AFRICAN DEVELOPMENT FUND

MULTINATIONAL

EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES - PHASE 1.

OSHD DEPARTMENT

September 2014

TABLE OF CONTENTS

Currency Equivalents

1UA = KES 133.61	1USD = KES86.44
1UA =RWF 1047.72	1USD = RWF 677.86
I UA= UGX 3.927,461	1USD = UGX 2.540,77
1 UA= TZS 2.521,01	IUSD=TZS 1.658

Fiscal Year

July 1 – June 30

Weights and Measures

1metric tonne	=	2204 Pounds (lbs)
1 Kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (“)
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

Acronyms and Abbreviations

AfDB	African Development Bank	**HRH**	Human Resources for Health
ADF	African Development Fund	**ICT**	Information and Communication Technology
AIMS	Aid Information Management System	**IMF**	International Monetary Fund
AKDN	Aga Khan Development Network	**IPR**	Implementation Progress Report
APR	Appraisal Report	**IUCEA**	Inter-University Council for East Africa
AVU	African Virtual University	**KNH**	Kenyatta National Hospital
AWPs	Annual Work Plans	**M&E**	Monitoring and Evaluation
CEME	Centre of Excellence in Medical Education	**MDGs**	Millennium Development Goals
CoE	Centre of Excellence	**MoH**	Ministry of Health
CPI	Corruption Perception Index	**MOHSW**	Ministry of HealthSocial Welfare
CSP	Country Strategy Paper	**MOF**	Ministry of Finance
DoF	Director of Finance	**NCDs**	Non-Communicable Diseases
EAC	East African Community	**NDP**	National Development Plan
EABEI	East Africa Biomedical Engineering Institute	**NEMA**	New Education Model for Africa
EAOI	East Africa Oncology Institute	**NHIF**	National health Insurance Funds
EAHI	East Africa Heart Institute	**NTF**	Nigerian Trust Fund
EAKI	East Africa Kidney Institute	**OOP**	Out of Pocket
EU	European Union	**PCN**	Project Concept Note
FM	Financial management	**PCR**	Project Completion Report
FSF	Fragile States Facility	**PCT**	Project Country Team
GDP	Gross Domestic Product	**PCU**	Program Coordination Unit
GERD	Gross Expenditure on Research and Development	**PFM**	Public Financial Management
GoK	Government of Kenya	**PG**	Postgraduate
GoT	Government of Tanzania	**POM**	Project Operation Manual
GoU	Government of Uganda	**UCI**	Uganda Cancer Institute
HIPC	Heavily Indebted Poor Countries	**UoN**	University of Nairobi

Loan Information

CLIENT'S INFORMATION	
Country's	Kenya, Rwanda, Uganda and Tanzania (Phase 1)
Borrowers	Governments of the Republic of Kenya, the Republic of Rwanda, the Republic of Uganda and United Republic of Tanzania
Executing Agencies	Ministry of Health Kenya, Ministry of Education Rwanda, Ministry of Health, Uganda and Ministry of Education and Vocational Training in Tanzania

FINANCING PLAN						
Program Phases	**Amount Financed (UA millions)**					
	ADF 13 Loan PBA		**ADF 13 RO**		**Counterpart Funds**	**Total**
	GOVTs	**AFDB**	**GOVTs**	**AFDB**	**GOVTs**	
1. Kenya		10		15	2.5	27.5
2. Rwanda		5		7.5	1.25	13.75
3. Uganda		9		13.5	2.25	24.75
4. Tanzania		2.5		3.75	0.5	6.75
Total (Phase 1)		26.5		39.75	6.5	72.75

Breakdown of Phase 1. EAC COEs Phase 1

Component	**GOVTs**	**ADF-13**	**Total**
C1. Creation of Centres of Excellence	3.40	61.64	65.04
C2. Support to Regional Integration	2.18	0.25	2.43
C3. Program Management	2.22	3.06	5.28
Total			72.75

KEY FINANCIAL INFORMATION – KENYA			
Instrument	ADF Loan	Service charge	0.75%
Loan currency	USD	Repayment period	40 years
Commitment fee	0.50%	Grace period	5 years
Other Fees			

KEY FINANCIAL INFORMATION – RWANDA, UGANDA AND TANZANIA			
Instrument	ADF Loan	Service charge	0.75%
Loan currency	USD	Repayment period	40 years
Commitment fee	0.50%	Grace period	10 years
Other Fees			

TIMEFRAME – MAIN MILESTONES	
Concept Note Approval	27 February 2014
Program approval – Phase 1	17 September 2014
Effectiveness	December 2014[1]
Last disbursement	31 December 2019
Completion	30 June 2019
Last repayment	February 2059

[1] Uganda Effectiveness date will be March 2014 due to its internal project clearance procedures by the Cabinet and Parliament once the Bank approves the project.

Project Summary

Project Overview: The objective of the project is to contribute to development of relevant and highly skilled workforce in biomedical sciences to meet East African Community (EAC) immediate labour market needs and support implementation of EAC's 'free' labour market protocols. The project Phase 1[2] will support creation of a network of Centers of Excellence (CoEs) in *biomedical sciences and engineering - Nephrology and Urology* in Kenya, *Oncology* in Uganda, Cardiovascular in Tanzania *and Biomedical Engineering and eHealth* in Rwanda. To deliver quality and relevant skills development, research and service delivery, the CoEs will develop higher education programmes and collaborate with 'World Class' institutions in curriculum development, faculty exchange, mentoring, access to resource materials and carry out joint thematic biomedical research and publish it.

***Project Outcomes*:** The project's main deliverable is to enhance EAC's competitiveness through a highly skilled workforce in biomedical sciences. The project will enable EAC increase its capacity and competitiveness through expanding higher education and specialised service delivery that are demanded by the rapid economic development in East Africa. The project has potential to create jobs for professionals and support services through medical tourism within the EAC as well as from other African regions. For example, the increase in number of EAC citizen's medical travelers to South Asia has opened an investment window for entrepreneurs in these countries in travel, logistics and medical billing and accommodation.

***Needs Assessment*:** Development of relevant biomedical skills and thematic research would greatly reduce foreign dependency and expenditures; especially for Non-Communicable Diseases (NCDs) diagnostics and treatments in Europe, North America and South Asia. Currently, the EAC Governments and households are utilizing an estimated USD 150 million annually for NCDs related services from outside the region. Premature deaths and prolonged disability caused by NCDs have economic impact via lowered productivity and losses in income and capital formation. According to World Bank[3] the rising trends and costs of NCDs will force countries to make choices in creating strategies to address NCDs cost effectively and sustainably.

***Bank Added Value*:** The EAC regional approach to higher education, skills development and service delivery leverages economies of scale. The Bank is playing a critical role in supporting regional integration and in development of relevant skills and technologies to meet immediate and emerging labour markets needs. The thriving and dynamic labour market in East Africa demands a greater diversification of skills, knowledge and research. Investing in these skills would accrue to economic growth potential of the EAC by significantly enhancing and upgrading EAC's biomedical sciences, technology and research capacities. This would contribute to evolution of the EAC economies towards more knowledge-based economies.

***Institutional and Knowledge Building*:** The project will support the EAC secretariat to convene thematic forums for sharing knowledge based on each CoEs focus area. The secretariat will also undertake studies on EAC Labour Market needs for the biomedical sector and also support development of the EAC's NCDs registry. In collaboration with the Inter University Council of East Africa (IUCEA) and the National Commissions for Higher Education, the EAC will also be supported to develop regional postgraduate admission criteria and guidelines in medical sciences to facilitate implementation of the EAC labour mobility protocols and promote inclusive economic growth.

[2] Phase 1 targeting is informed by ADF 13 pipeline allocation for these countries.

[2] World Bank September 2011 'The Growing Danger of NCDs'

African Development Bank – RESULTS-BASED LOGICAL FRAMEWORK[4]

Country and project name:	EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES PHASE 1(KENYA, UGANDA, RWANDA AND TANZANIA).
Purpose of the project :	To provide high quality, competitive and skilled workforce in the EAC for social and economic development.

