

4. Evaluation by Five Criteria

4.1. Relevance

Overall, the Project's focus on blood safety, HIV/HBV and OI research, and community-based behavioural interventions on HIV/AIDS issues are consistent with the needs of the country, and in line with priorities of Kenya's health development agendas as well as that of JICA's country assistance programme. Hence, relevance of the strategy of the Project is high.

Detailed explanation is presented below.

Currently, 1.1 million adults and 100,000 orphans are estimated to live with HIV and AIDS in Kenya¹². HIV/AIDS is considered a "uniquely corrosive threat" to poverty reduction in the Kenya's Economic Recovery Strategy (ERS), and also perceived as a "national emergency" that all individuals, societies and institutions are to deal with. Within the Kenya National Strategic Plan on HIV/AIDS (2005/6~2009/10), HIV/AIDS related research as well as community mobilisation was enlisted as essential measures to respond to the epidemic.

Project interventions are also responsive to the needs of target groups. Availability of safe blood in the country is limited, with only 50% supplied as oppose to 250,000 units of demand. HIV and HBV prevalence among donated blood was 2.0% and 3.6%, respectively, requiring due implementation of screening. The scaling-up plan of ART¹³ will increase importance of continuous surveillance of HIV strains in the country, monitoring ARV drug resistance, and diagnosis and better management / treatment of opportunistic infections. Formulation of affordable plant based agents for use against opportunistic viral infections is timely and consistent with MOH emphasis on development of herbal medicines. Similarly, Project's attempt to develop a socio-behavioural intervention in addressing HIV/AIDS in Western Kenya came out of the very needs perceived among PMTCT researchers, when they found out the astounding amount of ignorance over HIV/AIDS in both mothers and their partners. Western and Nyanza Provinces not only have very high HIV seroprevalence among antenatal care (ANC) clients, but also there are persisting harmful traditional practices such as wife inheritance and polygamy.

The Project is also in line with JICA's Country Assistance Strategy, as it falls under one of the three programmes of the health-sector support by JICA, namely 1) rural health service improvement, 2) international parasitic diseases control, and, 3) mitigation on AIDS and infectious diseases control. JICA also stresses human resource development as a crosscutting theme.

¹² Kenya National Strategic Plan on HIV/AIDS (final draft), March 2005

¹³ Currently, 23,963 people (8,000 private and 11,221 public) are receiving ART in Kenya (GAC, 2005). With the Global Fund support to scale up the ART availability in the country, the number is expected to increase.

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4.2. Effectiveness

The Project was effective in producing valuable and numerous Outputs, each of which constitute strengthened capacity of KEMRI in terms of a development and production unit, a specialised research body, a surveillance body, as well as a training body in the area of HIV, viral hepatitis and Opportunistic Infections.

These achievements are undeniably founded upon the long-term technical cooperation. Steady and persisting cooperation for quarter a decade had brought sufficient ground to this phase an opportunity to rigorously pursue various research undertakings. Additionally, KEMRI Counterparts were able to impart and disseminate their techniques and knowledge to its national and regional counterparts. Expansion of working partners, be that service providers and/or research institutes, in turn enhanced KEMRI's research potentials for securing quality cohorts and samples and for cross-fertilising capabilities. These gains have become increasingly visible, to MOH, to regional academic forum and to external partner research institutions.

Such gains could be further consolidated to form solid institutional strengths, as it appears to be dispersed in different individuals and sections. This is partly due to the fact that, with the exception of blood safety component, each Activity item in the PDM is rather self-conclusive and independent. This weakness of logical sequence in PDM did not seem to have provided sufficient direction to each Activity towards contributing to a shared objective.

4.3. Efficiency

Generally, the Project utilised most inputs to produce Outputs, and has been fairly successful in obtaining Outputs. Almost all equipment provided under current phase has been working perfectly. As for levels of utilisation, most of the equipment is either used everyday or regularly. This is due to the fact that major investments under this phase were vehicles and office equipment. Additionally, quite a few equipment that was donated by the previous cooperation is still in regular use.

Looking though the results of questionnaires and interviews, implementation process could have been more efficient. Concrete points were raised in the questionnaire survey as well as interviews with Counterparts and Experts are shown below:

- The Project supported repairing work of the P-3 laboratory (worth Kshs.10,335,907) built in 1997 by the Grand Aid scheme¹⁴. This laboratory is yet to be fully utilised for intended purpose. The Project identified and sent one Counterpart for 4.7-month training on HIV Culture in Kanazawa University, Japan. On his return in December 2005, the P-3 laboratory will be utilised for the intended purpose;
- Equipment quality was excellent but delay in provision was experienced. Some Experts

¹⁴ The cost of establishing the P-3 laboratory in KEMRI was 157,135,081 Kshs. (equivalent JPY 245,700,000)

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(60%) and Counterparts (44%) questioned affordability of the maintenance cost of equipments for KEMRI;

- Quite many Experts marked "rarely" or "more or less" on adequacy in number (56%), timing (89%) and area of expertise (75%) of long-term Experts, while Counterparts marked 44%, 41%, 22%, respectively, showing a certain extent of dissatisfaction. This seems to be reflective of the absence of the Chief Advisor and other Experts for some period as well as Expert's limitation in covering various specialised activities;
- Thirty-nine (39) % of Counterparts and 33% of Experts responded "rarely" or "more or less" on timeliness of Counterpart training. Another similar point is the lack of managerial enforcement to coordinate visits by Short-term Experts and assignment of Counterparts.

It should also be noted that persistent efforts have been made by both Experts and Counterparts to continue Activities despite the above-mentioned difficulties. Long and short-term Experts were generally instrumental in smooth running of the Activities, as they secure operational costs, organise procurement of needed research materials, and guide the academic works. 1) At times, JICA could not secure long-term Experts that fits the qualifications required in the field; 2) Managerial interventions for ensuring timely allocation of Counterparts were insufficient; and, 3) JICA's regulatory prohibition denied supplement salaries of Counterparts that discouraged some Counterparts to work with the Project.

4.4. Impact

Observed effects of the Project in provision of blood screening kits, research activities, training technical staff in the public health system, and direct community intervention, to varied extent, made or can potentially make contribution to infectious control and research in Kenya. Nevertheless, substantial impact on infectious diseases control and research has been rather minimal than it could be.

This could partially be explained by the weak Project design, as well as weak interests on both KEMRI and MOH parties to strengthen its ties: PDM did not make provisions to a mechanism that coordinate and mitigate varied interests between MOH officials in policy / guideline formulations and KEMRI researchers. On the same token, the PHE component could make a good contribution to HIV/AIDS control programme if the experience is completed and compiled into an effective intervention model, and by sharing the good practice with those with similar engagements and interests.

Furthermore, the Project stakeholders and the Evaluation Team observed the following positive and negative impacts relating to Project's interventions:

- Thanks to human resource development and continuous updating of laboratory equipment by the Project, KEMRI is equipped to house an INTRMID programme, a PhD and MSc

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in tropical medicine;

- Long-term support enabled KEMRI to strengthen its human resources as it opened opportunities for training wider and thick layers of researchers, technologists and technicians, instead of just concentrating on a few capable researchers. On the other hand, it resulted in, to some extent, dispersed focuses and weakened results-orientation;
- Loss of qualified and trained personnel: Two focal personnel have left the Project despite having received intensive training from JICA funds;
- Under the PHE component, their interactive educational interventions seemed to have prepared the community to accept the issues as their own. Among them, some community members began to perceive needs to address the issues surrounding AIDS orphans within the community;
- There is a sense of dependency among KEMRI personnel on JICA funds and expertise of JICA Experts, which is accompanied by weak confidence in securing research budget from competitive funding sources, and the lack of avidity for their own research subjects, respectively;
- Under OI component, those participated in cohort study benefited from accurate diagnosis and treatment and regular monitoring of their health status. Some measures are required to minimise any negative impact after the closure of each study;
- Similarly, interns and college/university students learning at KEMRI have a great exposure to varieties of diagnostic technologies. This is most appreciated at laboratories in remote areas - Busia and Kisumu; and,
- KEMRI provided Japanese college / university students valuable practical experiences.

