of a vaccine.....”, - Dr. Fred Sawe of KEMRI/Walter Reed Project, Kericho during the Launch of Vaccine trials in the area



Facilitators and participants at the 8th TCTP on Blood Safety.

A. HIV/AIDS Research

Research on HIV/AIDS focuses on:

- Strategies to reduce mother to child transmission of HIV
- Epidemiological and behavioral research to assess the incidences of and risk factors for HIV infection in the prospective cohorts.

i) Global Aids Programme

A KEMRI/CDC cooperative agreement supports substantial HIV prevention and treatment work. The programmes include:-

1. Support for HIV testing and counselling.
2. Support for programmes on prevention of mother to child transmission of HIV and treatment interventions, which include training, provision of necessary equipment and supplies.
3. Prevention of HIV among the youth. This is a multi-component HIV prevention programme targeting adolescents, their families and the community in the rural areas of Nyanza.

ii) KEMRI/JICA Third Country Training Programme (TCTP) on Blood Safety

The 7th & 8th KEMRI/JICA TCTP programmes on Blood Safety were held during the year. At the 7th TCTP a total of 32 participants, drawn from 11 African countries, attended the course while in the

8th TCTP a total of 29 participants drawn from 10 African countries attended.

The course covered topical issues in:

- ◇ Blood safety, quality control and assurance on blood screening.
- ◇ Molecular epidemiology of HIV/AIDS and viral hepatitis.
- ◇ Emerging and re-emerging infectious diseases,
- ◇ Laboratory safety, management and ethics.

Participants received hands-on-experience on use of simple, rapid blood screening tests for Hepatitis B, HIV/AIDS and other blood-borne infections.

The courses concluded with educational visits to some regional blood transfusion and VCT centres within the country.

iii) **FACES Programme Expanded**

The Family Aids Care and Education Services (FACES) offers HIV care and education services within Nyanza Province. The Programme provides services for both Kisumu and Suba Districts but will soon roll out to Migori District. Currently FACES provides support to 4500 patients 3300 of whom are on Anti Retroviral Therapy (ART). The project is currently expanding its facilities in Kisumu to accommodate more clinical space.

iv) **Couples Interventions Study (CIS)**

The CIS project based in Kisumu, is part of a Phase III, multi-site, clinical trial in which participants undergo treatment and follow-up for 12-24 months. This study tests the efficacy of twice daily acyclovir (400 mg) among HIV discordant couples where the HIV-infected partner is co-infected with Herpes simplex virus type 2 (HSV-2) to prevent transmission to their HIV negative partner. CIS is a collaboration between the University of California, San Francisco and the Kenya Medical Research Institute (KEMRI).

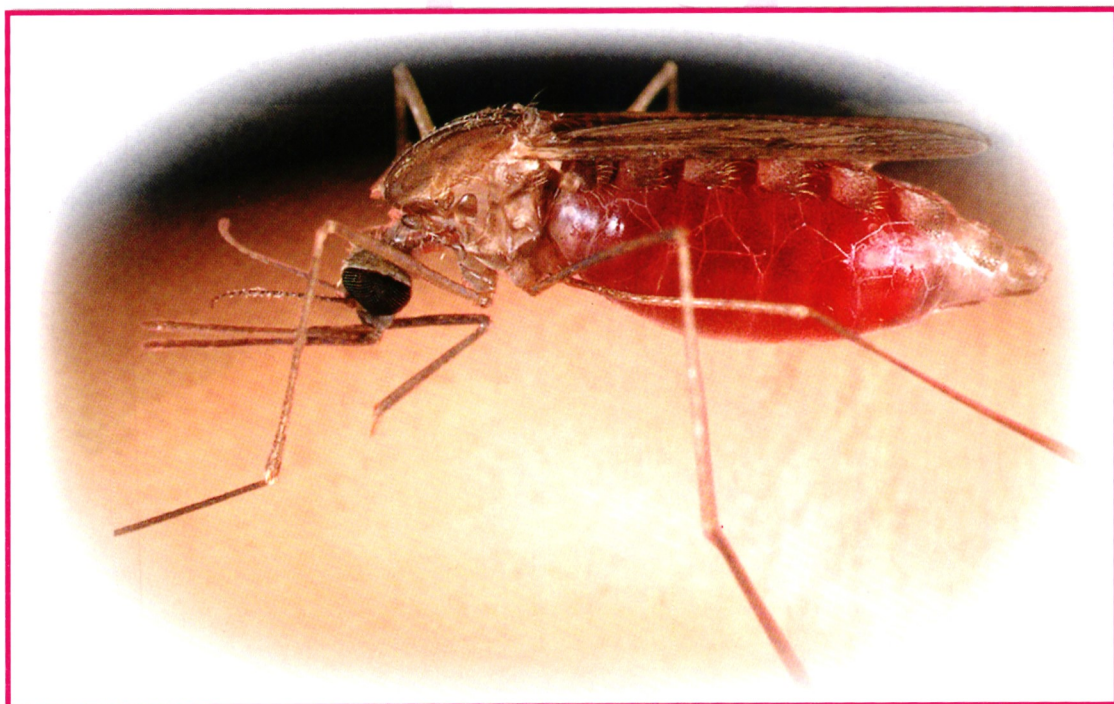
B. TUBERCULOSIS (TB)

TB programme prioritizes training of community-based health workers to recognize, refer and follow patients with TB. The programme has provided extensive support to improve TB diagnostics and treatment capacity and training related to diagnostic HIV testing among TB patients. It supports the National TB and Leprosy Control programme in the integration of TB/HIV treatment activities.



A truck fitted with X-Ray facilities for use in a TB study in Nyanza Province. The truck was acquired through KEMRI/CDC collaboration

Research Programmes



2 Parasitic Diseases

The programme aims at the reduction of disease burden due to parasitic infections and particularly due to malaria, schistosomiasis, leishmaniasis, filariasis and intestinal parasites. It concentrates on the epidemiology, parasitology, immunology, molecular biology, pathophysiology, vector biology and control of parasitic diseases. In addition, it focuses on drugs management and development of vaccines.

A. MALARIA

i) Mosquito Genetics Study

Current studies include:

- Analysis of the population genetic structure of *Anopheles gambiae* s.l. and *Anopheles funestus* mosquitoes in relation to malaria transmission.
- Monitoring of insecticide susceptibility / resistance in Central and Western Kenya and analysis of associated resistance mechanisms.
- Antimalarial drug efficacy and drug resistance studies that involve assessment of therapeutic

efficacy of artemisinin and non-artemisinin based combinations against falciparum malaria,

- Analysis of *P. falciparum* genes that influence malaria parasite infectivity to mosquito vectors.
- Assessment of some immune genes and phenotypic markers in different ethnic communities in Kenya, in relation to susceptibility to malaria infection.
- Evaluation of an integrated intervention strategy for malaria mosquito vector control that employs insecticide treated nets (ITNs) as the primary entomological intervention.

ii) Insecticide Study

This study is designed to define the population structure of the malarial vectors in Kenya and West Africa. This is based on the premise that effective malarial control in Africa needs a thorough understanding and description of the population structure of its principle vectors.

The impetus of the study is:

1. Better understanding of the key malaria problems specifically the vector.
2. To develop more focused malaria control strategies.

The study uses molecular biology techniques in defining the population structure of the *Anopheles gambiae* and *Anopheles funetus* on the local scale and in parts of W Africa.