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMPACT	Improve EAC's competitiveness through quality higher education and research capabilities	• EAC human capital growth in Biomedical Sciences. • Continued economic growth	<1% of Biomedical professionals have postgraduate degrees. 5.3%	• 20% growth of experts with postgraduate Diplomas, Masters and PhDs by 2025 • >5.4% over next five years	• EAC Secretariat Reports • Ministries of Tourism Reports • AFDB Economic Outlook Reports • World Bank EAC competitiveness Reports	
OUTCOMES	1. Improved access to quality and affordable specialized tertiary education in biomedical sciences in EAC.	• Number of students enrolled in the CoEs • % of students from EAC countries • Ranking of the Host Universities in Africa and Globally	0 0 2014 levels	• At least 50 full time and 100 part time student per year , 2015 to 2019, in each CoE (of whom at least 40% are female) • >10% by 2019 • At least 2 Steps forward by 2019	• COEs register • EAC Project monitoring Reports • Regional and international University ranking reports • World Economic Forum Reports	**Risks:** Inadequate local capacity and systems for implementation. **Mitigation Measure:** Provide technical assistance and close supervision and guidance to the PCU by the country offices. **Risk:** Weak retention of skilled graduates. **Mitigation Measure:** Governments have regulations binding 'students' benefitting from scholarships to commit to work for at least 3-5 years or to reimburse the scholarship. The project has adopted these regulations for each country. **Risk:** Inadequate women
	2. Improved access to timely, affordable and quality specialized biomedical services in the EAC.	• Number of patients managed at the CoEs (% of women) • % of EAC's beneficiaries in each CoE • % of women beneficiaries of postgraduate training	0 <5% 30%	• 10,000 outpatients and 30000 bed nights/CoE in Kenya, Tanzania and Uganda/ per year 2015-2019 (50% women) • At least 10% from EAC countries by 2019 • 40% women by 2019	• Country's Tourism Reports • COEs records • MOH records • EAC Secretariat Reports	

[4] Specific project logframes are included in the PAR's Technical Annexes. The main changes are under outputs and components. The overall project impact and outcome are the same for all CoEs since this is a regional project.

OUTPUTS	3. Increased stock of skilled professionals in biomedical sciences for the regional labour market.	• Number of CoEs graduates employed • Retention rates • Cost saving of EAC patients treated in mainly Asia and Europe	0 $150m/y	• 75% of graduates are employed by 2019 • Retention is above 85% • <$50m/y in 2019	• EAC Secretariat registry • CoEs reports • MOH and WHO Workforce Reports • Labour market reports	enrolment in the tertiary Biomedical Programs **Mitigation Measure:** Create an active women recruitment programme in biomedical CoEs.
	1. Creation of four CoEs in biomedical sciences	• Number of CoEs completed and functional by the project • Contribution to Published Biomedical Research in Africa • Number of postgraduate students trained in the CoEs • % of women participation in the scholarships scheme	0 11% 0 0	• 4 CoEs in biomedical sciences by 2019 • >15% by 2019 • 600 Postgraduate trainees gain new and refresher skills/per year 2015 to 2019 • 40% by 2019	• Project monitoring reports • Governments' Reports • WHO Reports	**Risk:** Inadequate support for multinational projects due to delays in implementation. **Mitigation Measure:** The project has analysed ongoing Bank supported regional projects in Education and Training and taken into account lesson learnt in its design
	2. Support to EAC Regional Integration in biomedical sciences and Labour Mobility.	• Number of curricula harmonised and accredited by a regional authority • Number of regional knowledge sharing fora in biomedical sciences held	0 0	• 3 Postgraduate curricula /CoE accredited in collaboration with IUCEA by 2017 • At least three thematic fora led by each CoE/per year 2015 to 2019	• EAC Project reports. • EAC Project reports.	**Risk:** Lack of political will to regulate regional higher education **Mitigation Measure:** Work with the EAC Secretariat and the Inter University Council of East Africa to facilitate regional integration.
					INPUTS	
	Component I: Establish four Centres of Excellence in Biomedical Sciences. (UA 65.04 million). Support development of infrastructure, equipment and systems for four new teaching, learning and research CoE in Kenya, Rwanda, Uganda and Tanzania. Facilitate and strengthen networking of the CoEs by leveraging ICT, support development of partnerships with peer CoEs for collaboration and scholarships and; and facilitate strengthening of the EAC students and patients' referral systems in-country and the region. **Component II: Support EAC Regional Integration agenda in Higher Education and Implementation of EAC Labour Mobility Protocols (UA 2.43 million).** The key activities here will include curriculum harmonization for biomedical programs within the EAC, support annual knowledge sharing forums in biomedical sciences; studies on EAC labour market needs and establishment of an NCD registry. **Component III: Project Implementation (UA 5.28 million).** The key activities here will include support to the Project Coordinating Units (PCU) to: **e**xecute annual project work plan and procurement plans; prepare project quarterly report; carry out annual audits; provide office equipment; and Technical Assistance as required.				**ADF Loan:** **Kenya**: UA10.0 million; **Rwanda:** UA 5.0 million **Uganda** UA9.0 million and **Tanzania** UA 2.5 million **Regional Envelope:** UA 39.75 million **Counterpart funding:** UA 6.75 million **Total loan**: UA 72.75 million **Component I:** UA 64.04 million **Component II:** UA 2.43 million **Component III:** UA 5.28 million).	

PROJECT TIMEFRAME

				2014/2015				2015/2016				2016/2017				2017/2018				2018/2019			
	TASK	**START**	**FINISH**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**
1	EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION PROJECT	1/9/2014	30/6/2019																				
2	Loan approval																						
3	Publication of GPN																						
4	Recruitment of PCUs' staff																						
5	Fulfilment of loan conditions																						
6	Recruitment of the civil work design consultant and design delivered																						
7	Recruitment of the Labour Market study consultant and work delivered																						
8	Needs assessment																						
9	Faculty capacity building																						
10	Recruitment of contractors for civil work and completion of civil work.																						
11	Programmes Development and delivery																						
12	Regional Accreditation of Programmes																						
13	Procurement of furniture and equipment																						
14	Regional Labour Market Study																						
15	Recruitment of students																						
16	Research Strategy and Guidelines																						
17	Mid-term Review																						
18	M&E Framework																						
19	Project Completion																						

REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSED LOAN FOR THE EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES PHASE 1

Management submits the following Report and Recommendation on a proposed Loan for UA 66.25million (sixty six million and twenty five thousand Units of Account) to finance the Project Phase 1[5] in Kenya Rwanda, Uganda and Tanzania. Governments' counterpart funding is UA 6.05 million (six million and fifty thousand Units of Account).

I – STRATEGIC THRUST & RATIONALE

1.1 Project Linkages with Relevant Strategies and Objectives:

1.1.1 The project is aligned to the target Countries strategies and development objectives for relevant skills development for the labour market. *Kenya's* 2013-2018 Medium Term Plan (MTP) II for the Vision 2030, targets development of specialised skills as a priority to promote medical tourism within the region to improve Kenya's competitiveness regionally and globally. Specifically, the MTP II identifies creation of Centres of Excellence to promote medical tourism through highly specialised services. *Rwanda's* five year priority skills development strategy 2013-2018 aims to train at least 11,666 for skilled and specialized jobs driven by labour market needs. *Uganda's* Vision 2040, prioritizes development of human resource with globally competitive skills. The Vision 2014 indicates that among other approaches, Uganda will establish Centres of Excellence (CoE) in Health and Education.. Rwanda's Vision 2020 and Tanzania's development vision 2025 aim at establishing a well-educated and learning society. This also aims at moving towards a strong and competitive economy and alleviation of poverty.

1.1.2 The project is also aligned to EAC regional strategies as regards human resources development and the Bank's East Africa Regional Integration Strategy Paper (RISP) 2011-15. The EAC Development Strategy 2011/12 -2015/16 priority area two aims to Promote Education, Science and Technology for a creative and productive human resource. Under this priority, the EAC will support creation of CoEs in the region, promoting E-learning and enhance collaborations with regional and international Centers of Higher Learning. The EAC community shares similar characteristics in respect to skills gaps and constraints to address relevant education and training for the labour market. EAC collaboration and networking in Education and Training for development of relevant skills are therefore critical. The January 2014 Bank's Mid Term Review report of the East Africa Regional Integration Strategy Paper (EA-RISP), includes support to the EAC CoEs in Medical Higher Education under Pillar 2, Capacity Building.