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4.5. Sustainability

With the technical capacity that have been developed through 25 years of cooperation, KEMRI is likely to be able to produce most of its outputs as a research, training and production bodies to a satisfactory level. Key to sustainability rests more on the financial aspect.

KEMRI was established through the Science and Technology (Amendment) Act of 1979, and has been recognised as one of the leading health research institutions in Africa with one of the best facilities in the whole continent. During the last five years, the level of recognition in its track and potential contributions to the country has become “more visible.” It has also grown into an educational institution, hosting the JICA-supported TCTP and in-county training programme as well as the INTRMID – MSc and PhD degree programme in collaboration with JKUAT.

Analyses in a group exercise conducted by core Counterparts and Japanese Experts indicated that there is sufficient level of confidence among KEMRI researchers and technical staff that they can maintain and apply technical knowledge they have attained through the Project, and even continue producing achievements, provided that ample supportive environment is sustained after withdrawal of JICA’s support.

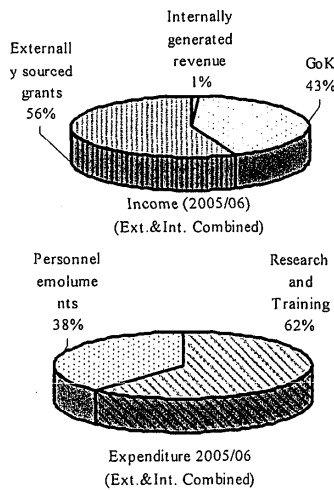


Diagram 4-1: KEMRI Budget (including externally sourced grants)

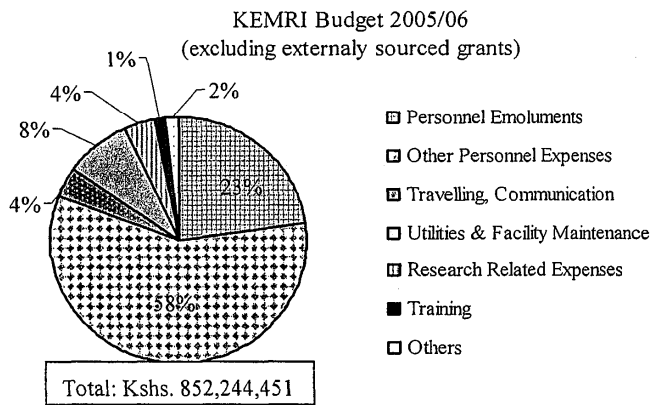


Diagram 4-2: KEMRI Budget 2005/06 (excluding externally sourced grants)

Financially, KEMRI is given a lump sum budget for the implementation of medical research from the Ministry of Health, and the amount has been on increase over the past five years¹⁶. Only a portion (about 4%) out of internal resources goes into research related activities, nevertheless, because KEMRI has been sourcing most of its research expenses from external grants, including one from JICA whose contribution is 17~18%. In 2005/06, GOK portion of the budget was 43% while external grants was 56%. Other 1% was internally generated revenue.

¹⁶ Interview from the Deputy Director in Administration and Finance.

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KEMRI is planning to increase the portion of revenue through income generation activities up to 15% of total income by 20014/15. At the same time, KEMRI has a plan to establish grant office, which enables researchers to collectively raise research funds. The challenge is how to approach and appraise demand-driven research proposals. Newly established manufacturing plant is also to join these efforts. It is expected, for these efforts to bear fruit, it will take some time. Immediate concerns are 1) early establishment of proper management structure in the manufacturing unit, 2) securing sources of funds to carry on some essential research activities, and, 3) maintenance of laboratory equipment, as the delay / lack of them could potentially undermine the gain of KEMRI centres.

As for KEMRI-developed blood screening kits (HEPCELL II, PA-1, KEMCOM), sustainability depends upon demands from the users. Efforts to find and expand the market resting on its advantages (locally made, cheaper, stable supply, no electricity required) as well as to overcome some disadvantages (cumbersome procedure, requiring large samples for one test, requiring specifically trained staff, and margins for erratic interpretation) are required.

Under PHE component, sustainability of activities in six sub-locations in Western Kenya appears to be good, as its approach was to empower community members to be equipped with knowledge and create favourable attitude towards their own actions. Nevertheless, this intervention does not seem to be at a mature stage: the Project requires cautious and gradual approach in withdrawing and handing over the leadership to the community.

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5. Conclusion

Overall, the Project successfully contributed to capacity building of KEMRI as a competent institute in areas relating to blood safety, HIV/AIDS and OIs. Last 5 years were considered an “exponential period” for a long-standing KEMRI/JICA cooperation where achievements and appreciation from general public gained enhanced visibility and recognition, i.e. in terms of its research and surveillance functions and its role as a specialised training providers in diagnostic technology/techniques. Furthermore, KEMRI has increasingly come to assume its roles in Africa, in training and surveillance functions. The said institutional growth of KEMRI sets a milestone for JICA’s future collaboration with KEMRI, to enhance a vision and practice of what KEMRI could contribute for the benefits of others, founded upon the strength built through a long-standing cooperation. KEMRI, thus, is expected to step up its role as JICA’s Partner for Technical Cooperation instead of its recipient.

For the blood safety component, challenges are on putting in place sound management in the newly established production unit to establish a stable market in supply of quality-assured and affordable blood screening kits and dissemination of technical know-how among laboratory professionals.

For research component, more focus on the research and training that synchronise with prioritised agendas in the health sector, and ensuring the MoH personnel in policy/guideline formulation have sufficient understanding is required. KEMRI’s capacity to secure research funds from non-JICA sources in a competitive environment is untapped. Strengthening on this could fill in the expected shortage to support crucial research activities for sustaining gains made through the Project.

For PHE component, the team requires to complete and consolidate the experience gained through the intervention in western Kenya with the lessons learnt, which should be fed to all relevant stakeholders.

Therefore, the Project should facilitate the process of formulating a phase-out plan in light of the above challenges, especially in the spirit of strengthening sustainability. To the extent possible, the process should be collective, transparent and with the guidance and supervision of the management.

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6. Recommendations

6.1. Overall Recommendations

With the leadership of the Ministry of Health, related organisations are expected to further promote blood safety as well as diagnosis, prevention and treatment of opportunistic infections in Kenya. To this end, the Ministry of Health should utilise the capacity and expertise available at KEMRI in national infectious diseases control. KEMRI should enhance its contribution that leads to substantial improvement in national health policies and the health system.

The Evaluation Team also recommends the following action items as shown below (6.2 ~ 6.3) to be taken up by concerned parties.

6.2. Recommendations to the Ministry of Health

1. MOH is to ensure support and commitment to HEPCELL II to be constantly used in BTCs and other health facilities.
2. MOH is to promote the use of other approved KEMRI-produced blood screening kits.