It also involves developing PCR diagnostic tools for the detection of pyrethrin resistance in anopheles mosquitoes.

iii) Clinical Studies and Drug Testing

The study involves design and conduct treatment of uncomplicated pediatric and adult malaria, clinical management of severe malarial anemia, systematic review of scientific literature, evaluation of clinical care quality, malaria parasitology and voluntary HIV/AIDS counseling and training.

The impetus for this study is:-

- The need to synthesize research into useful and manageable information.
- The problem that drug resistance has posed to the management of malaria disease making it mandatory to evaluate alternative more effective anti-malarial drugs.

In a bid to satisfy the two drives, the study has undertaken the following activities:

- Randomized controlled trial of artemisinin based combination therapy.
- Meta-analysis of the role of non-artemesinin based combinations like Fansidar in the treatment of uncomplicated malaria in Africa.
- An evaluation of the in-vivo response of *P.falciparum* to anti-malarial treatment in HIV infected and unaffected individuals.

B. SCHISTOSOMIASIS

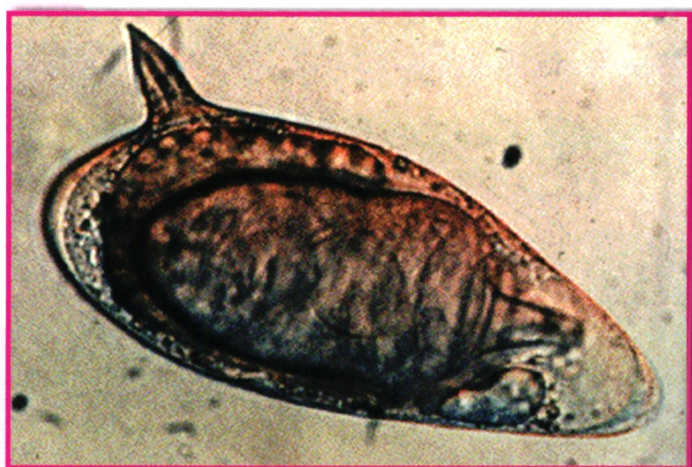
Due to the high prevalence of HIV and other parasitic infections in western Kenya, research in schistosomiasis commonly known as *bilharzia*, is broadened to accommodate research into the interactions of schistosomiasis with HIV and other parasitic infections.

Research activities:

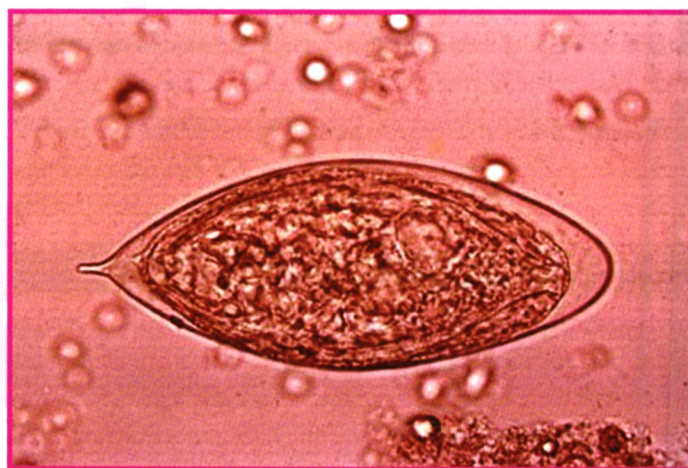
- Epidemiological and ecological studies on schistosomiasis in western Kenya a collaborative effort with the University of New Mexico, with

the aim of identifying transmission sites for *Schistosoma mansoni* (causative agent of human intestinal schistosomiasis).

- Epidemiological studies on a rodent schistosome (*S. rodhaini*), a close relative of the human parasite *S. mansoni* in western Kenya, aimed at determining the prevalence of *S. rodhaini* in the snail population.
- Evaluation of the recently developed PCR test for identifying and differentiating between cercariae (schistosome larval forms that occur in the snail hosts and which initiate infection in humans) of *S. mansoni* and *S. rodhaini*.
- A study on genetic characteristic of different population of *S. mansoni* in Kenya showed that the parasite is genetically very diverse.

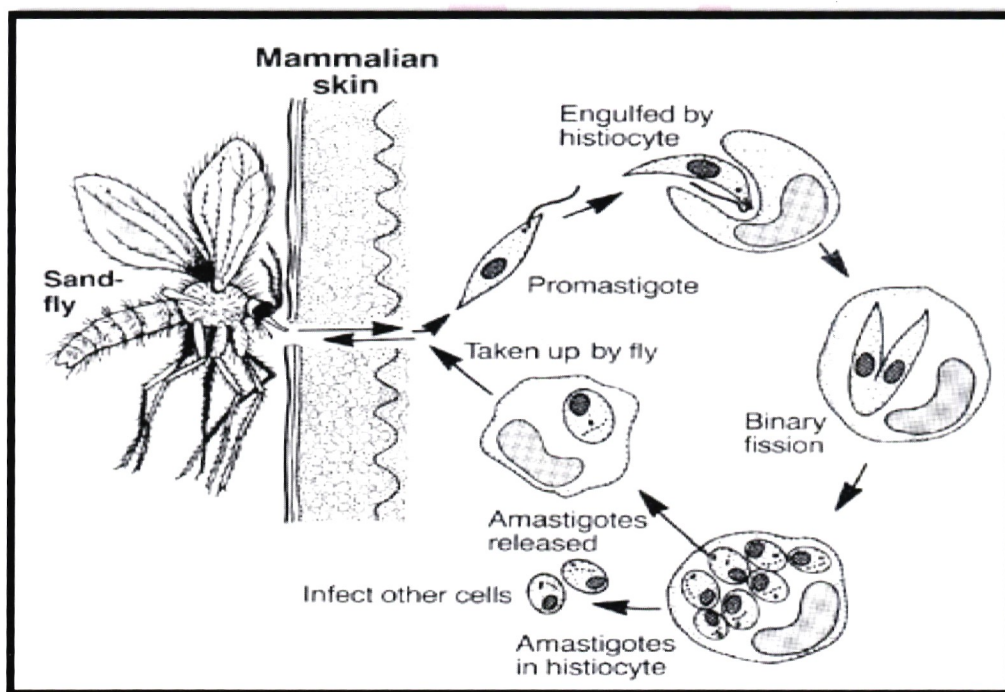


Schistosoma mansoni parasite egg



Schistosoma haematobium parasite egg

C. LEISHMANIASIS



Lifecycle of Leishmania parasite

Leishmaniasis forms a group of parasitic diseases transmitted by the bite of infected sand flies, genus *Phlebotomus*. Cutaneous Leishmaniasis is the most common form. The other form is known as visceral Leishmaniasis (Kala-azar).

Research activities:

- Biological approaches using entomopathogenic fungi (i.e. fungi that cause disease in insects) for sandfly control are being investigated in collaboration with the International Centre for Insect Physiology and Ecology (ICIPE).
- Investigations on various indigenous plants traditionally used against leishmania parasites and as insecticides for mosquito and sandfly control.
- Research efforts focusing on antigens derived from the surface of a *Leishmania* parasite, as potential vaccine candidates.
- Field evaluation of novel arthropod repellants against disease vectors with an objective of evaluating new repellent candidates in the field against mosquitoes and sand flies.