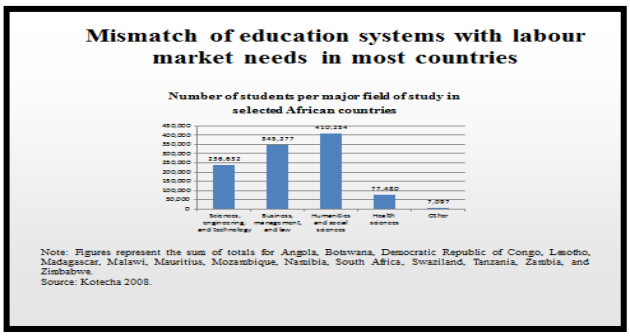
1.1.3 The Bank's 2013-2022 Strategy core operational priorities include Skills and Technology and Regional Integration as well as special focus on gender and fragile states. This strategy highlights the need to focus on relevant skills development for the labour market; it also emphasizes on regional integration to draw on human resources more effectively and promote inclusive growth through relevant skills development and effective and equitable delivery of services. The Human Capital Strategy 2014 -2018 main area of focus is skills development for competitiveness and jobs. The strategy's New Education Model of Africa (NEMA) aims to address labour market-skills mismatch, adopt application of ICT, support research and regional integration through creation of regional CoEs.

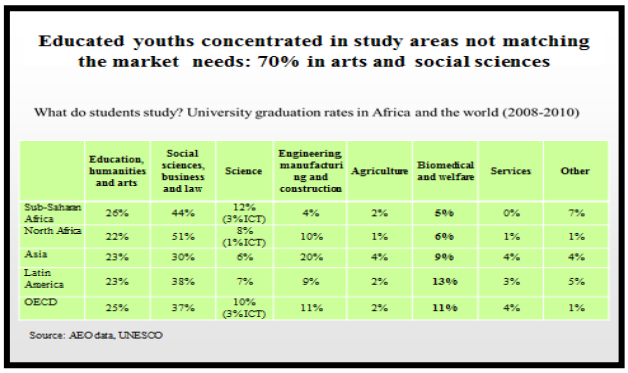
[5] Phase 2 will include the establishment of a Centers of Excellence in Burundi on Nutritional Sciences see PAR Annex. Phase 1 targeting was informed by ADF 13 priority pipelines.

The Bank's Country Strategy Papers (CSP) for the target countries takes into account the need for development of relevant skills. For example, the Kenya's CSP 2014-2018 Pillar II is '*developing skills for an emerging labour market of a transforming economy';* Uganda's CSP mid-term review 2014-2016 Pillar II is '*Skills development*'; Rwanda's combined 2012-16 country strategy paper mid-term review Pillar 2 is '*Enterprise and Institutional Development'* and includes developing relevant skills to increase employability.

1.2 Rationale for Bank's Involvement:

1.2.1 The project supports immediate development priorities for the target countries in higher education driven skills to boost inclusive economic growth. The thriving and dynamic labour market in East Africa demands a greater diversification of skills, knowledge and research. The mismatch between the education systems and labour market calls for immediate action. Only 28 per cent of students in African universities are enrolled in science and technology programmes as noted in the Figures (Mwapachu, 2010). Strengthening higher education in Africa should be guided by labour market evidences. The development of high quality, competitive and skilled human capital is a pre-requisite to the transformation of EAC member countries to a knowledge-based regional economy. Investing in this project will enable the EAC region to contribute to accelerating the pace of scientific and technological development and boost economic growth.

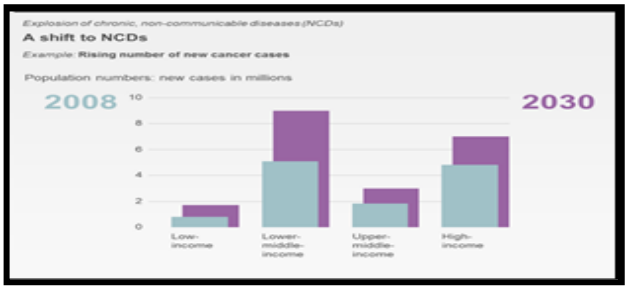




	Education, humanities and arts	Social sciences, business and law	Science	Engineering, manufacturing and construction	Agriculture	Biomedical and welfare	Services	Other
Sub-Saharan Africa	26%	44%	12% (3%ICT)	4%	2%	5%	0%	7%
North Africa	22%	51%	8% (1%ICT)	10%	1%	6%	1%	1%
Asia	23%	30%	6%	20%	4%	9%	4%	4%
Latin America	23%	38%	7%	9%	2%	13%	3%	5%
OECD	25%	37%	10% (3%ICT)	11%	2%	11%	4%	1%

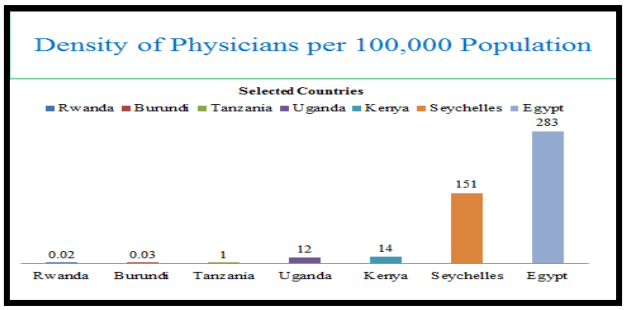
1.2.2 The continued economic growth in East Africa over the last two decades has not been accompanied with proportionate investments in higher education and research specifically in biomedical sciences and engineering. Several factors contributed to the decline in quality of higher education in Africa including inadequate financing and the reduction of unit cost from US$ 6,800 in 1980s to US$ 1,200 in 1990s amid rapidly rising enrolment[6]. The thriving and dynamic labour market in East Africa demands a greater diversification of skills, knowledge and research. To deliver those skills, capacity and jobs; the EAC region needs to invest in academic excellence. Africa needs thinkers, scientists, researchers, real educators who can potentially contribute to societal development (Yeneayhu 2006). Raising educational levels create a quality workforce needed for East Africa.

1.2.3 The EAC socio-economic transformation has resulted into a shift in lifestyle norms through the growing middle class and reflected on the increasing demand for timely and quality goods and services, including specialized biomedical skills and services.



[6] World Bank (2008) Higher Education Quality Assurance in Sub-Saharan Africa, Washington, D. C.

The World Bank report of September 2011 has spelt out the recent trends in NCDs in Africa and noted that by 2030 or earlier, 46% of deaths in Africa will be attributed to Non-Communicable Diseases (NCDs) as shown in Figure above. This has created a demand for higher biomedical education programmes in East Africa that provide the required knowledge, skills and research platform needed to produce highly skilled and specialized professionals within the EAC.



1.2.4 A well educated and highly skilled human resources is critical for EAC's transformation and economic prosperity. Key studies have addressed biomedical skills shortages in East Africa. The 2004 Joint learning Initiative, the 2006 WHO Health Workforce Report and the 2010 SAMS (Sub-Saharan African Medical Schools) Study are some of the studies that have highlighted the need for biomedical skills development. Figure shows medical skills gaps in the project target countries. These studies recommend a blend of interventions to produce skilled medical workforce and adequately address the exceptionally weak and neglected tertiary medical education and research. Investment in biomedical tertiary education is capital intensive and it's highly unlikely that the target CoEs would be developed in the near future without this Bank's initial intervention. This intervention is catalytic and is expected to bring other partners on board to support the CoEs. This has begun to happen; the French Embassy has come on board to support the training component of this project.

1.2.5 The project supports regional integration and aims at responding to the EAC's labour market needs. The project supports EAC's regional integration agenda in Education and Training and is anchored on the EAC's 2011/12 -2015/16 strategic plan as well as the Bank's East Africa RISP. EAC's labour market immediately requires highly specialized workforce with advanced knowledge, skills and competences to address the rising NCDs burden (mainly cardiovascular, kidney and cancer diseases) which is negatively impacting on human productivity and costing these Governments and households USD 150 million annually for seeking service delivery from outside the region. The project will address the critical shortage of highly skilled medical professionals (as shown in figure) as well as very skilled biomedical engineers and ICT to improve access to timely and quality NCDs related services and research. The regional integration aspect will entail harmonisation of post graduate curricula and standards among the EAC thus facilitating free labour credentials recognition and mobility according to the EAC labour mobility protocols. Through this project, the Bank will support the EAC meet key labour market skills gaps and at the same time enable the EAC member countries to harness their collective resources and comparative advantages in Education and Training.

1.2.6 **The EAC region has a significant demand for specialised and skilled oncologists and relevant research and service capacity**. Uganda for example, with a population of 35 million has only 20 oncologists while the annual new cases load is 60,000 and steadily rising. These cases require timely and accurate diagnostics, therapeutic and rehabilitative services. The high morbidity and mortality of cancerous conditions in the EAC is attributed to late case presentation, reflecting lack of preventive services and poor access to timely diagnosis and treatment as a result of inadequate skills, poor infrastructure and financial constraints. Uganda Cancer Institute (UCI) is the main Government facility in charge of managing the oncological burden in Uganda. To date, only 6 out of 96 (5.3%) staff at UCI has received some specialized oncological training. The GoU awarded UCI an autonomous status and called for Bank support to skills development and tertiary education.