6.3. Recommendations to KEMRI

1. KEMRI with the assistance of the Project to draw up a plan for developing collective capacity to obtain research funds from competitive sources.
2. KEMRI to support procurement of reagents, experimental equipment, consumables, packaging materials, for supporting HEPCELL II production and dissemination as well as research activities in identifying molecular framework for HIV and cervical cancer screening programme.
3. KEMRI to support field expenses for collection of samples and data from monitoring infectious diseases
4. KEMRI to take measures to retain trained counterparts to continue research activities.
5. KEMRI to find a way to enhance the remuneration of staff in order to retain skilled personnel at the production unit.
6. KEMRI to maintain collaborative network with NPHLS, MoH, PGH and other research institutes to conduct research activities.
7. KEMRI to continue the promotion of diagnostic skills / knowledge as well as to strengthen Good Laboratory Practice (GLP) programme in Provincial General Hospitals and District Hospitals.
8. KEMRI to support essential research / community (including youth group) activities after completion of the Project, if continuation is required to produce tangible results.

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6.4. Recommendations to the Project

The Project should carefully examine the phasing-out plan for sustainability, in order to maximise retention of achievement gained through a series of capacity building activities. To this end, the Project, together with relevant stakeholders, should formulate a half-year work plan of the Project until the planned closure of the Project.

1. KEMRI together with the Project to discuss the effective management strategy for the new Production Unit in light of its productivity, financial sustainability and quality assurance. KEMRI should establish effective management system as well as QA/QC system in the Production Facility, including considering creation of autonomous business division for production and marketing.
2. Project to expedite the compilation of research results for evidence-based policy formulation and action.
3. Project to train researchers in basic computer skills (data inputting, management and analyses) to promote swift analyses of collected data.
4. Project to complete technical assistance activities for production of KEMCOM (HIV1/2 detection kit), technique of producing peptides of HIV1/2, HIV culture and HIV phenotyping for drug resistance studies.

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7. Lessons Learnt

Based on experiences from the Project's implementation, the following good practices and lessons are drawn.

Good practices:

- 1. The Project promoted working in a Team for a common objective, especially with the blood safety group. This has facilitated effective communication and collaborative working relationship among researchers across different Centres.*
- 2. Monitoring conducted with participation of both the Counterparts and Experts to jointly review progress and to formulate the reports was instrumental for increasing ownership and transparency.*
- 3. The relationship between short-term Experts and Counterparts who are "coupled" for conducting intensive technical guidance and training in Kenya as well as Counterpart training in Japan customised by corresponding Experts at their affiliate institutions in Japan, was received well and quite effective in ensuring the Counterparts to master technical aptitude.*
- 4. Involvement in training activities entailed and thus enhanced researcher's skills in explaining research results to general audience.*
- 5. Several KEMRI Researchers, Technologists and technicians enhanced their relationships with the Ministry of Health and/or other organizations in the field. This has in turn brought to the Counterparts benefits to their research activities.*
- 6. Frequent communication among the Project Advisory Committee, the management of KEMRI as well as the Ministry of Health was beneficial in positioning the Project in broader context.*
- 7. JICA has stepped in at the right moment to support KEMRI in conducting TCTP. This collaboration of two schemes was effective in disseminating the results of Technical Cooperation to the region.*

Lessons learnt:

- 1. In selection of experts as well as in formulation of the TORs, due consideration to continuity in ongoing activities as well as expertise that fit the local needs and contents of the Project (such as PDM) is required. Prompt reporting to Kenya JICA Office and HQs from the Project is essential in supporting the needs at the ground.*
- 2. It is beneficial for the Project to promote understanding among Counterparts of the differences between JICA and other external partners, in order to avoid loss of motivation.*
- 3. Technical support to research activities tends to become self-conclusive within individual research topic. Coherent objective setting and objective-oriented monitoring is essential in order to secure efficiency and effectiveness.*
- 4. More efforts should be integrated by both parties to draw up and realise sustainability plans from the earlier stage of the project.*
- 5. Long-term support has been beneficial in developing institutional capacity for research. Risk is undefined, incoherent focus on capacity building. On the other hand, Counterpart becomes too dependent.*
- 6. Timing of Counterpart training in Japan should be strategically coordinated in the overview of the Project plan. For example, training of core Counterpart should be scheduled in advance to*

starting the activities in the country so that the Counterpart can be fully involved.

7. *Research Project under JICA Technical Cooperation to have clear guidelines and agreement among stakeholders on data ownership and publication.*
8. *Although each visit by the Short-term Experts is short, it could produce desired results if sufficient repetitive follow-ups are provided to the Counterparts.*
9. *Responsibility of Counterpart should be recognised in the organization, and information on the absence of Counterpart should be closely shared with the Experts in timely manner.*

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PDM(0) of the PROJECT

Project Title: Infectious and Parasitic Diseases Research and Control Project

Target group: not defined
Target area: not defined

Ultimate beneficiaries: not defined

Date: April 12, 2001
Duration: May 1, 2001 - April 30, 2006

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal</p> <p>Research and control programmes of infectious and parasitic diseases are strengthened in Kenya and its neighbouring countries through capacity building of research activities and human resources development at KEMRI and related institutions.</p>	<p>In 3 to 5 years after the end of the Project,</p> <ol style="list-style-type: none"> 1. A substantial reduction of transmission of HIV/AIDS and Viral Hepatitis through blood products and blood transfusion in Kenya and neighboring countries using the diagnostic kits developed in KEMRI 	<ol style="list-style-type: none"> 1. Statisticians from Ministry of Health and Ministry of Planning and National Development 2. Statisticians from National AIDS and STI Control Programs/National AIDS Council 3. Project records 	<ol style="list-style-type: none"> 1. Trained personnel continue to remain in the area of control and research programs 2. Government support for control and research programs in terms of budget remain strong 3. HIV/AIDS pandemic does not get out of control 4. Emerging and re-emergin diseases associated with HIV infectious are contained 5. Preventive health behaviors of people become appropriate
<p>Project Purpose</p> <p>Human resources and human/information network of institutions in Kenya and its neighbouring countries are developed in order to strengthen effective control of the targeted diseases (HIV/AIDS, viral hepatitis, opportunistic infections, parasitic diseases)</p>	<ol style="list-style-type: none"> 1. A certain number of personnel in charge of blood safety control programs in Kenya successfully receive training 2. Appropriate and cost-effective kits to be produced and supplied 3. Appropriate and cost-effective socio-behavioral intervention strategies developed 4. Appropriate prevention, control and management strategies developed 	<ol style="list-style-type: none"> 1. Records of the Project 2. Number of personnel in charge of blood safety programs trained 3. Number of kits distributed 	<ol style="list-style-type: none"> 1. Trained personnel remain active in their areas of training 2. The project is adequately supported by JICA and Kenyan Government

ANNEX I PDM (Ver 0)