D. FILARIASIS

The parasites causing Filariasis are transmitted by mosquitoes. Infection with filarial parasites leads to elephantiasis a profoundly disfiguring and disabling disease mainly of the limbs.

Research work to monitor trends in transmission and infection with anopheles-transmitted lymphatic filariasis is ongoing in Malindi. The WHO/TDR supported Project covers 8 villages along the Sabaki River. Infection has declined after 3 rounds of Mass Drug Administration (MDA) an indication that the infection may be managed as a public health problem with additional 2 rounds.



Infected limbs of a patient caused by a filarial parasite (Elephantiasis)



Members of a regional workshop for managers and policymakers organised by ESACIPAC on strengthening school health and nutrition programmes.

East and Southern Africa Centre for International Parasite Control (ESACIPAC).

ESACIPAC's mission is to undertake human resource development to strengthen research and control programmes on parasitic diseases in the eastern and southern Africa region, which brings together Kenya, Uganda, Tanzania mainland, Zanzibar, Malawi, Zambia, Zimbabwe and Botswana.

i) International Workshop

ESACIPAC held a very successful regional workshop for managers and policymakers on strengthening school health and nutrition programmes. It was attended by 22 managers from 8 countries (Kenya, Uganda, Tanzania, Rwanda, Ethiopia, Malawi, Zambia and Ghana). This workshop was jointly organized with the Partnership for Child Development (PCD) of Imperial College, London.

ii) In-country Workshop

ESACIPAC held a two day workshop for all stakeholders in Kenya involved in school health and nutrition service provision. It was attended by policymakers from ministries of health and education, and over 20 organizations including PLAN International, GTZ, World Bank, World Concern, World Vision, UNICEF, WFP etc. Discussion revolved around policy issues and integration of activities with partners and programmes and how to effectively monitor and evaluate school health activities.



A Ministry of Education Science & Technology representative addressing participants during a workshop organised by KEMRI/ESACIPAC in collaboration with the Partnership for Child Development (PCD), Imperial College London

iii) Mwea School-Based Parasite Control Project

During the year, teachers who had been trained in public health dewormed all school-age children in Mwea division. Although the prevalence of both schistosomiasis and soil-transmitted helminths has tremendously declined, fluctuations are occurring due to re-infections, especially of schistosomiasis. The programme must, therefore, address deworming of adult population because they are also infected.

ESACIPAC organized a one day meeting in Mwea to discuss the development of 6 model health-promoting schools in the division. The six selected schools will integrate deworming, health education, water & sanitation and other relevant interventions to reverse parasitic diseases trends among school going children. Participants at the workshop included school heads, health teachers, parents' representatives, chairmen of school management committees, TAC tutors and the area education

officer. The way forward in development of model schools was charted.

As part of the project ESACIPAC/JICA has completed construction of model latrines in 3 schools within the study area. Members of the community provided locally available material and labour while ESACIPAC/JICA Project supplied all the purchasable material for construction.



Model latrine constructed through a community initiative with the support of KEMRI/ESACIPAC project under the Mwea School Based Parasite Control Programme

Research Programmes



3

Epidemiology, Public Health and Health Systems

The programme is mandated to define and investigate the incidences and prevalence of diseases and health issues of major public health importance and develop strategies for promotion of better health.

i) KEMRI Seeks to Ensure Food Hygiene
The Food Handlers Programme is a continuous project being conducted in Kenya, among institutions that handle food. The main objective of the project is to ensure Food safety for all consumers.

This involves collection of specimens which are then subjected to laboratory diagnosis for typhoid, parasites and urinary related diseases.

ii) KEMRI Investigates Occurrence of Diabetes Type-2 Across Kenya

Research on type-2 Diabetes is a collaborative project between the Institute and several local and international partners. The main objective of this project is to determine the occurrence of type-2 diabetes mellitus in rural and urban populations and its association with rural-urban migration.

iii) Rift Valley Fever

Rift Valley Fever (RVF) is an acute febrile zoonotic disease caused by RVF virus belonging to the Bunyaviridae family, genus *Phlebovirus*.

The fever was first detected and described in sheep in the early 20th century. It was also first isolated in humans in 1930 near Lake Naivasha. Since then outbreaks have been reported in many countries in Africa including South Africa, Egypt, Mauritania, Senegal, Zambia and Madagascar. In the year 2000 the virus occurred outside Africa for the first time in Saudi Arabia and Yemen.

Epidemiology and Clinical Perspective

RVF outbreaks are associated with heavy rainfall and massive flooding that result in the hatching of a large numbers of flood water *Aedes* mosquitoes which are primary vectors and interepizootic reservoirs of RVF virus.

Humans acquire the virus through bites from infected mosquitoes and more frequently through exposure to blood, body fluids or tissues of animals that have been infected through mosquito bites. In humans the disease presents initially as a flu-like illness and about 8% of cases develop severe disease including generalised haemorrhagic syndrome or bleeding from body orifices, encephalitis and retinitis. Overall mortality is estimated at 1%. In livestock the virus causes abortions and >90% mortality in calves and lambs. Mortality in mature animals is generally low.

KEMRI in collaboration with its research partners is playing an active role in addressing the emerging and re-emerging diseases such as Rift Valley Fever, among others, through the following interventions:

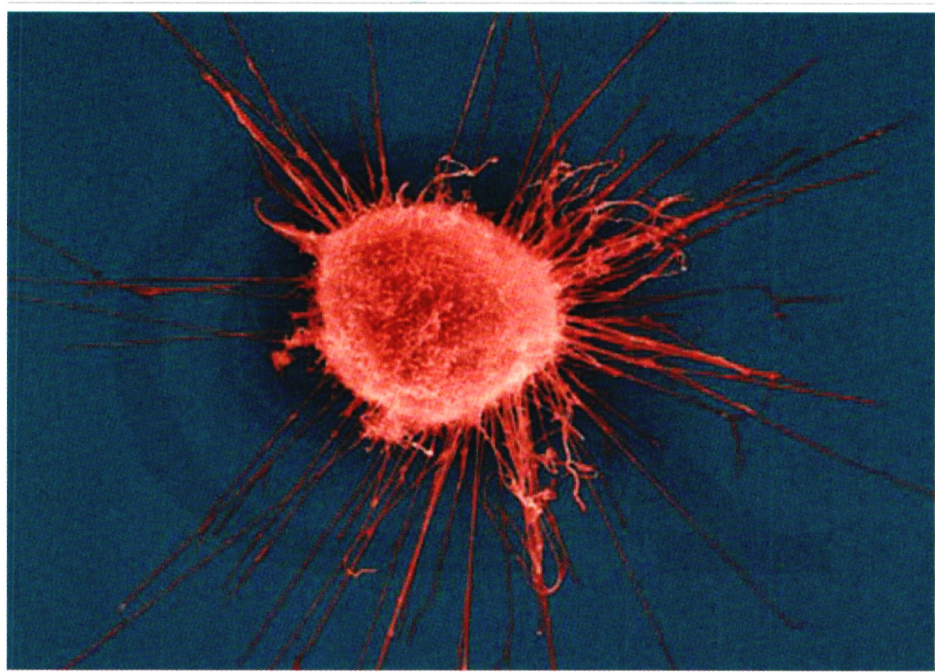
- ◇ National preparedness through upgrading of laboratories and training of health workers in specialised skills.
- ◇ Active surveillance through data collection, management and dissemination together with Geographical Information Systems(GIS.)