1.2.7. The EAC relies on India, South Africa and Europe for urology and nephrology postgraduate education, clinical training as well as services delivery. Kenya with a 43 million population has only 20 nephrologists, 30 urologists and 10 nurses specialised in these areas. It is estimated that other EAC countries have a third of these in total. It costs about USD 500,000 to train an urologist and nephrologist in these countries while the East Africa Kidney Institute (EAKI) estimates USD 40,000 to train an urologist and nephrologist once the CoE is fully functional. The countries and households spend at least USD 47,000 per patient to access those services in India; the main destination for EAC patients. Currently, only 50 patients undergo kidney transplants annually within the EAC out of an estimated 10,000 mainly due to limited skills and inadequate infrastructure. With this limited capacity, the waiting time for transplant takes at least five months. Establishment of the EAKI will therefore contribute to improved access to quality education, training and specialized services within the EAC region.

1.2.8 **The EAC aims at increasing the numbers of skilled biomedical engineers and investing in critical infrastructure.** It is therefore crucial to concomitantly increase the capacity and support to biomedical engineering and eServices. Rwanda utilizes - through external expertise - 10% of the new equipment value on annual maintenance. The diversity of skills needed to provide a broad range of biomedical services demands the availability of a variety of skills in biomedical engineering along with adequate infrastructure and sustainable maintenance systems. Investment in these skills is expected to significantly increase both the quality and efficiency of services while creating new jobs and businesses especially among the youth. The reliance on systems developed abroad brings with it unwarranted complications in terms of routine licensing expiry, compatibility issues, limited modification capabilities and sustainability issues.

1.2.9 **Tanzania has the lowest cardiac centers to population ratio of 1/33,000,000 compared to Asia 1/16,000,000, Europe: 1/1,000,000 and USA: 1/120,000**. Cardiovascular illnesses and related deaths could have been averted by primary prevention or instituting lifesaving procedures that are not necessarily expensive provided skilled human resource and the required facilities are in place. Lack of comprehensive management, lack of specialized centers, lack of trained human resources, and lack of appropriate research to inform best practices; all contribute to the problems of prevention and management of CVD in the developing world including Tanzania.

1.3 Donors coordination:

1.3.1 The project has explored collaborations and joint financing with various partners. Development Partners including the Aga Khan University, the French Development Agency, Germany KFW and World Bank IFC have expressed interest in the project. As at appraisal, only the French Embassy in Nairobi has indicated concrete support for this project at an estimated cost of Euro 624,480. Modalities for cooperation are outlined below. A signed *signed Embassy document to AFDB is included in the Technical Annex Chapter 9.*

a) Exploratory missions: the identification process of French University Hospitals willing to take part in this project has been launched. The French Embassy in Kenya will fund and organize a first exploratory mission for their representatives.
b) Support for a two years specialized internship in nephrology and urology in French University Hospitals. This will benefit two trainees per year for 5 consecutive years.
c) Contribution to the development and teaching of CoEs curricula in urology and nephrology.
d) Setting up the conditions for the development of E-learning facilities and practices, in connection with the Université Médicale Virtuelle Francophone (Francophone e-university of medicine).

Also, the Aga Khan Development Network is in the process of drafting a Memorandum of Understanding (MoU) with the UCI for collaboration in Faculty exchange and access to teaching and learning resources at the Aga Khan CoE in Nairobi, Kenya.

1.3.2 The Uganda Cancer Institute (UCI) received funding from USAID to construct a modern outpatient ward and research facility. This USAID and the Fred Hutchinson Cancer Research Centre facility will handle outpatient treatment, modern research laboratory and administration offices and data management systems. It is expected that the facilities will be ready by February 2015. This USAID supported infrastructure together with the GoU constructed 100 bed new ward, will complement the proposed CoE's upgrade for quality training and service delivery.

1.3.3 Bank investment at Muhimbili University of Health and Allied Sciences (MUHAS) complements on-going support by the Republic of Koreafor a MUHAS teaching hospital by the Republic of Korea at USD 79 Million scheduled for completion in 2016. This upcoming hospital does not include cardiovascular Sciences teaching and learning facilities. The proposed cardiovascular support structures are to be constructed adjacent to the University's Korean funded teaching hospital for complementary and optimal functioning of the MUHAS teaching hospital and the CoE.

1.3.4 A cooperation framework has been developed for potential collaboration with other Development Partners interested in joining the project. Donor coordination exists in the four countries through the respective Development Partners (DPs) working groups. The Bank is present in the four countries and is a member in both the Health and Education DPs group. The project supervision missions will be undertaken jointly with the French Embassy and other interested DPs. The framework shown on *Table 1.3.4* below is crucial to inform potential Development Partners considering to support or scale up this project in the course of Phase 1 or in Phase 2. The main objective of the cooperation framework below is to highlight the key investments financing gaps related to the Project Phase 1 and 2. These areas were identified through the appraisal mission dialogues with target countries and the EAC. The available ADF 13 support to Phase 1 of the project will support the scope of activities indicated under section II 'Project Description'.

Table 1.3.4: Cooperation Framework for the Project

Required Additional Support to the EAC CoEs Phase 1&2	***USD***
Development and delivery of a laboratory based Nutrition program	1,000,000
Scale up Schlorships for Trainees from the EAC at the COEs	1,000,000
Promote NCDs related Scientific Research and Publication in journals	800,000
Enhance support to marketing the EAC CoEs in-country	200,000
Support CoEs e-learning and connectivity	500,000
Quality Assurance and Accreditation for additional biomedical programs	500,000
Collaborations and Networking	2,000,000
Strengthen physical infrastructure (works and equipment)	45,000,000
Total	***51,000,000***

II – PROJECT DESCRIPTION

2.1. Project components

2.1.1 The development objective of the project is to contribute to development of a relevant and quality skilled workforce in biomedical sciences to meet EAC's immediate labour market needs. The specific objective of the project is to provide high quality, competitive and skilled workforce in the EAC for social and economic development.

2.1.2 Project components are derived from the project's development objectives and expected outcomes.

2.1.3 A description of the project components is presented below. A detailed description of each component, activities, costs and indicators for each target country is attached as Technical Annex Chapters 1-4.

2.1.3.1 Component 1: Establish Centres of Excellence in Biomedical Sciences.

This is the core of the project and therefore the main project component. The aim of this component is to establish EAC of Centres of Excellence (CoE) in biomedical sciences. Once functional, the CoEs will establish a network to support benchmarking in quality enhancement as well as joint research. Each CoE will focus on a specialised area of expertise based its comparative advantage mainly, availability of basic faculty in the target speciality. The CoEs will target both national and regional students.

In addition, the project will endeavour to leverage ICT in training, research and service delivery for cost effectiveness and efficiency. Each CoE would be equipped with appropriate technology, including visual technology to facilitate diagnostics of ailments; patients record manage at the CoE; provide remote guidance to other health institutions and enable them to share in the guidance and expertise of the limited number of specialist within the EAC. Collaborating and networking institutions from aboard will support teaching and learning as well as research through development of eLearning modules for foundation courses and support teaching through video conferencing facilities and eLibraies.

The project will support common activities shown in *Box 1* below in the four sub-components.

Box 1: Common Activities that the Project will support in the four CoEs

i. Train Faculty of existing target institutions as 'Trainer of Trainees' through collaborations and networking with the relevant institutions.
ii. Train postgraduate students from the EAC in each of the CoEs.
iii. Support production of relevant e-IEC materials to create awareness on healthy lifestyles.
iv. Develop competency based curricula for each of the target CoEs through collaboration and networks with relevant 'World Class' institutions.
v. Support for quality assurance and accreditation of the faculty and the training programs at each CoE.
vi. Construction of teaching and learning complexes in each CoE. The main areas of the complex are listed in the Technical Annexes Chapters 1-4
vii. Strengthen and support scientific thematic research and publication through collaboration and networks with relevant institutions.
viii. Support women's empowerment in science, technology and leadership through scholarships and deliberate targeting of women in these science fields.

The Component 1 has four sub-components:

a) **Sub-Component 1.1: Creation of a CoE in Nephrology and Urology Sciences in Kenya – East Africa Kidney Institute (EAKI).**

This sub-component aims at addressing labour market shortages for skilled professionals in the biomedical specialties of nephrology and urology within the EAC.