Project Outputs	Narrative Summary	Verifiable Indicators By the end of the project period:	Means of Verification Project	Important Assumptions
<ol style="list-style-type: none"> 1. An HIV/AIDS and viral hepatitis diagnosis system for blood safety (testing and confirmation) is established with widespread utilization of quality assured blood screening kits. 2. The methods for diagnosis, prevention and treatment of opportunistic infections in both adults and children with HIV/AIDS are established with the application and development of traditional medicines. 3. Application and development of traditional medicines in terms of treatment of infections: <ol style="list-style-type: none"> (1) To collect candidate plants, cultivate and conserve them (2) To carry out activity-guided phytochemistry of the plants (3) To carry out biological assays to establish efficiency of plant extracts against HIV/AIDS (4) To conduct pharmacological and toxicological studies of plant extracts on experimental animals (5) To carry out pharmaceutical formulation studies (6) To carry out efficiency and safety studies of plant extracts on primate models (7) To carry out pilot clinical trials 4. Activities related to monitoring and evaluation: <ol style="list-style-type: none"> (1) To establish management organization and to formulate detailed implementation plan (2) To conduct monitoring of the project activities and results on a regular basis 	<p>By the end of the project period:</p> <ol style="list-style-type: none"> 1. The evaluation of results from blood screening in KEMRI shows high acceptability in terms of cost, operational efficiency and sustainability 2. General problems in blood safety programs in the country are well understood and solutions strategized 3. The results of survey for trainees in blood safety their high satisfaction 4. Clear understanding of the community based HIV/AIDS preventive interventions 5. Establishment of human and communication network 	<ol style="list-style-type: none"> 1. Surveys conducted on the Project 2. Simulation models developed from data in NACC and the Project 3. Curriculum and training materials 4. Training facilities under Grant-in-Aid developed 5. Interviews and questionnaires carried out among the communities, health personnel, training instructors and trainers 6. List of human network 7. Print out or file of collected information 	<ol style="list-style-type: none"> 1. The Kenyan counterpart personnel involved in training and research remain in these occupations 2. There will be strong collaborations between KEMRI and Ministry of Health, and bilateral organizations 	

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Project Activities	Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>1. Production, quality control, quality assurance and widespread utilization of blood screening kits:</p> <p>(1) Production and quality assurance of KEMRI HEPCELL II and KEMRI HIV-1 PA kits</p> <p>(2) Distribution of the kits to government hospitals through MOH and AMREF network</p> <p>(3) Training of personnel in charge of blood safety programs, either thorough mid level manpower training program In-country training program or TCTP in Kenya and its neighboring countries</p> <p>(4) Development of a serum bank for HIV/AIDS and hepatitis virus positive blood</p> <p>(5) Monitoring of epidemic HIV strains</p> <p>(6) Monitoring of the percentage of HCV infected patients</p> <p>(7) To conduct community health education (e.g. HIV/AIDS seminars on behavior change and prevention of MTCT)</p> <p>(8) To train community health educators</p> <p>(9) To strengthen technical capacities to cultivate HIV and purify HIV antigen</p> <p>(10) To establish IFA confirmatory test</p> <p>(11) To monitor window period for blood transfusion or management of MTCT</p> <p>(12) To strengthen production units for KEMRI HEPCELL II and KEMRI HIV-1 PA kits under Grant-in-Aid</p>	<p>1. A certain number of personnel in charge of blood safety control programs in Kenya and neighboring countries successfully receive training</p> <p>2. Appropriate cost-effective kits developed</p> <p>3. Appropriate and cost-effective socio/behavioral interventions developed</p> <p>4. Incidence and type of opportunistic infectious determined</p> <p>5. Mortality from opportunistic infectious substantially reduced</p> <p>6. Number of anti-retroviral agents developed</p>	<p>1. Number of personnel in charge of blood safety programs trained</p> <p>2. Number of kits produced</p> <p>3. The number of counterparts trained</p> <p>4. The number of community health educators trained</p> <p>5. HIV/AIDS statistics from MOH and Ministry of Planning and National Development</p> <p>6. Prevalence of HCV in general population</p> <p>7. Number of protocols presented to KEMRI's Scientific and Ethical Committees</p> <p>8. Number of cohorts established</p> <p>9. Project records</p>	<p>1. Necessary support is given to the Project by JICA, the Kenya government, regional government and collaborating government ministries and institutions of Kenya</p> <p>2. Equipment supplied to the Project from JICA receive prompt clearance by the customs</p> <p>3. Trained personnel remain available for the Project</p> <p>4. Adequate financing of the project by the Kenya government and JICA</p>	

ANNEX I PDM (Ver 0)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>2.. Prevention and treatment of opportunistic infections (OI):</p> <ul style="list-style-type: none"> (1) Develop appropriate proposals on nutrition and OI in adults and children with HIV/AIDS (2) Establish HIV/AIDS cohort(s) in Kibera (3) Carry out regular follow-up of HIV/AIDS patients for incidence and risk factors to OI (4) Design preventive interventions and assess their impact on incidence of OI (5) Strengthen laboratory capacities to diagnose OI (6) Nutritional study in children under five years old in Kibera 			

PDM(1) of the PROJECT

Project Title: Research and Control Of Infectious Diseases Project

Target group: not defined
Target area: not defined

Ultimate beneficiaries: not defined

Amendment Date: March 21, 2003 (effective from April 1, 2003)
Duration: May 1, 2001 - April 30, 2006

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p><u>Overall Goal</u></p> <p>Research and Control programs of infectious diseases are strengthened in Kenya through capacity building of research activities and human resources development at KEMRI and related institutions, such as NPHLS.</p>	<p>In 3 to 5 years after the end of the Project, transmission of HIV/AIDS and viral hepatitis through blood products and blood transfusion in Kenya will be substantially reduced, using the diagnostic kits development in KEMRI</p>	<p>1. Statistics from National AIDS and STI Control Programs/National AIDS Council 2. Project records</p>	<p>1. Trained personnel continue to remain in the area of control and research programs 2. Government support for control and research programs in terms of budget remain strong 3. HIV/AIDS pandemic does not get out of control 4. Emerging and re-emergin diseases associated with HIV infectious are contained 5. Preventive health behaviors of people become appropriate</p>
<p><u>Project Purpose</u></p> <p>Research and production capacity, human resources and human/information network at KEMRI, in collaboration with other institutions in Kenya such as NPHLS, is developed in order to strengthen effective control of the targeted diseases (HIV/AIDS, viral hepatitis and opportunistic infections).</p>	<p>1. A certain number of personnel in charge of blood safety control programs in Kenya successfully receive training 2. Appropriate and cost-effective kits to be produced and supplied 3. Appropriate and cost-effective socio-behavioral intervention strategies developed 4. Appropriate prevention, control and management strategies developed</p>	<p>1. Records of the Project 2. Number of personnel in charge of blood safety programs trained adequately and efficiently 3. Number of kits distributed 4. Results of proficiency test</p>	<p>1. Trained personnel remain active in their areas of training 2. The project is adequately supported by JICA and Kenyan Government</p>

ANNEX I PDM (Ver 1)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p><u>Project Outputs</u></p> <ol style="list-style-type: none"> An HIV/AIDS and viral hepatitis diagnosis system, also including other blood-borne infections, for blood safety (testing and confirmation) is established with widespread utilization of quality assured blood-screening kits. The methods for diagnosis, prevention and treatment of opportunistic infections in both adults and children with HIV/AIDS are established. 	<p>By the end of the project period:</p> <ol style="list-style-type: none"> The evaluation of results from blood screening in KEMRI shows high acceptability in terms of cost, operational efficiency and sustainability General problems in blood safety programs in the country are well understood and solutions strategized The results of survey for trainees in blood safety their high satisfaction Clear understanding of the community based HIV/AIDS preventive interventions Establishment of human and communication network Herbal-based product against OIs including herpes virus infection will be formulated for use 	<ol style="list-style-type: none"> Surveys conducted on the Project Simulation models developed from data in NACC and the Project Curriculum and training materials Interviews and questionnaires carried out among the communities, health personnel, training instructors and trainers List of human network Print out or file of collected information 	<ol style="list-style-type: none"> The Kenyan counterpart personnel involved in training and research remain in these occupations There will be strong collaborations between KEMRI and Ministry of Health