◇ Rapid Response Units

iv) Arboviral Infection Distribution

Anthropophilic (vectors attracted to man) mosquitoes, sand flies and ticks are responsible for the transmission of known and newly reported arboviruses infecting human populations across Kenya. The main objective of this research is to determine the prevalence and distribution of arboviruses among vector species in parts of Kenya.

Research Programmes



4

Biotechnology and Non-communicable Diseases

The focus of this programme is the development and promotion of modern biotechnological techniques in molecular biology for production of pharmaceuticals, biologicals and for other applications for use in the promotion of health. The programme also focuses on non-communicable diseases including oncology, cardiovascular and renal diseases.

i) Molecular Technology

Molecular Entomology Research is conducted at KEMRI in collaboration with Centers for Diseases Control and Prevention (CDC) focusing on the development of molecular tools for identifying anopheline mosquito sibling species and determining their genetic structure and diversity. This knowledge will contribute to the long term strategies of controlling malaria transmitting mosquitoes especially in the endemic regions.

ii) Unique Lymphoma Research in Western Kenya

KEMRI/Case Western Research University collaborative research activities involve investigating the correlation between malaria and *burkitt lymphoma* cancer, in healthy children living in the

holoendemic and sporadic regions in Kenya. These two conditions have been found to occur in similar environments.

Cancer Registry Launches Report

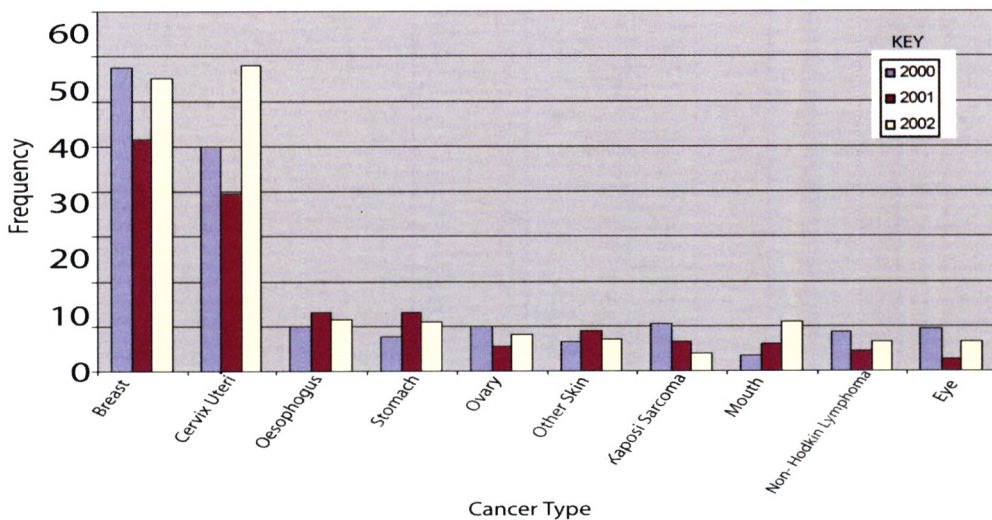
Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. Nairobi Cancer Registry based in KEMRI routinely provides the nation with quality data on cancer incidence and prevalence, common types of cancer and their trends. This allows for effective planning of prevention control measures, screening programmes and cost effective cancer management.

A report detailing current cancer reportage and incidents in the country was launched in the year at KEMRI. The Cancer Incidence Report, outlines the common types of cancers reported, their current trends and advocates for effective planning of preventive measures, treatment and or management.

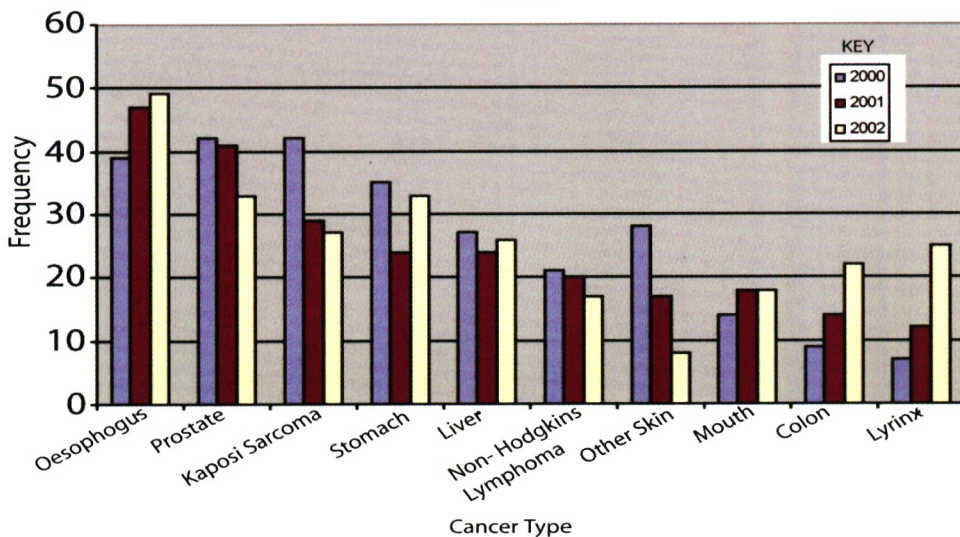


Dr. Davy Koech, Director, KEMRI and Dr. G. Z. Mutuma during the launch of the Nairobi Cancer Registry Report at KEMRI headquarters.

THREE YEAR TREND - FEMALE
FEMALE



MALE



Most common cancers in the years 2000 to 2002

Traditional Medicine and Drug Research

The role of traditional medicine in healthcare delivery in the developing countries is well known and acknowledged. In Kenya, this is evidenced by the number of Traditional Herbal Practitioners (THPs) and patients that make regular consultative visits to the Institute. The THPs come to seek advise on registration process and other matters concerning collaboration in traditional medicine research while the patients come to seek for alternative herbal treatment for their disease conditions which have not been managed by conventional medicine.

Traditional medicine research cuts across all the four research programmes of KEMRI and also partners with other national and regional institutions in an effort to rationalize the usefulness of traditional medicine in contemporary clinical therapy.

Partnerships / Collaborations

- Partnerships with Universities of Maseno, Makerere and Dar es Salaam in the implementation of VicRes sponsored project titled 'Physico-Chemical and Pharmacological evaluation for sustainable exploitation of *Toddalia Asiatica* in Lake Victoria Basin'.
- Partnership with University of Nairobi, KARI, KIRDI, Kiriri Women's University of Science and Technology, Promotion of Private Sector Development in Agriculture (PSDA) Ministry of Agriculture and Farm Concern in the implementation of KAPP sponsored project titled 'Commercialization of Medicinal and Aromatic Plant Products in Kenya'.
- Collaboration with the Ministry of Health, National Coordinating Agency for Population Development, Department of Culture and other stakeholders, in the development of a National traditional medicine and medicinal plants policy.
- Collaboration with traditional health practioners to determine training needs to improve traditional medicine practice.
- Collaboration with National Museums of Kenya in the process of developing training curriculum for traditional health practioners.