The EAKI will operate as part of the University of Nairobi (UON), College of Health Sciences and the Kenyatta National Hospital (KNH). KNH is the UON's teaching hospital. The EAKI will be part of the EAC network of CoEs and will target students from Kenya and the EAC region. The institute will provide leadership in postgraduate education, training, research services to cater for the ever increasing needs for urological and nephrological care

in the region. The EAKI will be modelled along the best standards in the field and provided with state of the art biomedical equipment and clinical systems. The UoN has already formulated a MoU with Institute of Urology and Nephrology in Barcelona, Spain for collaboration and networking in establishing the EAKI. The MoU with Seattle University in the USA has also been discussed and will be finalised in the course of 2014.

b) Sub-Component 1.2: Creation of a CoE in Oncology Sciences in Uganda – East Africa Oncology Institute (EAOI).

This sub-component aims at addressing labour market shortages for skilled professionals in oncology.

The project will support establishment of a regional CoE in Uganda aiming to transform Uganda Cancer Institute (UCI) from a modest specialized health facility to a higher institute in collaboration with Makerere College of Health Sciences. The UCI will be part of the EAC network of CoEs and will accept students from Uganda and the EAC member countries. The institute will provide leadership in postgraduate education, clinical training, research and clinical services to cater for oncology demands in the region. The CoE UCI is collaborating and networking with relevant institutes such as the Fred Hutchinson Cancer Research Centre, NCI, University of British Columbia, and Case Western Reserve University. The UCI is specifically seeking collaboration with Aga Khan University and is working on a MOU to operationalize this collaboration. Makerere University College of Health Sciences will lead the process of faculty development, curricula and programmes designs, setting up best practices in oncological research and publishing.

c) Sub-Component 1.3: Creation of a CoE in Biomedical Engineering and eHealth in Rwanda – East Africa Biomedical Engineering Institute (EABEI).

This sub-component aims at addressing labour market shortages for skilled professionals in biomedical specialties specifically biomedical engineering and eHealth.

The project will support establishment of a Center of Excellence in Biomedical Engineering and eHealth (CEBE) at the University of Rwanda. The CEBE Rwanda will be part of the EAC network of CoEs and will target students from the region. The institute will provide leadership in training, research and preventive maintenance services to cater for regional needs. One of the key pillars of CEBE is to strengthen the synergy between the academia, the Government and the private sector while harnessing the transformational power of biomedical engineering and ICT for cost-effective service provision and job creation. The CEBE will seek ways to ensure development of e-Health Tools and Systems within the region.

d) Sub-Component 1.4: Creation of a CoE in Cardiovascular Sciences in Tanzania – East Africa Heart Institute (EAHI)

This sub-component aims at addressing labour market shortages for skilled professionals in cardiology and cardiovascular surgery in Tanzania. The CoE overall objective is to expand biomedical higher education and help reduce the burden of CVD and risk factors in the East African population. The CoE will train highly qualified human resources, provide quality multifaceted patient care, and conduct cutting edge research and innovation in Cardiovascular sciences (CVD). The CoE is hosted at the Muhimbili University of Health and Allied Sciences (MUHAS) Mloganzila Campus. The CoE in Cardiovascular Sciences will be established on two phases; phase 1 entails the preparation of the architectural drawings and construction of the administrative building while phase 2 entails the establishment of the teaching and research facilities.

2.1.3.2 Component II: Support EAC Regional Integration agenda in Higher Education and Labour Mobility.

The project will support the EAC Secretariat-Health Department, to implement its common market protocols including among others, free labour mobility. The project will provide an opportunity for the EAC member states to harness their collective resources and comparative advantages in biomedical skills and knowledge development. The project will support the EAC Heath Department to provide overall project coordination in the target countries and report to the Bank on the same. The EAC will also follow up with the target CoEs to hold thematic annual forums for knowledge sharing based each of the CoEs biomedical focus area. The project will also support EAC to undertake studies and analysis on EAC Labour Market needs for the health sector and also support development of a NCDs EAC registry.

Lack of reliable data is one of the main constraints in planning for biomedical education and training. The EAC secretariat will hold dialogue with the target countries to review the 'bonding' of staff who benefit from training scholarships with an aim to harmonize the 'bonding' modalities. The EAC Heath Department in collaboration with the Inter University Council of East Africa (IUCEA) and the national commissions for higher education in the target countries will be supported to develop regional postgraduate admission criteria and guidelines in biomedical sciences. This will facilitate labour mobility within the EAC The collaboration, networking and benchmarking aspects of the CoEs approach including curriculum review and development; will inform harmonization of service delivery and quality legislations on the medium term.

2.1.3.3 Component III: Project implementation in each Target Country.

Under this component, resources will be provided to ensure effective project management at country level. The component will mainly be financed through counterpart funds. A dedicated Project Coordination Unit (PCU) in each country will oversee the day to day implementation of the project. The MOH Kenya will host the project's PCU while the host CoE Institutions in Uganda, Tanzania and Rwanda will host the PCUs. The PCU coordinator will work closely with the EAC secretariat on the regional integration project activities.

The key skills mix for the PCU are: Project Coordinator/Manager; a Procurement Officer; Finance and Accounting officer; an Academic Programs Officer; a Research Officer; a Monitoring and Evaluation officer; and a Gender Officer. It is envisaged that most of the PCU staff will be deployed from existing executing agencies and CoEs host institutions. Any new recruitment to the PCU, especially where ADF resources may be used must be prior approved by the Bank. The PCU's main deliverable will be to execute the Bank approved country specific annual work plan and procurement plans. The PCU will also prepare project

quarterly reports and submit to the Bank on time, and ensure the project is audited annually as required and that the audit report is submitted to the Bank on time.

2.2. Technical solutions retained and other alternatives explored

The adopted project model focusses on significantly enhancing and upgrading of biomedical sciences education and training, as well as research capacity in existing institutions of higher learning in the EAC. The enhancing and upgrading approach entails collaboration and networking with regional and international institutions specialized in the target CoEs fields. This technical solution retained, is value for money and will realize creation of a high quality and accredited network of Biomedical Sciences CoEs in the EAC region. The solution aims at creating affordable and quality institutions of higher learning within the EAC that can meet the labour market demands for specialized services and at the same time inform knowledge based economies through local research and local innovations. This will greatly reduce dependency and expenditures for biomedical trainings and NCDs diagnostics and treatments in Asia, Europe and South Africa in Africa thus saving the EAC loss in foreign exchange and promoting medical tourism and consequently job creation.

Table 2.2: Project Alternatives Considered and Reasons for Rejection

Alternative	**Brief description**	**Reasons for rejection**
Training in Biomedical Sciences abroad for the EAC labour Market.	The project would support training of personnel in relevant institutions abroad.	This solution does not provide value for money taking into account the cost of trainings abroad and the numbers that would be trained. This solution would not enhance and upgrade the target institutions. It would not contribute to enhanced quality and accreditation of the target institutions thus impacting on their competitive and that of the EAC region. Regional integration in the EAC in higher education and labour mobility would not be facilitated. There is also high potential 'brain drain' that would be associated with this approach.
Adoption of curricula and programs from other CoEs in the developed world and import them into the EAC region	The project would 'brokering' and adopting existing curricula and programs in relevant institutions abroad and have these delivered locally. The abroad institutions would 'set up' local or satellite campuses within the EAC.	The adopted curriculum and programs would be very expensive (per students charge) based on the ICT foreign programs adopted by some local institutions which amount to about USD 300,000 per year. Adopting foreign curriculum does not encourage harnessing of local expertise and contextualizing of the proposed programs to meet the real needs. Collaboration and networking enables the local institutions to benchmark with best practices while at the same time creating own expertise and quality curriculum that respond to the local and region's needs.
Establish CoEs in Biomedical sciences in each country (a non-integrated approach).	Establish CoEs in each thematic area in all the target countries.	There is need to leverage economies of scale, comparative advantage and maximize on the limited expertise in Biomedical sciences in the EAC region.

2.3. Project type

The EAC CoEs project is a stand-alone regional multinational investment. This option is most practical to realize the project's intended outcomes in each country and foster regional integration in education and training and labour mobility. The EAC secretariat will provide overall coordination of the project and will play a catalyst role, specifically in regard to formulation of regional guidelines for curriculum and accreditation in biomedical sciences. Each country will be responsible for the day -to -day implementation of 'it' CoE. The CoE will work closely with the EAC secretariat in the execution of the project's regional integration activities. The Phased approach will enable the project's gains in Phase 1 to be consolidated and ensure lessons learnt in Phase 1 are taken into account in Phase 2 to achieving optimal functioning and long term development benefits of the CoEs.