ANNEX I PDM (Ver 1)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>Project Activities</p> <p>1. HIV/AIDS and viral hepatitis diagnosis system also including other blood-borne infections, for blood safety :</p> <p>(1) Quality control of production and quality assurance of KEMRI HEPCELL II (hepatitis B) and KEMRI HIV-1 PA kits</p> <p>(2) Production of HBsAb test kits (PHA) -KEMRI HEPsAB</p> <p>(3) Production of HBsAg test kits as trials</p> <p>(4) Establishment of technology to prepare HIV-Type1 and Type2 synthetic peptides</p> <p>(5) Development of agglutination kits, incorporating HIV-Type1 and Type2 antigens</p> <p>(6) Giving advice for the distribution of the kits to hospitals through MOH and other organisations such as AMREF</p> <p>(7) Development and implementation of training curriculum for blood safety in Kenya through Mid-Level Manpower Training Programme and In-Country Training Programme.</p> <p>(8) Development of a serum bank for HIV and hepatitis B virus positive blood</p> <p>(9) Monitoring of window period for improved quality of blood for transfusion</p> <p>(10) Application of IFA for confirming HIV sero-status</p> <p>(11) Strengthening of technical capacities to isolate HIV and check for HIV antigen</p>	<p>1. A certain number of personnel in charge of blood safety control programs in Kenya successfully receive training</p> <p>2. Appropriate and cost-effective kits are developed</p> <p>3. Appropriate and cost-effective socio-behavioral intervention are developed</p> <p>4. Incidence and type of opportunistic infectious are determined</p> <p>5. Mortality from opportunistic infections is substantially reduced</p>	<p>1. Number of personnel in charge of blood safety programs trained</p> <p>2. Number of kits produced</p> <p>3. The number of counterparts trained</p> <p>4. The number of community health educators trained</p> <p>5. HIV/AIDS statistics from MOH and Ministry of Planning and National Development</p> <p>6. Prevalence of HCV in general population</p> <p>7. Number of protocols presented to KEMRI's Scientific and Ethical Committees</p> <p>8. Number of cohorts established</p> <p>9. Project records</p>	<p>1. Necessary support is given to the Project by JICA, the Kenya government, regional government and collaborating government ministries and institutions of Kenya</p> <p>2. Equipment supplied to the Project from JICA receive prompt clearance by the customs</p> <p>3. Trained personnel remain available for the Project</p> <p>4. Adequate financing of the project by the Kenya government and JICA</p>

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>(12) Monitoring the epidemic of HIV strains</p> <p>(13) Monitoring of the prevalence/incidence of HCV infection</p> <p>(14) Establishing gene diagnosis laboratory of various known types of HIV and hepatitis virus.</p> <p>(15) Monitoring of other blood-borne infections</p> <p>(16) Training of community health educators and conducting community health and conducting community health education (e.g. HIV/AIDS seminars on behaviour change and PMTCT of HIV and HBV) in Western Kenya</p> <p>2. Diagnosis, prevention and treatment of opportunistic infections (OIs) :</p> <p>(1) Development of appropriate proposals on OIs in both adults and children with HIV/ AIDS in Nairobi and Western Kenya</p> <p>(2) Establishment of a cohort(s) of HIV infected individuals in Nairobi</p> <p>(3) Regular clinical follow up of AIDS patients to determine the epidemiological profile of OIs</p> <p>(4) Designing of preventive and nutritional interventions and assessment of their impact on the incidence of OIs</p> <p>(5) Strengthening of laboratory capacities to diagnose OIs</p> <p>(6) Establishment of diagnosis and treatment of OIs for children in orphanages with or without HIV/AIDS</p>			

ANNEX II Experts

Project: KEMRI/JICA Infectious Diseases ProjectDuration: 1 May 2001-31 April 2006**Long Term Experts**

No.	Name	Designation	Period	Duration (months)	Re.
1	Prof. Teruaki Amano	Chief Adviser	13 Aug.,2001-31 Mar.,2003	19.6 Month(s)	
2	Dr. Koji Yano	Chief Adviser	28 Apr.,2005-30 Apr.,2006	12.0 Month(s)	
3	Mr. Tsutomu Kobayashi	Coordinator	1 May,2001-1 Aug.,2002	15.0 Month(s)	
4	Mr. Kozo Ono	Coordinator	17 Oct.,2001-31 Mar.,2003	17.4 Month(s)	
5	Mr. Kozo Ono	Coordinator	1 Apr.,2003-31 Apr.,2006	37.0 Month(s)	Cont'd
6	Dr. Nobuyoshi Kobayashi	HIV/AIDS	1 May,2001-2 May,2002	12.0 Month(s)	
7	Dr. Isao Oishi	HIV/AIDS	22 May,2001-31 Mar.,2003	22.3 Month(s)	
8	Dr. Isao Oishi	HIV/AIDS	1 Apr.,2003-21 Sep.,2004	17.7 Month(s)	Cont'd
9	Dr. Rika Yamada	HIV/AIDS	6 Sep.,2004-18 Dec.,2005	15.4 Month(s)	
10	Dr. Kazuko Kumon	Opportunistic Infection	8 Nov.,2001-31 Mar.,2003	16.7 Month(s)	
11	Dr. Kazuko Kumon	Opportunistic Infection	1 Apr.,2003-31 Mar.,2004	12.0 Month(s)	Cont'd
12	Dr. Tomoo Ukon	Opportunistic Infection	22 Jun.,2004-21 Jun.,2006	24.0 Month(s)	
13	Dr. Yasuo Kanamoto	Opportunistic Infection	26 Oct.,2004-26 Oct.,2005	12.0 Month(s)	
14	Dr. Yasukazu Omoto	Viral Hepatitis	5 Jun.,2001-31 Mar.,2003	21.8 Month(s)	
15	Dr. Yasukazu Omoto	Viral Hepatitis	1 Apr.,2003-5 Jun.,2004	14.1 Month(s)	Cont'd
LONG TERM EXPERTS TOTAL (in Months)				269. Month(s)	
LONG TERM EXPERTS AVERAGE DURATION (in Months)				24.5 Month(s)	

NOTE: Double counts appear under the same names is due to a change of the name of the Project from 1 April 2003.