Research activities :

i) Ethnobotanical and Ethnomedical Surveys

This involves documentation of herbal remedies and medicinal plants used traditionally to treat diseases and identify potential medicinal plants for further investigation.

ii) Biological and Phytochemical Evaluation

Current research activities include :

- Studies on antimalarial activity of plant extracts from malaria endemic regions of Kenya.
- Isolation and identification of the anti-malarial compounds from plants.
- Determination of the safety of the extracts and compounds identified as having potential for development as anti-malarials.
- Studies on leishmanial activity of plant extracts both *in-vitro* and *in-vivo*.
- Determination of the safety of plant extracts with anti-leishmanial activity.
- Evaluation of plant extracts for management of *herpes simplex* viruses both *in-vitro* and *in-vivo*.
- Evaluation of the potency of plant extracts against pathogenic bacteria and fungi.

iii) Traditional Medicine (TM) Database

Traditional Medicine Database that was developed with technical assistance from WHO Afro is now being upgraded to create new variables that meet specific needs of the research activities.

iv) National Traditional Medicine and Medicinal Plants Policy

KEMRI is continuing to play an active role in the Interministerial development of a National Traditional Medicine Policy. The process is multisectoral and has representatives from THPs, Government Departments, Research institutions, Academic institutions amongst others. The first policy draft has recently undergone public debate to collect views of all stakeholders in Kenya following which a final document will be presented to the government for approval. The national goal is to promote safe, effective and sustainable good quality medicine in Kenya. In response to the challenges posed by the widespread use of TM, WHO developed the *WHO Traditional Medicine Strategy* that addressed the following:-

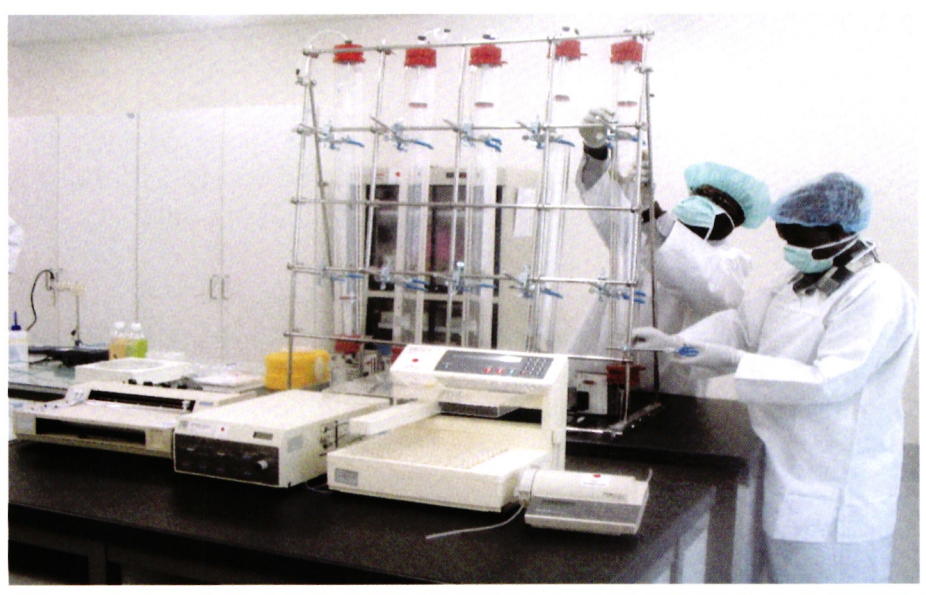
- (i) Framing policy.
- (ii) Safety, efficacy and quality.
- (iii) Enhancing access.
- (iv) Promoting proper use of TM.

Adequate policies and legal frameworks that will facilitate research and strengthen capacity to produce sufficient evidence on safety and efficacy is necessary for the full realization of the potential of TM in health care of Kenyans. There is indeed a major stake for KEMRI in the draft national policy on Traditional Medicine & Medicinal Plants that incorporates critical issues and proposed policy interventions in:

- 1. Conservation.
- 2. Domestication and production.
- 3. Commercialisation, marketing and trade.
- 4. Safety, efficacy and quality.



Traditional Herbal Practitioners at a workshop in KEMRI to commemorate African Traditional Medicine Day.



Production , Marketing and Intellectual Property Rights

A. PRODUCTION

The production facility situated at the Institute's Headquarters was constructed and equipped through collaboration between KEMRI and JICA.

Activities of the Department



Members of the Pharmacy and Poisons Board being conducted on an inspection tour of the Production Unit.

i) Good Manufacturing Practice (cGMP)

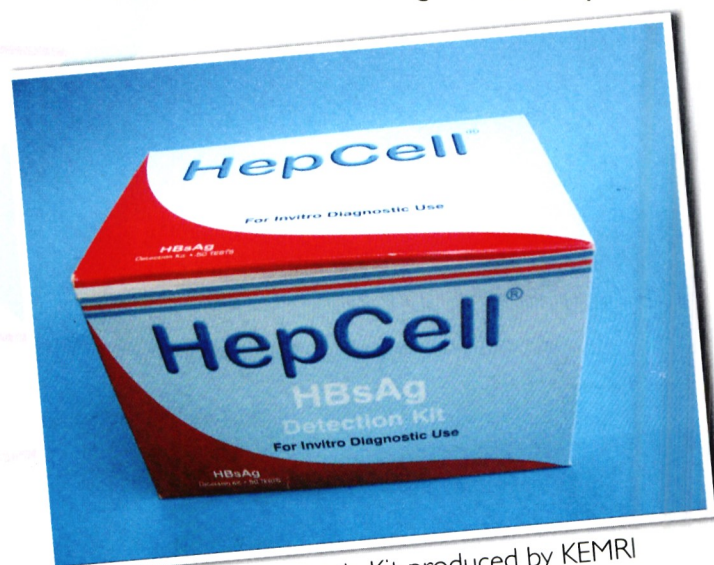
The facility was certified cGMP compliant by the Pharmacy and Poisons Board during the year.

ii) ISO 9001:2000 Accreditation

The facility is currently undergoing the process of ISO 9001:2000 certification.

iii) Diagnostic Kits

The Department currently manufactures diagnostic kits for viral hepatitis B. These kits are supplied to the Ministry of Health and other health institutions in Kenya. The kit is also undergoing evaluation by the ministries of health in Uganda and Tanzania. Other diagnostic kits for detection of HIV and Tuberculosis are in various stages of development.



HepCell diagnostic Kit produced by KEMRI

B. MARKETING

2. HIV/AIDS in the Workplace Programme

The aim of the programme is to train participants in HIV/AIDS prevention, management and control which include setting up workplace programmes and developing policies. Several institutions participated in these activities during the year.

In partnership with Standard Chartered Bank, KEMRI participated in the annual World Aids Day with focus on educating members of the public on HIV/AIDS. An awareness seminar was also held at *Kwa Watoto* Home, Kayole and Dagoretti Children's Home targeting orphans in both primary and secondary schools.



HIV/AIDS Workplace training programme in session

C. INTELLECTUAL PROPERTY MANAGEMENT

I. Intellectual Property Rights Management (IPR)

The Institute recognises the need to protect intellectual property in health research and has taken centre stage in developing an appropriate IP policy for the region. Towards this end, KEMRI has worked closely with the centre for Management of Intellectual Property and Health Research Development (MIHR) of United Kingdom. Resulting from this partnership, a regional IPR Management Seminar was held in the year attracting participants from various research fields including public universities.