2.4. Project cost and financing arrangements

2.4.1 **The total project cost for the initial phase, net of taxes and duties, is estimated at UA 72.75 million, of which UA 31.2 million is in foreign currency and UA 42.55 million in local currency.** The cost estimate is based on works, training program costs and equipment estimated budgets provided by the target CoEs. The cost estimates include a 5% to 10% physical contingency and 5% annual price contingency. The tables below show the Phase 1 cost estimates and financing arrangements for Phase 1 EAC CoEs overall project. Technical Annex, Chapter 5 shows the detailed total costs for each CoE.

Table 2.4.1: Project Costs Estimates by Component [amounts in millions UA]

Components	***For. currency costs***	***Loc. currency costs***	***Total Costs***	***% Foreign***
Establish Centres of Excellence in Biomedical Sciences	26.96	26.42	53.42	50.46
Support Regional Integration in Higher Education and labour mobility	0.52	1.29	1.71	30.40
Project implementation	0.75	4.19	4.94	15.18
Total Base Cost	**28.23**	**31.9**	**60.13**	**46.94**
Physical contingency	1.62	2.49	4.11	39.41
Price Contingency	3.75	4.76	8.51	44.06
Total project cost	***33.60***	***39.15***	***72.75***	***46.18***

2.4.2 The project will be financed by counterpart funds from target countries and the ADF. Bank financing amounts to UA 66.25 million, or 91.05% of the project. The counterpart funds will account for at least 10% of the project costs in each country for Phase 1.

Table 2.4.2 Sources of financing [amounts in millions UA]

Financing Source	***Foreign Costs***	***Local Costs***	***Total Costs***	***Percentage (%)***
ADF	33.60	32.65	66.25	90,90
GoVTs*	0,00	6.50	6.50	9,10
Total Cost	***33.60***	***39.15***	***72.75***	***100,00***

*GoVTs- Governments of Rwanda, Kenya, Tanzania and Uganda. A detailed project costs for each CoE by country is presented in Technical Annex Chapter 1 to4.

Table 2.4.3 Project cost by category of expenditure [amounts in millions UA]

Category	***Foreign Costs***	***Local Costs***	***Total Costs***	***% Foreign***
Works	3.45	14.29	18.23	18.92
Goods	15.90	1.80	17.70	89.83
Services	8.38	8.44	16.82	49.82
Operating costs	0.00	7.37	3.737	0.00
Total Base Cost	**28.23**	**31.9**	**60.13**	**46.94**
Physical contingency	1.62	2.49	4.11	39.41
Price Contingency	3.75	4.76	8.51	44.06
Total program cost	***33.60***	***39.15***	***72.75***	***46.18***

Table 2.4.4 Expenditure schedule by component (million UA)

Components	***2014/15***	***2015/16***	***2016/17***	***2017/18***	***2018/19***	***Total***
Establish Centres of Excellence in Biomedical Sciences	9,62	12,19	20,40	15.18	7,46	**64.85**
Support Regional Integration in Higher Education and labour mobility	0,43	0,49	0,37	0,35	0,36	**2,00**
Project implementation	1,20	1,24	1,11	1,15	1,21	**5,91**
Total	***11,25***	***13,91***	***21,89***	***16.68***	***9,02***	***72.75***

2.5. Project's target area and population

The project will directly benefit the estimated 150 million EAC citizens through affordable quality, and accredited biomedical skills and tertiary education institutions and services. The CoEs will create an opportunity for students from the EAC region, as well as Central Africa who are already training within the EAC, to access high quality postgraduate biomedical sciences education thus increasing their availability and employability in the regional labour market. The CoEs target students enrollment is 150 students on postgraduate programmes (140 masters, 10 PhD) in addition to 300 trainees for short courses in Phase 1. The proposed short courses are indicated in Technical Annexes 1-4 for each CoE. The EAC private sector will also benefit from a qualified and accredited relevant skilled workforce instead of relying on foreign professionals. The project outcomes will also directly improve quality and affordability of service delivery for EAC citizens seeking kidney, heart and cancer services. At least 100,000 EAC citizens seek these services abroad each year. Technical Annexes Chapters 1-4 provides details on specific project beneficiaries for each EAC country.

2.6. Participatory process for project identification, design and implementation

Project's participatory consultations involved stakeholders from the Governments' Ministries of Education, Finance and Health andalso involved Development Partners, Civil Society and Private Sector and was facilitated and convened by the East African Secretariat. The workshop held in July 23-24 2012 aimed to identifying and preparing the project technical areas of each CoE. Follow up meetings on the project's consultations have been held with academia, private sector, civil society, regional bodies including the

EAC and the IUCEA, public and private health care providers, Government's relevant Ministries and various Development Partners during the appraisal mission. Chapters 1-4 of the Technical Annex contain details of the people met and the consultation's outcome in Kenya, Rwanda and Uganda. The civil society is deemed to play a role in creating awareness for uptake of affordable biomedical services within the EAC. The relevant regional CSOs such as AMREF will be targeted during the project launch. The main messages from these consultations are highlighted in *Box 2* below.

*Box 2: Main Outcomes of Project's Stakeholders Consultations***.**

i. Each of the EAC CoEs should focus on its comparative advantage in regard to the CoE's target training program and build on existing ongoing trainings in-country.
ii. Investment in biomedical sciences at higher education level is very limited. EAC region relies heavily on Asia and South Africa for these services.
iii. The existing faculty in biomedical sciences is scarce and therefore the project focuses on skills and capacity development for the faculty at the beginning of the project.
iv. There is need to develop guidelines on the regional students admissions in the target CoEs.
v. Research and publication should be one of the key project focus areas.
vi. To ensure relevant and quality of graduates from the CoEs, it's critical that the training programs are developed and delivered in collaboration with relevant 'world class' institutions.
vii. Quality assurance and accreditation is critical to the success of the CoEs.

2.7. Bank Group experience, lessons reflected in project design

2.7.1 The Bank is supporting ongoing Multinational Education and Training Projects across Africa. The Pan African University (PAU), African Virtual University Project, the West African Economic and Monetary Union (WAEMU) and Support to a Network of Institutions of Higher Education Project covering Economic Community of West African States (ECOWAS). The Bank has also supported the African Economic Research Consortium (AERC) to deliver postgraduate Economics training through the Collaborative programs. This project takes into account good practices and lessons learnt from challenges experienced in implementing these projects. The project design and implementation arrangement is also informed by challenges encountered in the NELSAP regional project as well as the World Bank Supported Project 'East Africa Laboratory Network Project'. In addition, the project approach is also informed by March 2014 workshop in Kigali, Rwanda on '*Accelerating Africa's Higher Education for Science, Technology and Innovation'*. The target countries under this project participated in the Kigali forum.

2.7.2 Among the key challenges experienced by these projects is a delay in implementation which has mainly been attributed to central implementation arrangements; delays in procurements and 'tied' conditions for effectiveness. The key lessons learnt from these projects and the recent forums are taken into account in this project including: ***(i)*** Need for formal collaboration and networking to ensure roles and functions are well defined and deliverables clearly stipulated. The project has indicated need for signed MoUs with collaborating institutions; ***(ii)*** Inadequate research and publication impacts on the quality and competiveness of Higher education in Africa. The project has included support to thematic research, publication and support to a knowledge sharing forum as core project activities; ***(iii)*** Based on evidence from existing successful CoEs[7] in the region and abroad, CoEs need to be created within existing institutions as opposed to 'stand-alone' CoEs. The project will support CoEs within main Higher Education institutions in the EAC based on their comparative advantage in biomedical programs; ***(iv)*** The regional bodies should play an oversight role and coordination as opposed to day to day project implementation to ensure

[7] Example of a successful CoE presented at the Kigali Forum is the TWAS, March, 2014. The industry linkages in the target CoEs are the teaching and referral hospitals which are now part of the CoEs.

timely project take off. This project has taken into account specific in- country project coordinating teams. Through consultations, it has been agreed that the EAC Secretariat will mainly play an oversight and coordination; and **(*v*)** Inadequate project readiness at appraisal to ensure quality at entry. The project has considered advance procurement for works design consultant and has begun working with the CoEs on defining the training programs, and identifying equipment and their specifications. In addition, the project's conditions for effectives are not 'tied' to fulfill by all the four countries at the same time.