Short Term Experts

No.	Name	Designation	Period	Duration	Re.
FY 2001/2002					
1	Prof. Hiroshi Ichimura	HIV/AIDS	16 Aug.,2001-2 Sep.,2001	0.5 Month(s)	
2	Dr. Masahiko Kurokawa	Traditional Medicine	24 Sep., 2001-12 Oct., 2001	0.6 Month(s)	
3	Prof. Hiroshi Ichimura	HIV/AIDS	11 Feb.,2002-6 Mar.,2002	0.8 Month(s)	
4	Prof. Haruhiko Taguchi	Opportunistic Infection	18 Feb.,2002-30 Mar.,2002	1.4 Month(s)	
5	Prof. Shinichi Nakamura	Opportunistic Infection	18 Feb.,2002-6 Mar.,2002	0.6 Month(s)	
6	Dr. Hiroshi Yatsushashi	Viral Hepatitis	24 Feb.,2002-9 Mar.,2002	0.5 Month(s)	
FY 2002/2003					
1	Prof. Hiroshi Ichimura	HIV/AIDS	11 Aug.,2002-30 Aug.,2002	0.6 Month(s)	
2	Prof. Yoshihide Fujiyama	HIV/AIDS	13 Aug.,-2002-28 Aug.,2002	0.5 Month(s)	
3	Prof. Shin Kawai	Opportunistic Infection	26 Aug.,2002-7 Sep.,2002	0.4 Month(s)	
4	Prof. Haruhiko Taguchi	Opportunistic Infection	26 Aug.,2002-20 Sep.,2002	0.8 Month(s)	
5	Prof. Yoshihiro Kiuchi	Viral Hepatitis	27 Feb.,2003-27 Mar.,2003	1. Month(s)	
6	Dr. Takeshi Naruse	Viral Hepatitis	4 Mar.,2003-28 Mar.,2003	0.8 Month(s)	
FY 2003/2004					
1	Prof. Yoshito Eizuru	Opportunistic Infection	7 Aug.,2003-31 Aug.,2003	0.8 Month(s)	
2	Prof. Haruhiko Taguchi	Opportunistic Infection	11 Aug.,2003-31 Aug.,2003	0.6 Month(s)	
3	Prof. Hiroshi Ichimura	HIV/AIDS	6 Sep.,2003-27 Sep.,2003	0.7 Month(s)	
4	Dr. Hiroshi Yatsushashi	Viral Hepatitis	15 Sep.,2003-26 Sep.,2003	0.4 Month(s)	
5	Prof. Hiroshi Kiyono	HIV/AIDS	4 Feb.,2004-9 Feb.,2004	0.2 Month(s)	
6	Prof. Yoshikazu Yuki	HIV/AIDS	4 Feb.,2004-9 Feb.,2004	0.2 Month(s)	
7	Prof. Hiroshi Ichimura	HIV/AIDS	10 Feb.,2004-4 Mar.,2004	0.8 Month(s)	
8	Dr. Koji Yano	Viral Hepatitis	3 Mar.,2004-25 Mar.,2004	0.7 Month(s)	
9	Prof. Yoshihide Fujiyama	HIV/AIDS	27 Mar.,2004-10 Apr.,2004	0.4 Month(s)	
FY 2004/2005					
1	Dr. Rika Yamada	HIV/AIDS	5 Jun.,2004-19 Jun.,2004	0.5 Month(s)	
2	Dr. Takashi Yoshiyama	Opportunistic Infection	4 Jul.,2004-18 Jul.,2004	0.5 Month(s)	
3	Prof. Yoshito Eizuru	Opportunistic Infection	31 Jul.,2004-12 Sep.,2004	1.4 Month(s)	
4	Prof. Hiroshi Ichimura	HIV/AIDS	4 Aug.,2004-10 Sep.,2004	1.2 Month(s)	
5	Prof. Yoshihide Fujiyama	HIV/AIDS	14 Aug., 2004-29 Aug., 2004	0.5 Month(s)	
6	Dr. Hiroshi Yatsushashi	Viral Hepatitis	22 Aug.,2004-4 Sep.,2004	0.4 Month(s)	
7	Prof. Toshiyuki Sasagawa	HIV/AIDS	1 Feb.,2005-22 Feb.,2005	0.7 Month(s)	
8	Prof. Hiroshi Ichikmura	HIV/AIDS	11 Feb.,2005-3 Mar.,2005	0.7 Month(s)	
9	Dr. Koji Yano	Viral Hepatitis	21 Feb.,2005-27 Mar.,2005	1.2 Month(s)	

ANNEX II Experts

No.	Name	Designation	Period	Duration	Re.
FY 2005/2006					
1	Prof. Yoshito Eizuru	Opportunistic Infection	29 Jul.,2005-21 Aug.,2005	0.7 Month(s)	
2	Prof. Hiroshi Ichikmura	HIV/AIDS	4 Aug.,2005-20 Aug.,2005	0.5 Month(s)	
3	Prof. Haruhiko Taguchi	Opportunistic Infection	8 Aug.,2005-28 Aug.,2005	0.7 Month(s)	
4	Prof. Hiroshi Yatsunami	Viral Hepatitis	10 Aug.,2005-21 Aug.,2005	0.4 Month(s)	
5	Prof. Yoshihide Fujiyama	HIV/AIDS	13 Aug.,2005-28 Aug.,2005	0.5 Month(s)	
6	Dr. Yasukazu Omoto	Viral Hepatitis	(planned)	1. Month(s)	
7	Dr. Rika Yamada	HIV/AIDS	(planned)	1.7 Month(s)	
8	Prof. Toshiyuki Sasagawa	HIV/AIDS	(planned)	1. Month(s)	
SHORT TERM EXPERTS: TOTAL DURATION				26.9 Month(s)	
SHORT TERM EXPERTS: TOTAL NUMBER of EXPERTS				17. Persons	
SHORT TERM EXPERTS: TOTAL NO. of VISITS				38. Visits	
SHORT TERM EXPERTS: AVERAGE DURATION per VISIT				0.7 Month(s)	
SHORT TERM EXPERTS: AVERAGE NO. of VISITS per INDIVIDUAL EXPERT				2.4 Times	
SHORT TERM EXPERTS: NO. of TRIPS per EXPERT (range)				1~8 Times	

List of Equipment procured for the ProjectProject: KEMRI/JICA Infectious Diseases Project
Duration: 1 May 2001–31 April 2006

No.	NAME (Specification)	Model	Maker	Total Price (Ksh)	Procurement Type	Designation	Installed at:	Remarks
1	4 wheel drive car	Landcruiser VX	TOYOTA	4,202,025	Tech.Cooperation	Blood Safety	KEMRI HQ	
2	Deep Freezer -86	MDE-592AT	SANYO	1,315,650	Tech.Cooperation	HIV	HIV Nairobi Lab.	
3	Deep Freezer -86	MDE-U481AT	SANYO	1,280,745	Tech.Cooperation	HIV	HIV Nairobi Lab.	
4	HPLC	HPLC	Beckman Coulter	6,457,057	Tech.Cooperation	TM	TM Nairobi Lab.	
5	Set of AVR/UPS for P3 Lab.	AVR Input:3P4W 400V Output:1P2W	Sumitomo Costruction	6,576,907	Tech.Cooperation	HIV	HIV Nairobi Lab.	
6	Installation Works at P3 Lab		Sumitomo Costruction	3,759,000	Tech.Cooperation	HIV	HIV Nairobi Lab.	
7	Autoclave	100LTRS Horizontal	Swiftlock	2,121,000	Tech.Cooperation	HIV	HIV Nairobi Lab.	
8	Refrigerator	500Ltrs	LG	226,522	Tech.Cooperation	HIV	HIV Nairobi Lab.	
9	Refrigerator	500Ltrs	LG	226,522	Tech.Cooperation	OI	OI Nairobi Lab.	
10	Refrigerator	500Ltrs	LG	226,522	Tech.Cooperation	OI	OI Busia Lab.	
11	FACS Computer	G4 733MHz		1,654,380	Tech.Cooperation	HIV	HIV Nairobi Lab.	
12	P2-Level Safety Cabinet	4feet230v,50Hz,4.5A	Thermo Forma	1,508,940	Tech.Cooperation	OI	OI Nairobi Lab.	
13	Multichannel pipettes (2)	8-way 50-300µl		76,630	Tech.Cooperation	VH	VH Nairobi Lab.	
14	P/C (Desktop)	EVO 55500 20GB	COMPAQ	139,380	Tech.Cooperation	HIV	HIV Nairobi Lab.	
15	P/C (Desktop)	EVO 55500 20GB	COMPAQ	139,380	Tech.Cooperation	OI	OI Nairobi Lab.	
16	P/C (Desktop)	EVO 55500 20GB	COMPAQ	139,380	Tech.Cooperation	VH	VH Nairobi Lab.	
17	P/C (Desktop)	EVO 55500 20GB	COMPAQ	139,380	Tech.Cooperation	VH	VH Nairobi Lab.	
18	P/C Software	Microsoft Office 2000	Microsoft	60,988	Tech.Cooperation	HIV	HIV Nairobi Lab.	
19	P/C Software	Microsoft Office 2000	Microsoft	60,988	Tech.Cooperation	OI	OI Nairobi Lab.	
20	P/C Software	Microsoft Office 2000	Microsoft	60,988	Tech.Cooperation	VH	VH Nairobi Lab.	
21	P/C Software	Microsoft Office 2000	Microsoft	60,988	Tech.Cooperation	VH	VH Nairobi Lab.	
22	P/C Software	Microsoft Windows 2000	Microsoft	55,221	Tech.Cooperation	HIV	HIV Nairobi Lab.	
23	P/C Software	Microsoft Windows 2000	Microsoft	55,221	Tech.Cooperation	OI	OI Nairobi Lab.	
24	P/C Software	Microsoft Windows 2000	Microsoft	55,221	Tech.Cooperation	VH	VH Nairobi Lab.	
25	P/C Software	Microsoft Windows 2000	Microsoft	55,221	Tech.Cooperation	VH	VH Nairobi Lab.	
26	UPS	500va	PROSS	10,222	Tech.Cooperation	HIV	HIV Nairobi Lab.	
27	UPS	500va	PROSS	10,222	Tech.Cooperation	OI	OI Nairobi Lab.	
28	UPS	500va	PROSS	10,222	Tech.Cooperation	VH	VH Nairobi Lab.	
29	UPS	500va	PROSS	10,222	Tech.Cooperation	VH	VH Nairobi Lab.	
30	Laser Jet Printer (Color)	Color LaserJet 4600dn	HP	406,060	Tech.Cooperation	VH	VH Nairobi Lab.	
31	Water Bath	220v	Memmert	149,076	Tech.Cooperation	HIV	HIV Nairobi Lab.	
32	Co2 Incubator	108L	Memmert	746,592	Tech.Cooperation	OI	OI Nairobi Lab.	
33	Bondapak column	WAT025836	BONDAPAK	539,340	Tech.Cooperation	TM	TM Nairobi Lab.	
34	Clumn/filter SET		BECKMAN COULTER	441,168	Tech.Cooperation	TM	TM Nairobi Lab.	
35	iMac G4/1Ghz inc		APPLE	339,966	Tech.Cooperation	HIV	KEMRI HQ	