Participants at an IPR Workshop organised by MIHR & KEMRI during the Year

27th African Health Sciences Congress

The Congress was held in Durban, South Africa hosted by the University of Limpopo in collaboration with the South African Medical Research Council, Kenya Medical Research Institute and African Forum for Health Sciences. The theme of the Congress was *"Strengthening Resource Capacity and Transfer of Adequate Technology for an Integrated Development in Africa"*. A total of 350 participants 52 of whom were from KEMRI attended.

The Congress attracted of 590 abstracts and 374 abstracts were selected for oral presentation while 216 went to poster presentations. KEMRI presented 99 abstracts, 77 of which were placed for oral presentations and 22 for poster sessions.

The 28th African Health Sciences Congress will be held in Mauritius hosted by the University of Mauritius in collaboration with the Society for Free Radical Research - London

KEMRI Graduate School of Health Sciences

Since inception of the KEMRI Graduate School, the Institute has taken deliberate steps to offer its staff opportunities, to seek further training both locally and abroad. Its KEMRI's tradition that members of staff joining the Institute at various levels of training proceed to obtain higher qualifications at various local, regional and international institutions. In line with the mission of the Graduate School, KEMRI has entered into collaborations with a number of institutions of higher learning.

Through these collaborations several members of staff of the institute have obtained advanced qualifications, some leading to MSc. and PhD degrees.

Under the umbrella of the Graduate School , the Institute of Tropical Medicine (ITROMID) was established in collaboration with the Jomo Kenyatta University of Agriculture and Technology (JKUAT). By combining the academic, research training and linkage capacity available at these two institutions , ITROMID provides a very conducive academic and research environment for young scientists.

The Institute has also entered into partnership with the University of Nairobi's Institute of Tropical and Infectious Disease (UNITID) to undertake research, training , exchange of scientific visits and information and student attachment programmes. Through this arrangement KEMRI scientists have benefited from specialised short courses offered at UNITID. On the other hand UNITID utilises the services of KEMRI staff in design and execution of some of it's programmes.

REPORT OF THE CONTROLLER AND AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF KENYA MEDICAL RESEARCH INSTITUTE FOR THE YEAR ENDED 30th JUNE 2006

I have audited the financial statements of Kenya Medical Research Institute for the year ended 30th June 2006 in accordance with the provisions of Section 14 of the Public Audit Act, 2003. I have obtained all the information and explanations which, to the best of my knowledge and belief, were necessary for the purpose of the audit. The financial statements are in agreement with the books of account.

Respective Responsibilities of the Board of Management and the Controller and Auditor General

The Board is responsible for the preparation of financial statements which give a true and fair view of the state of affairs of the Institute and its operating results. My responsibility is to express an independent opinion on the financial statements based on my audit.

Basis of Opinion

The audit was conducted in accordance with the International Standards on Auditing. Those standards require that the audit be planned and performed with a view to obtaining reasonable assurance that the financial statements are free from material misstatement. An audit includes an examination, on a test basis, of evidence supporting the amounts and disclosures in the financial statements. It also includes an assessment of the accounting policies used and significant estimates made by the Board, as well as an evaluation of the overall presentation of the financial statements. I believe the audit provides a reasonable basis for my opinion.

1. Residential Staff Housing Project

In the Report for 2004/2005, reference was made to the cost of Kshs. 120,022,200 incurred on a staff housing project which had stalled being written off without the approval of the Treasury and the parent Ministry. As previously reported the developer of the project using the title document of the land on which the development was taking place borrowed funds from National Bank of Kenya. In an effort to discharge the title, the Government spent Kshs. 280 million in 1993 and Kshs. 142 million in 2000 towards settling Developers account with National Bank of Kenya. So far, the title has not been discharged. In the circumstances, the propriety of the expenditure written-off amounting to Kshs. 120,022,000 and payment to National Bank of Kenya of Kshs. 422 million cannot be ascertained. It has, however, been explained that the release of title to the Institute is being followed up by the Treasury and that funds for the completion of the project will be allocated in 2007/2008 and the asset reintroduced back in the Institutes' books.

2. Receivables Kshs. 44,492,873

The receivables of Kshs. 44,492,873 as at 30th June 2006 exclude debtors amounting to Kshs. 26,295,200 purportedly paid by an advocate who had earlier owed the Institute Kshs. 120 million. The institute has not, however, provided verifiable documents to substantiate the receipt of the payment of Kshs 26,295,200. In addition, there is no evidence to indicate that the advocate was ever charged interest on the deposit which he held since April/May 2000. In the circumstances, the receivables balance of Kshs. 44,492,873 is understated by the amount due from the Institute's lawyer amounting to Kshs. 26,295,200 and undetermined interest payable on the total amount of Kshs. 120 million since April/May 2000.

Opinion

Except for the reservations set out in the foregoing paragraphs, in my opinion, proper books of account have been kept and the financial statements give a true and fair view of the affairs of the Institute as at 30th June 2006 and of its deficit and cash flows for the year then ended.



P. N. KOMORA

CONTROLLER AND AUDITOR GENERAL

Nairobi
02 March 2007

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30TH JUNE 2006

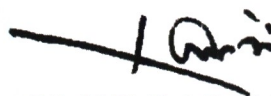
	<u>Page</u>	<u>Note</u>	<u>2005/2006</u> <u>Kes.</u>	<u>2004/2005</u> <u>Kes.</u>
<u>Income</u>				
Grants	34	3(a)	2,765,855,675	2,648,793,999
Others	34	3(b)	39,760,015	9,570,936
Total Income			<u>2,805,615,690</u>	<u>2,658,364,935</u>
<u>Expenses</u>				
Staff costs	34	4(a)	773,002,348	687,572,295
Operating costs	35	4(b)	2,067,156,282	1,913,993,920
Non-Financial costs	35	4(c)	52,846,463	46,963,651
Total expenses			<u>2,893,005,093</u>	<u>2,648,529,866</u>
(Deficit)/Surplus			<u>(87,389,403)</u>	<u>9,835,069</u>

BALANCE SHEET AS AT 30TH JUNE 2006

	<u>Page</u>	<u>Note</u>	<u>2005/2006</u> <u>Kes.</u>	<u>2004/2005</u> <u>Kes.</u>
<u>Non-Current Assets</u>				
Property, Plant and Equip.	33	2	<u>3,219,316,150</u>	<u>1,300,448,959</u>
<u>Current Assets</u>				
Receivables	36	5	44,492,873	122,430,444
Unexpended cash on Special accounts and Grants	37	7b	301,052,607	148,333,427
Cash and Bank balances	38	8	46,389,351	105,554,637
Total Current Assets			<u>391,934,831</u>	<u>376,318,508</u>
Less:				
<u>Current liabilities</u>				
Payables	36	6	73,702,415	29,916,557
Deposits, Special accounts and Grants	37	7a	301,052,607	148,333,427
Total Current Liabilities			<u>374,755,022</u>	<u>178,249,984</u>
<u>Net Current Assets</u>			<u>17,179,809</u>	<u>198,068,524</u>
<u>Total Assets</u>			<u>3,236,495,959</u>	<u>1,498,517,483</u>
<u>Represented by</u>				
Accumulated fund	30		<u>3,236,495,959</u>	<u>1,498,517,483</u>