2.8. Key performance indicators

Project performance indicators are as outlined in the projects' log frame at impact, outcome and output levels. Impact indicators include: (i) EAC specific Country's Competitive Ranking; (ii) Target Institutions' Regional and International Ranking; (iii) EAC region contribution to Research in Biomedical Sciences. Outcome indicators: (i) CoEs ranking in quality and competiveness; (ii) Number of Published research articles; (iii) Improved medical Tourism; (iv) Graduates employed and retention rates. Output indicators: (i) Establish and functional CoEs; (ii) Number of students enrolled and completed (not less of 40% of either sex); (iii) Number of Faculty trained not less of 40% of either sex); (iv) Curriculum structures within the EAC Harmonized with a gender perspective; and (v) Number of regional knowledge sharing forums in biomedical sciences held.

III – PROJECT FEASIBILITY

3.1. Economic Performance[8]

3.1.1 This project is in line with the Bank Group Country Strategies for Tanzania, Kenya, Uganda and Rwanda. Through its contribution to infrastructure development, training, research and service delivery, the project has strong returns for the overall development of the target EAC member countries. The improvement of urology, nephrology and cancer research, care and treatment will lead to improvement of the quality of life and a reduction in the cost of care for urology, nephrology and cancer patients, especially in foreign countries. Investing in higher education and skills has long been considered a key driver of economic growth. There is mounting evidence supporting premise that the investment in human capital is a key determinant of economic growth. The crucial function of higher education in the knowledge economy has been the object of ample empirical demonstrations that show a strong correlation between higher education and GDP growth, through human capital development and technology diffusion. This project specifically invests in higher education in specialties demanded by the thriving labour market in East Africa.

The project avails care, research and treatment of NCDs within the EAC countries with potential to create jobs for professionals and support services through intra and inter-regional medical tourism. For example, the increase in number of EAC citizen's medical travellers to countries such as Asia, Europe and America has opened an investment window for entrepreneurs in these countries in travel, logistics and medical billing and accommodation. These logistical services will henceforth be targeting the EAC member country intra and inter medical tourism activities.

3.1.2 Competitiveness, Quality of Higher Education and required Human Capital. Availability of skilled personnel to handle NCDs is a major concern within the EAC countries. For example, Kenya has in total 20 nephrologists, 30 urologists and 10 nurses specialised in urology and nephrology. With these limited skills, Kenya is struggling to serve

[8] A financial analysis of the project was not feasible at the moment due to inadequate data in Biomedical Sciences and the limited professionals in this area in the region. The project instead carried an economic analysis. The project Component 3 will support collection and analysis of data in biomedical sciences in EAC.

both the East and Central Africa with renal related services. As such, only 50 patients undergo kidney transplants annually due to limited skills and inadequate infrastructure. On the other hand, Uganda with a population of 35 million has only 20 oncologists while the annual case load of cancer is 60,000. To deliver the requisite skills, the region needs to invest in academic excellence, especially targeting medical specialists who can respond to the rapidly expanding threat of NCDs. The project will enhance the training of 150 Cancer, Kidney and Urology health workers per year in Phase 1, making them more suited for providing services at the respective CoEs and other research institutions. Phase 2 will also include Nutrition Institute in Burundi

3.1.3 Currently, due to lack of specialised training facilities and the need to train specialists abroad, it costs about USD 500,000 to train an urologist, nephrologist and oncologist in the EAC countries. Once the CoEs are fully operational, it will cost about USD 40,000 to train a urology, nephrology and oncology experts, thereby leading to huge savings in training costs. The project will therefore enable the target institutions to undertake a needs assessment on cancer, urology and nephrology care and treatment, thereby helping to design a lasting training and capacity building program for prevention, care and treatment.

3.1.4 The in-service and short courses programs for this project will also include capacity building in disease control as this has direct impact on the economy. The recent outbreak in Ebola Virus Disease (EVD) has exposed significant weakness in timely and appropriate management of infectious diseases. The result of this weakness is reduced economic growth with immediate impact on households. As a result of the uncontrolled EVD, the International Monetary Fund has indicated that economic growth in the affected West Africa Countries is likely to significantly slow down resulting into high inflation. The project will work towards close collaboration with the Centre for Disease Control and Prevention (CDC) to build capacity in the target EAC countries in order to improve their capacities in emergency preparedness and response.

3.1.5 Leverage economies of scale and saving of foreign exchange. Currently, Kenya has 30,000 new urology and nephrology cases (estimated 10,000 develop chronic kidney disease), while Uganda has 60,000 new cancer cases per year. Most are attended to locally, nevertheless, a significant number also seek treatment in India, South Africa and other countries with superior facilities. At least 100,000 EAC citizens seek these services abroad each year. The countries and household spend at least USD 47,000 per patient to access cancer, urology and nephrology services in India, as the main destination for EAC patients. Development of relevant biomedical skills would greatly reduce foreign dependency and expenditures, especially for NCDs diagnostics and treatments. Currently, the EAC Governments and households are utilizing an estimated USD 150 million annually for NCDs related services from outside the region, besides the cost of training. The project will reduce this outflow of foreign currency for treatment and training significantly, thereby improving the balance of payment position of the respective countries.

3.1.6 Private Sector Involvement. Private sector involvement and participation is important in this project to ensure relevance of the skills development for the labour market. The collaborating and networking institutions that will support development of the training programs, facilitate faculty exchange and supervise postgraduate students' clinical training in teaching and referral hospitals from the private sector such as the Aga Khan University Hospital and the Fred Hutchinson Cancer Research Centre. In addition, the private sector alone has a demand for an estimated 4,000 biomedical highly skilled professionals. The EAC private sector mainly relies on international expertise for short term and long term consultancies in these fields. A number of private sector providers have expressed interest and plans to establish satellite service centers in medium urban centers, for example for renal and oncology services, but inadequate local skills in these areas constrains these investments. In some EAC countries such as Kenya, investments have been established for renal dialysis centers large towns but at least four are not fully functional due lack of a skilled personnel.

3.2. Environmental and Social impacts

3.2.1 Environment.

The project is classified as category II and will adhere to the respective countries' environmental and waste management guidelines and procedures. The project targets creation of CoEs within existing learning institutions which already operate teaching and referral facilities. The CoE's host institutions have existing procedures for medical waste including management of radioactive medical waste. The project will comply with the relevant National Environmental Management and Co-ordination Acts and Biomedical Procedures in each of the target countries. An Environmental Impact Assessment (EIA) will be submitted in accordance with the National Environmental Impact Assessment and Audit Regulations (EIA/EA) prior to commencement of the construction of the teaching and learning complexes. At the project planning and design stage of the facilities a minimal effect on the environment will be ensured. There will be minimal cutting of trees in creating room for the construction; Non–interference with any natural water flows; and Provide hard landscape only to the essential areas and have soft landscape in the surrounding areas.

Regular communication and evaluation of the environmental performance with contractors will be carried out and any corrective action will be discussed with the project implementation team.. The contractors will be issued with the environmental requirements prior to commencement of the project for information and implementation. Medical waste disposal by the CoEs will be in line with the target's institutions and the respective national waste disposal rules and regulations.

3.2.2 Climate Change.

Overall, the planning and design of the building will take into account green building concepts**.** For example, orientation of buildings will be carefully considered to optimize natural light and ventilation into the rooms and reduce use of artificial lighting and ventilation unless where the room utilization requires otherwise for example operating theatres. High standards of maintenance of the institute will ensure that the building remains in the green state as designed and constructed. A preventive maintenance manual will be developed for each CoE.

3.2.3 Gender

The Bank's Gender Strategy 2014-2018 Pillar 2 Economic Empowerment includes women empowerment through skills development in science and technology as one of its core focus areas. Gender equality is also emphasized by national policies of Regional member countries. The Bank's Human Capital Strategy emphasizes on the need to empower women in science based education and training. Gender disparities in biomedical sciences vary among the target countries. For example in both Uganda and Kenya, there are high numbers of women enrolled in medicine (50%). However, in regard to biomedical specializations such cardiovascular, urology, nephrology and oncology, there are hardly any qualified women in these areas. Kenya for example has one qualified woman nephrologist despite the high numbers of women in need of obstetric fistula services. Chapter 7 of the Technical Annex describes in detail the gender situations and proposed interventions for this project. *Box 3* below summarizes the project's interventions on gender empowerment.