No.	NAME (Specification)	Model	Maker	Total Price (Ksh)	Procurement Type	Designation	Installed at:	Remarks
36	51mb Memory Upgrade		APPLE	46,662	Tech.Cooperation	HIV	KEMRI HQ	
37	Air port External		APPLE	35,754	Tech.Cooperation	HIV	KEMRI HQ	
38	Air port Card		APPLE	18,664	Tech.Cooperation	HIV	KEMRI HQ	
39	Desktop	EVO 40GB	Compaq	143,780	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
40	Laser Jet Printer	2300DN	HP	160,370	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
41	P2-Level Safety Cabinet	AC2-4AX/1	ESCO Airstream	567,057	Tech.Cooperation	HIV	HIV Nairobi Lab.	
42	P2-Level Safety Cabinet	AC2-4AX/1	ESCO Airstream	567,057	Tech.Cooperation	OI	OI Nairobi Lab.	
43	Water Bath	NE5-28D	CLIFTON	325,405	Tech.Cooperation	HIV	HIV Nairobi Lab.	
44	Thermal Cyclers	PCR9700	Applied Biosystems	795,374	Tech.Cooperation	HIV	HIV Nairobi Lab.	
45	Experimental Desk(1 set)		PAMUSA	363,000	Tech.Cooperation	HIV	HIV Nairobi Lab.	
46	CO2 Incuvator	MCO-15AC	SANYO	405,422	Tech.Cooperation	TM	TM Nairobi Lab.	
47	Binocular Microscope	MBL2000	KRUSS	104,250	Tech.Cooperation	TM	TM Nairobi Lab.	
48	Refrigerator with freezer	SR-48EKW	SANYO	42,676	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
49	Refrigerator with freezer	SR-48EKW	SANYO	42,676	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
50	Refrigerator	MPR-213F	SANYO	185,299	Tech.Cooperation	HIV	HIV Nairobi Lab.	
51	Deep Freezer	MDF-U2086S	SANYO	582,618	Tech.Cooperation	HIV	HIV Nairobi Lab.	
52	Biomedical Freezer	MDF-236	SANYO	158,829	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
53	Deep Freezer	MDF-293AT	SANYO	926,603	Tech.Cooperation	TM	TM Nairobi Lab.	
54	Plazma Freezer	MDF-U5411	SANYO	344,385	Tech.Cooperation	Blood Safety	VH Nairobi Lab.	
55	Blood Bank Refrigerator	MBR-506D	SANYO	463,248	Tech.Cooperation	Blood Safety	VH Nairobi Lab.	
56	Blood Bank Refrigerator	MBR-507D	SANYO	463,248	Tech.Cooperation	Blood Safety	VH Nairobi Lab.	
57	Desktop P/C(for Windows)	EVO D330	Compaq	114,078	Tech.Cooperation	HIV	HIV Nairobi Lab.	
58	Desktop P/C(for Windows)	EVO D330	Compaq	114,078	Tech.Cooperation	HIV	HIV Nairobi Lab.	
59	Desktop P/C(for Windows)	EVO D330	Compaq	114,078	Tech.Cooperation	Blood Safety	KEMRI HQ	
60	Desktop P/C(for Windows)	EVO D330	Compaq	114,078	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
61	Desktop P/C(for Windows)	EVO D330	Compaq	114,078	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
62	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	HIV	HIV Nairobi Lab.	
63	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	HIV	HIV Nairobi Lab.	
64	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
65	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
66	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	Blood Safety	KEMRI HQ	
67	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	VH	VH Nairobi Lab.	
68	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	VH	VH Nairobi Lab.	
69	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
70	Microsoft Office 2003		Microsoft	47,039	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
71	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	HIV	HIV Nairobi Lab.	
72	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	HIV	HIV Nairobi Lab.	
73	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	OI BUSIA	OI Busia Lab.	