DR. DAVY K. KOECH
SECRETARY,
BOARD OF MANAGEMENT



DR. JOEL D. ACHIBA
CHAIRMAN,
BOARD OF MANAGEMENT

STATEMENT OF CHANGES IN ACCUMULATED FUND FOR THE YEAR ENDED 30TH JUNE, 2006

	<u>2005/2006</u>	<u>2004/2005</u>
	<u>Kes.</u>	<u>Kes.</u>
Opening Balance	1,498,517,483	1,577,249,998
Surplus on Graduate Programme. A/c b/f	13,844,865	—
Write Down of residential buildings	—	(120,022,200)
(Deficit)/excess of expenditure over income	(87,389,403)	9,835,069
Motor vehicle (NBV) written off	(2,691,920)	—
Write back of accum. depn. on res. buildings	26,640	—
Development grants	<u>1,814,188,294</u>	<u>31,454,616</u>
Closing Balance	<u>3,236,495,959</u>	<u>1,498,517,483</u>

CASH FLOW STATEMENT FOR THE YEAR ENDED 30TH JUNE 2006

	<u>2005/2006</u>	<u>2004/2005</u>
	<u>Kes.</u>	<u>Kes.</u>
<u>Cash Flows from Operating Activities</u>		
(Deficit)/Surplus for the year	(87,389,403)	9,835,069
Adjustments for:		
Depreciation	52,846,463	27,174,895
Loss on disposal of office furniture and med. equip.	-	418,046
NBV of computers written down	-	19,370,710
	<u>(34,542,940)</u>	<u>56,798,720</u>
<u>Working capital changes</u>		
Decrease in receivables	77,937,571	456,654
Increase in payables	43,785,858	28,371,367
	<u>87,180,490</u>	<u>85,626,741</u>
<u>Cash Flows from Investing Activities</u>		
Purchase of fixed assets	(160,190,641)	(12,426,991)
Fixed assets disposal proceeds	-	26,295
Graduate Programme proceeds	13,844,865	-
	<u>(146,345,776)</u>	<u>(12,400,696)</u>
Net Cash used in Investing Activities	<u>(146,345,776)</u>	<u>(12,400,696)</u>
Net (Decrease)/Increase in cash and bank balances	<u>(59,165,286)</u>	<u>73,226,045</u>
Cash and bank balances at the beginning of period	<u>105,554,637</u>	<u>32,328,592</u>
Cash and Bank balances at the end of period	<u>46,389,351</u>	<u>105,554,637</u>

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 30TH JUNE, 2006

I. **SIGNIFICANT ACCOUNTING POLICIES**

a. **Basis of Accounting**

The financial statements are prepared in accordance with and comply with International Financial Reporting Standards (IFRS). The financial statements are prepared in Kenya shillings under the historical cost convention and on accrual basis.

b. **Depreciation**

Depreciation on fixed assets is calculated to write down their cost over their estimated useful lives on a straight-line basis at the following rates.

Office and residential buildings	1.0%
Office and medical equipment	2.5%
Office furniture	2.5%
Motor vehicles	5%
Computers & related equipment	25%

c. **Revenue Recognition**

Revenue is recognized in the accounts when earned and when it is probable that future economic benefits will flow to the Institute and these benefits can be measured reliably.

d. **Translation of Foreign Currencies**

Transactions denominated in foreign currencies during the year are converted into Kenya shillings at rates ruling at the transaction dates.

Assets acquired during the year denominated in foreign currencies are converted into Kenya shillings at rates ruling at the balance sheet date.

e. **Cash and Bank Balances**

For the purpose of the cash flow statement, this comprises cash in hand and bank deposits.

g. **Comparatives**

Where necessary, comparative figures have been adjusted to conform to changes in presentation

in the current year.

h. **Donor Grants**

Donor grants are credited to the income statements in the same period to which the related expenditure is charged. The unexpended cash balance is treated as current asset and current liability in the balance sheet

i. **Employee Benefit Costs**

The Institute operates a defined contribution scheme for its employees. The scheme operated by a Board of Trustees, is funded by contributions from both the Institute and the employees. The Institute's contribution to the scheme is charged to the income and expenditure statement when due.

The Institute also contributes to a statutory defined contribution scheme, the National Social Security Fund.

j. **Impairment of Assets**

The carrying amounts of the Institute's assets are reviewed at each balance sheet date to test for any impairment. On establishing such impairment, an impairment loss is recognised in the accounts.

2.

PROPERTY, PLANT AND EQUIPMENT AS AT 30TH JUNE 2006

Item	Land	Office Buildings	Residential Buildings	Motor Vehicles	Office & Medical Equipment	Office Furniture	Computers	Total
	Kes.	Kes.	Kes.	Kes.	Kes.	Kes.	Kes.	Kes.
Cost B/fwd	226,310,500	462,510,651	192,837,825	80,038,747	522,524,929	14,630,711	12,784,153	1,511,637,516
Additions	--	1,822,255,707	--	27,986,843	100,800,867	9,576,937	13,759,120	1,974,378,934
Transfers	1,332,000	--	(1,332,000)	--	--	--	--	--
Written Off	--	--	--	(2,833,600)	--	--	--	(2,833,600)
	227,642,500	2,284,766,358	191,505,825	105,191,990	623,325,796	24,207,108	26,543,273	3,483,182,850
Depreciations								
Balance b/fwd	--	43,094,755	15,261,448	25,073,459	117,301,134	5,559,667	4,898,094	211,188,557
Charge for the Year		22,847,664	1,915,058	5,259,600	15,583,145	605,178	6,635,818	52,846,463
Adjustments	--	--	(26,640)	(141,680)	--	--	--	(168,320)
	--	65,942,419	17,149,866	30,191,379	132,884,279	6,164,845	11,533,912	263,866,700
Net Book Value								
30-6-2006	227,642,500	2,218,823,939	174,355,959	75,000,611	490,441,517	18,042,263	15,009,361	3,219,316,150
30-06-2005	226,310,500	419,415,896	177,576,377	54,965,288	405,223,795	9,071,044	7,886,059	1,300,448,959

3. INCOME**a. Grants**

	<u>2005/2006</u>	<u>2004/2005</u>
	<u>Kes.</u>	<u>Kes.</u>
Recurrent exchequer	852,244,451	872,244,451
Special accounts	1,913,611,224	1,722,143,034
Jica operational	-	54,406,514
Total	<u>2,765,855,675</u>	<u>2,648,793,999</u>

b. Others

	<u>2005/2006</u>	<u>2004/2005</u>
	<u>Kes.</u>	<u>Kes.</u>
Rent and other misc income	24,890,950	9,570,936
Graduate Programme (ITROMID)	14,869,065	-
Total	<u>39,760,015</u>	<u>9,570,936</u>

4. EXPENSES**a. Staff Costs**

	<u>2005/2006</u>	<u>2004/2005</u>
	<u>Kes.</u>	<u>Kes.</u>
Personal emoluments	193,361,048	179,952,590
Gratuity & pension contribution	144,281,027	101,445,716
House allowance	215,550,032	211,599,836
Other allowance	184,999,394	172,045,753
Medical allowance	16,038,337	15,359,203
Passages & leave	774,623	759,686
Medical	8,142,521	6,409,511
Graduate Programme (ITROMID).	9,855,366	-
Total	<u>773,002,348</u>	<u>687,572,295</u>

b. Operating Costs

	<u>2005/2006</u> <u>Kes.</u>	<u>2004/2005</u> <u>Kes.</u>
Transport	15,072,583	10,751,609
Travelling & accommodation	9,145,269	7,835,337
External traveling & accommodation.	5,904,384	4,847,661
Postal & telegrams	645,712	532,762
Telephones	11,888,108	9,402,412
Official entertainment	3,111,165	4,352,334
Board committees & conferences	2,337,352	6,346,281
Electricity	28,732,421	30,322,918
Water & conservancy	9,412,412	2,919,253
Laboratory reagents & supplies	6,950	143,565
Purchase of drugs & dressings	2,165,943	2,195,471
Purchase of research animals	13,050	13,100
Research materials	903,630	359,730
Food and rations	523,183	383,399
Purchase of animal feeds	308,780	310,232
Purchase of consumable stores	1,839,997	1,708,390
Publishing & printing	208,857	85,079
Purchase of uniforms & clothing	1,101,709	1,644,244
Library	389,764	404,312
Purchase of stationery	6,507,406	5,026,384
Advertising, publicity & shows	5,078,422	2,911,939
Rents and rates	741,619	-
Computer	2,624,761	2,557,267
Miscellaneous	2,356,779	818,520
Training	5,229,756	8,307,005
Insurance	19,665,091	17,513,902
Maintenance - plant, machinery & equipment	7,099,470	3,589,423
Maintenance - buildings & stations	8,930,153	12,161,845
Special accounts and grants	1,913,611,224	1,722,143,034
JICA	-	54,406,514
Graduate Programme (ITROMID).	1,600,332	-
Total	<u>2,067,156,282</u>	<u>1,913,993,920</u>

c. Non-Financial Costs

	<u>2005/2006</u> <u>Kes.</u>	<u>2004/2005</u> <u>Kes.</u>
NBV of computers written down	-	19,370,710
Furniture & medical equipment	-	418,046
Depreciation	52,846,463	27,174,895
Total	<u>52,846,463</u>	<u>46,963,651</u>

5. RECEIVABLES

Category	2005/2006	2004/2005
	Kes.	Kes.
Advances to Centres	1,560,078	1,727,019
Staff advances	1,043,149	703,425
Statutory over remittance	43,309	-
Deposit with lawyer	-	120,000,000
Graduate School fees	7,069,155	-
Sundry debtors	34,777,182	-
Total	44,492,873	122,430,444

Sundry debtors

	Kes
Unremitted contributions by Kemri / CDC and Welcome Trust programmes on seconded staff and other shared costs	19,151,688
Outstanding remittances from the Institute's revenue generating activities	15,025,494
Deposit with Kenya Power & Lighting Co	600,000
Total	34,777,182

6. PAYABLES

Outstanding liabilities are as analysed below:

Category	2005/2006	2004/2005
	Kes.	Kes.
Unremitted staff deductions	314,649	29,916,557
Kemri Pension Fund	58,269,920	-
General Merchants	11,040,246	-
Graduate School- fees prepayments	4,077,600	-
Total	73,702,415	29,916,557

7. SPECIAL ACCOUNTS AND GRANTS**a) UNEXPENDED BALANCES ON SPECIAL ACCOUNTS AND GRANTS AS AT 30TH JUNE 2006**

Source of Funds	Balance as at 1.7.2005 Kes.	Received During the Year Kes.	Expenditure During the Year Kes.	Balance as at 30.6.2006 Kes.
American Embassy	41,072,594	774,104,003	713,477,739	101,698,858
Case Western Reserve University	2,363,798	4,358,750	5,641,050	1,081,498
Drugs for Neglected Diseases Initiative - Nairobi	312,952	3,893,290	1,683,379	2,522,863
Elizabeth Glazer Foundation	1,097,231	12,929,215	12,114,147	1,912,299
Government Treasury - USA	16,925,478	787,076,247	768,383,314	35,618,411
Hospital & Health Admin. Services	1,439,743	3,903,689	5,305,090	38,342
ITROMID	13,844,865	-	13,844,865	-
National Institutes of Health - USA	1,281,738	47,111,589	14,754,863	33,638,464
UNICEF	1,362,651	2,531,753	3,458,639	435,765
University of California	6,905,209	50,049,317	47,572,638	9,381,888
University of Georgia	1,044,766	7,276,345	8,155,218	165,893
University of New Mexico	431,641	4,360,766	4,596,054	196,353
University of Washington	(2,814,961)	23,698,056	20,165,712	717,383
Welcome Trust Research Laboratories	970,648	181,540,769	130,330,825	52,180,592
World Health Organization	12,944,618	13,718,561	11,423,009	15,240,170
Embassy of Japan	-	4,828,449	-	4,828,449
Other Collaborative Agencies	20,775,515	154,797,820	134,159,529	41,413,806
Internally Generated Revenue	28,374,941	19,113,731	47,507,099	(18,427)
TOTAL	148,333,427	2,095,292,350	1,942,573,170	301,052,607

Expended balance on Special Accounts and Grants comprises:

Operating costs

1,913,611,224

Development expenditure

28,961,946

Total**1,942,573,170**

b) FUNDED PROGRAMMES CASH AND BANK BALANCES

Cash balances for the funded projects as at the end of the financial year is as analysed below:

Account No.	Cash Kes	Bank Kes.
241970-312	83,008	275,178,975
241970-055	-	18,079,357
241971-135	-	4,828,449
241970-335	27,487	2,855,330
Total	<u>110,495</u>	<u>300,942,112</u>

8. EXCHEQUER CASH AND BANK BALANCE

Cash and Bank balances are as analysed below:

	<u>2005/2006</u> Kes.	<u>2004/2005</u> Kes.
Cash Balance	9,485	203,299
Bank Balance	46,379,866	105,351,338
Total	<u>46,389,351</u>	<u>105,554,637</u>

9. TAXATION

The Institute is not exempt from the provisions of the Income Tax Act. There were no outstanding tax liabilities at the end of the year.

10. CURRENCY

The currency applicable is Kenya Shillings.

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INTERNATIONAL & REGIONAL COLLABORATING INSTITUTIONS

INTERNATIONAL



Japan

- Japan International Cooperation Agency (JICA)
- Kanazawa University
- Nagasaki University



United States of America

- Centre for Disease Control and Prevention
- Walter Reed Army Institute of Research



United Kingdom

- Liverpool School of Tropical Medicine
- London School of Hygiene and Tropical Medicine
- Wellcome Trust (UK)



United Nations Agencies

- World Health Organisation



Thailand

- Mahidol University



Switzerland

- Medicines San Frontiers International



Brazil

- Oswaldo Cruz Foundation



Netherlands

- Royal Tropical Institute of Amsterdam



India

- Indian Council of Medical Research



REGIONAL



Blair Institute, Zimbabwe



Tanzania

- Commonwealth Regional Health Secretariat For East, Central and Southern Africa
- National Institute of Medical Research, Tanzania



Ethiopian Health and Nutrition Research



Noguchi Memorial Institute, Ghana



Medical Research Council, South Africa



Uganda

- Makerere University Medical School, Uganda
- Virus Research Council, Uganda



Suez Canal University, Egypt



Zambia Medical School



Canada

- Lawson Health Research Institute



Germany

- Institute of Virological Research



Australia

- Bois Initiative



Austria

- International Atomic Energy Agency (IAEA)