No.	NAME (Specification)	Model	Maker	Total Price (Ksh)	Procurement Type	Designation	Installd at:	Remarks
74	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
75	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	TM	TM Nairobi Lab.	
76	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	Blood Safety	KEMRI HQ	
77	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	Blood Safety	KEMRI HQ	
78	UPS(850W)	850VA	PROSS	24,600	Tech.Cooperation	Blood Safety	KEMRI HQ	
79	Laptop P/C(for Windows)	EVO NX9010	Compaq	168,261	Tech.Cooperation	VH	VH Nairobi Lab.	
80	Laptop P/C(for Windows)	EVO NX9010	Compaq	168,261	Tech.Cooperation	VH	VH Nairobi Lab.	
81	Laptop P/C(for Windows)	EVO NX9010	Compaq	168,261	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
82	Laptop P/C(for Windows)	EVO NX9010	Compaq	168,261	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
83	Desktop P/C (for Mac)	Powermac G4/1.25	APPLE	294,571	Tech.Cooperation	Blood Safety	KEMRI HQ	
84	Microsoft Office for Mac	V10	Microsoft	49,067	Tech.Cooperation	Blood Safety	KEMRI HQ	
85	Colour Printer	DeskJet 5150c	HP	15,750	Tech.Cooperation	HIV	HIV Nairobi Lab.	
86	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
87	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
88	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	VH	VH Nairobi Lab.	
89	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	VH	VH Nairobi Lab.	
90	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	Blood Safety	KEMRI HQ	
91	Laserjet Printer	2300DN	HP	114,798	Tech.Cooperation	Blood Safety	KEMRI HQ	
92	LCD Projector	EMP54	EPSON	283,795	Tech.Cooperation	VH	VH Nairobi Lab.	
93	LCD Projector	EMP54	EPSON	283,795	Tech.Cooperation	VH	VH Nairobi Lab.	
94	Portable Photocopier	PE16	XEROX	98,250	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
95	Photocopier	WCP420	ZEROX	358,560	Tech.Cooperation	TRAINING	KEMRI HQ	
96	Laptop PC	Windows XP Pro 1150	Dell	145,860	Tech.Cooperation	HIV	HIV Nairobi Lab.	
97	Laptop PC	Windows XP Pro 1150	Dell	145,860	Tech.Cooperation	VH	VH Nairobi Lab.	
98	Laptop PC	Windows XP Pro 1150	Dell	145,860	Tech.Cooperation	Blood Safety	KEMRI HQ	
99	Laptop PC	Windows XP Pro 1150	Dell	145,860	Tech.Cooperation	TRAINING	KEMRI HQ	
100	Laptop PC	Windows XP Pro 1150	Dell	145,860	Tech.Cooperation	TRAINING	KEMRI HQ	
101	Microsoft Office XP	For Windows	Microsoft	32,517	Tech.Cooperation	VH	VH Nairobi Lab.	
102	Microsoft Office XP	For Windows	Microsoft	32,517	Tech.Cooperation	Blood Safety	KEMRI HQ	
103	B/W Laser Jet Printer	KM FS 1920DN-28PPM	KYOCERA MITA	75,719	Tech.Cooperation	HIV	HIV Nairobi Lab.	
104	B/W Laser Jet Printer	KM FS 1920DN-28PPM	KYOCERA MITA	75,719	Tech.Cooperation	VH	VH Nairobi Lab.	
105	B/W Laser Jet Printer	KM FS 1920DN-28PPM	KYOCERA MITA	75,719	Tech.Cooperation	Blood Safety	KEMRI HQ	
106	B/W Laser Jet Printer	KM FS 1920DN-28PPM	KYOCERA MITA	75,719	Tech.Cooperation	TRAINING	KEMRI HQ	
107	B/W Laser Jet Printer	KM FS 1920DN-28PPM	KYOCERA MITA	75,719	Tech.Cooperation	OI	OI Nairobi Lab.	
108	Colour Inkjet Printer	Deskjet 5850C	HP	7,150	Tech.Cooperation	HIV	HIV Nairobi Lab.	
109	UPS	650VA	Powercom	8,437	Tech.Cooperation	HIV	HIV Nairobi Lab.	
110	UPS	650VA	Powercom	8,437	Tech.Cooperation	VH	VH Nairobi Lab.	
111	UPS	650VA	Powercom	8,437	Tech.Cooperation	Blood Safety	KEMRI HQ	

No.	NAME (Specification)	Model	Maker	Total Price (Ksh)	Procurement Type	Designation	Installed at:	Remarks
112	UPS	650VA	Powercom	8,437	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
113	UPS	650VA	Powercom	8,437	Tech.Cooperation	TRAINING	KEMRI HQ	
114	LCD Projector	CP322ia	Boxlight	189,683	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
115	LCD Projector	CP322ia	Boxlight	189,683	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
116	LCD Projector	CP322ia	Boxlight	189,683	Tech.Cooperation	Blood Safety	KEMRI HQ	
117	Scanner	ScanJet4500C	HP	17,160	Tech.Cooperation	VH	VH Nairobi Lab.	
118	Digital Camera		Yamada	16,475	Tech.Cooperation	VH	VH Nairobi Lab.	
119	TV	21inch CP21MF2	SANYO	18,968	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
120	TV	21inch CP21MF2	SANYO	18,968	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
121	Video	VHP-VK12DX	SANYO	6,774	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
122	Video	VHP-VK12DX	SANYO	6,774	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
123	Portable Copy Machine	FS-1018MFP	KYOCERA	111,747	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
124	Portable Copy Machine	FS-1018MFP	KYOCERA	111,747	Tech.Cooperation	TRAINING	KEMRI HQ	
125	Water Distiller	41L Autostill	GFL	84,370	Tech.Cooperation	HIV	HIV Kisumu Lab.	
126	Voltex Mixer	SA8	STURT	41,188	Tech.Cooperation	OI	OI Nairobi Lab.	
127	Voltex Mixer	SA8	STURT	41,188	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
128	Microscope	CME with 10X/WF	Leica	104,390	Tech.Cooperation	OI	OI Nairobi Lab.	
129	Microscope	CME with 10X/WF	Leica	104,390	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
130	Microscope with Digital Camera	Eclipse E200 with Digital Camera	NIKON	411,882	Tech.Cooperation	HIV	HIV Nairobi Lab.	
131	Incubator	INE600	Memmert	377,197	Tech.Cooperation	OI	OI Nairobi Lab.	
132	UV Lamp	LF 106L	UVI	30,349	Tech.Cooperation	OI	OI Nairobi Lab.	
133	Shaker	SSM1	Stuart Scientific	115,759	Tech.Cooperation	OI	OI Nairobi Lab.	
134	Water Bath	WB22	Memmert	107,306	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
135	Magnet Stirrer	CB161	STURT	43,356	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
136	Balance	AUY220	SHIMADZU	156,082	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
137	Spirometry	RS232	Sensormedics	319,751	Tech.Cooperation	OI	OI Nairobi Lab.	
138	Inverted Microscope	Eclipse TS100-F	NIKON	704,535	Tech.Cooperation	TM	TM Nairobi Lab.	
139	Microcentrifuge with Refrigerate	Micro 22R	Hettich	335,693	Tech.Cooperation	HIV	HIV Nairobi Lab.	
140	Generator	2.0KVA EF2600	YAMAHA	76,619	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
141	Generator	2.0KVA EF2600	YAMAHA	76,619	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
142	Genetic Analyzer for ABI Prism310	I/P No. 4327421		482,336	Tech.Cooperation	HIV	HIV Nairobi Lab.	
143	Photometer	5010	Brozeck	672,018	Tech.Cooperation	HIV	HIV Nairobi Lab.	
144	Deep Freezer	MDF-236	SANYO	218,220	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
145	Autoclave	MLS-3780	SANYO	1,363,875	Tech.Cooperation	OI	OI Busia Lab.	
146	Autoclave	MLS-3780	SANYO	1,363,875	Tech.Cooperation	OI BUSIA	OI Nairobi Lab.	
147	4 wheel drive car	LandCruiser Prado	TOYOTA	3,094,032	Tech.Cooperation	PHE BUSIA	KEMRI Busia	
148	4 wheel drive car	LandCruiser Prado	TOYOTA	3,094,032	Tech.Cooperation	PHE KISUMU	KEMRI Kisumu	
149	Thermal Cycler	PCR 9700	Perkinelmer	1,193,600	Tech.Cooperation	HIV	HIV Nairobi Lab.	

No.	NAME (Specification)	Model	Maker	Total Price (Ksh)	Procurement Type	Designation	Installed at:	Remarks
150	Real time PCR	Easy Q	Biomerieux	5,237,280	Tech.Cooperation	HIV	HIV Nairobi Lab.	
151	FAXSCAN	PCA-Guava	GUAVA	4,774,400	Tech.Cooperation	HIV	HIV Kisumu Lab.	
152	Elisa Reader			(planned)	Tech.Cooperation	OI	OI Nairobi Lab.	
153	Elisa Reader			(planned)	Tech.Cooperation	OI BUSIA	OI Busia Lab.	
TOTAL (in Kshs)				70,720,149	⇒(in Japanese Yen)		106,302,600	