Box 3: Summary of the Projects Gender Interventions

i. Orientation of students and faculty on gender and leadership in science and technology.
ii. Provide scholarships targeting women at the CoEs to enable them specialize in the relevant biomedical skills.
iii. Review the Curricula for the CoEs with a gender perspective. In Kenya, the African women's Centre of the University of Nairobi has volunteered to assist in this aspect.
iv. The CoEs will include quality and affordable services relevant to women such as obstetric fistula at the urology and nephrology CoE.
v. A gender focal point will be part of the Project Coordinating Team.
vi. Mentorships programs for women in male dominated fields will be developed.
vii. Monitoring and Evaluation data for the CoEs will be sex disaggregated.

3.2.4 Social

Unemployment in the EAC especially among the youth, 15 to 35 years, is up to 40%. The project will support regional integration through harmonization of the biomedical higher education within the EAC and facilitating labour mobility within the EAC thus increasing the opportunity of employability for the graduates. Development of a high quality, competitive and skilled human capital will increase EAC's competitiveness and impact on the socio-economic aspects of the populations. The project has potential for creating new jobs through development of a new range of skills guided by the labour market and provision of services related to medical tourism such as travel, logistics and medical billing and accommodation. The CoEs, will enable delivery of affordable and quality biomedical services to EAC community including the poor and vulnerable. The project has potential to save at least half the USD 150 million utilized annually by the EAC to access specialized biomedical service from abroad. Most of these funds come from the household and will be invested in the local economy. The gender aspects of the project promote inclusion. The project intervention will enable women to access biomedical tertiary training. In this regard the project will aim to enroll at least 40% women at the CoEs.

Resettlement. The CoEs will be established within existing institutions therefore no resettlement or social displacement is involved in this project.

IV – IMPLEMENTATION

4.1 Implementation arrangements

4.1.1 The project's Executing Agencies are the respective Ministries of Education and Health in the target countries. The CoE's host institution will take full responsibility of the day to day implementation in line with Paris Declaration on aid effectiveness and within Bank rules and regulations. The project management team will be trained and supported by Bank Field Offices and Task Management Team. The EAC Secretariat will provide overall oversight and coordination to the project. In country Project Steering Committees (PSC) will be established chaired by the Executing Agency's Permanent Secretary or an equivalent. The PSC will include senior staff from the line Ministries, the CoEs representative and private health sector representatives. The project's annual work plans and budgets will be reviewed and approved by the respective PSCs. Each CoE will have its own Board of Directors (BoD) drawn from expertise in the target area and industry. The BoD will provide strategic focus on the CoEs including sustainability measures and will include participation of the private sector

such as the East Africa Health Federation.The Head/Director of the CoE's will serve as the secretary to the CoE's BoD. Minutes of the BoD and decision taken will be presented to the PSC, which will meet on a quarterly basis. The PSC and the BoD will ensure that the terms, conditions, project objectives and reporting schedules are adhered to as per the loan agreements.

4.1.2 A Dedicated Project Coordinating/Implementing Unit (PCU/PIU) will implement the project on a day to day basis in each target country. The PCU will be guided by the PSC in regard to annual work plan and budget execution. The PCU coordinator, procurement staff and financial /accounting staff will be members of the PSC. The skills mix for the PCU will be in the following areas: Project Coordinator/Manager; a Procurement Officer, Finance and Accounting officer, an Academic Programs Officer, A Research Officer, a Monitoring and Evaluation officer, and a Gender Officer. The PCU will liaise with the EAC Secretariat on the regional integration aspects of the project. These activities will be included in the project's annual work plan. The PCU staff will mainly be deployed from existing executing agencies and CoEs host institutions.

The PCUs will execute project's annual work plan and procurement plans, prepare project quarterly report; and ensure the project is audited annually as required. Chapters 1-4 of the Technical Annex detail the project's implementation arrangements in each country.

4.1.3 Financial management and audit

In summary, the Financial Management (FM) Arrangements for the East Africa Centres of Excellence Project are defined here based on the FM assessment for each target CoE. The specific FM assessment and a description of the financial flow and disbursement for each CoE are detailed in the Technical Annexes Chapters 1-4. For Kenya, the Ministry of Health (MoH) will be the project's accounting entity. For Rwanda, , the University of Rwanda, will be the accounting entity of the project. . For Uganda the accounting entity of the project will be the Uganda Cancer Institute (UCI); while for Tanzania, the accounting entity will be Muhimbili University of Health and Allied Science. A PCU at each of the CoEs will be tasked to manage the project. The composition of the Secretariat and the FM arrangements in each country are detailed and attached in the Technical Annex Chapters 1-4. The Director of Finance (DoF) in each CoE will be ultimately responsible for the FM of the project. The local PFM systems will be followed. DoF will second an FM Specialist to the project. The seconded FM Specialist will ensure that books of accounts from which financial statements of the project will be extracted are properly maintained. As such the Executing Agency (EA) will ensure that they have all the right accounts and sub accounts for the preparation of the project books of accounts. Further, the DoF will ensure that a system of Internal Controls acceptable to the ADF is maintained throughout the life of the project. Through the FM Specialist the Accountants will prepare or cause to prepare the unaudited interim financial reports (IFRs) of the project. The unaudited IFRs will be submitted to the ADF no later than 45 days after the end of each quarter. At the end of each financial year and at the end of the project, each of the CoEs will prepare annual financial statements which will be audited by the Auditor General of each participating country or independent external auditors acceptable to the Bank.

4.1.4 Disbursement Arrangements

All four methods of disbursements accepted by the ADF will be allowed. However, it is envisaged that the most commonly used ones will be the Direct Payment Method and the Special Account method. Most large contracts will be paid directly by the ADF once the EA has signed off. It is expected that there could be smaller payments which would be paid using the Special Account. In this regard, each EA will open a Special Account in USD for receiving funds from the ADF. The first disbursement will be based on a six month work plan

agreed with the ADF. Subsequent disbursements will be based on the next work plans also agreed with the ADF. The EA will be asked to justify the at least 50% of the previous tranche before the next tranche can be disbursed.

4.1.5 Procurement:

4.1.5.1 All procurement of goods and works and acquisition of consulting services financed by the Bank will be in accord with the Bank's Rules and Procedures: "Rules and Procedures for Procurement of Goods and Works," dated May 2008, and "Rules and Procedures for the Use of Consultants," dated May 2008, using the relevant Bank Standard Bidding Documents. An 18-month Procurement Plan has been developed for each country. The procurement arrangements for each project activity are detailed in Technical Annex Chapters 1 to 4 for Kenya, Rwanda and Uganda respectively. To accelerate project implementation, given the time taken to conclude procurement of civil works by similar projects, advance contracting is considered for selection of a consultant for works design, preparation of works bidding documents, and construction supervision for the proposed CoE's buildings.

4.1.5.2 The respective implementing agency/PCU in each target country will be responsible for the procurement of all goods, works and consulting and training services. An assessment of the capacity of the Executing Agencies to implement procurement actions for the project has been carried out by the Bank. The assessment of the procurement capacity of the Executing Agencies in each target countries is provided in the Technical Annex Chapters 1 to 4.

4.2. Monitoring: The project will use existing Executing Agencies and target CoEs monitoring and evaluation structures. The PCUs in liaison with the EAC secretariat will play a critical role in project monitoring. The PCUs will include a Monitoring and Evaluation (M&E) Officer. A project's M&E database will be established in each PCU based on the log frame indicators and targets. The PCU will update this database continuously and report on the project's target progress through the quarterly project reports. The PSC will also monitor project progress and take remedial action as needed. The PCU will submit to the Bank minutes of the PSC meetings. These reports will be utilised by the Bank to update the project's Implementation Progress Report (IPR). The Bank will carry out at least two project supervision missions each year as well as a mid-term evaluation of the project. The Bank's country offices in the respective Country's will provide day to day guidance to the PCU on project implementation and ensure adherence to agreed procedures and schedules. This support will include training the PCU on procurement and disbursement procedures. The project key milestones are outlined in the country specific Results Based Logical Frameworks in Chapters 1-4 of the Technical Annex in line with project timeframe schedule and log frame.

4.3. Governance: The CoEs are based in existing Universities and therefore will follow the Universities governance and management structures while linking with the Executing Agencies (EA) the PSC and the PCU for the project purposes. Based on the Financial Management and Procurements Assessments, there are no critical foreseen risks related to Governance. The CoE's BoDs will oversee the management and strategic functions of the CoEs. Minutes of the BoDs will be shared with the PSC to ensure actions are taken on arising matters. The Bank will carry out periodic financial management assessment of the project as well as procurement management assessments to review the CoE's and the EA's internal controls. Direct Payment methods will be applied to equipment and works activities. The executing agency will open a special account for project implementation activities. An annual project audit will be carried out at the EA.

4.4. Sustainability: The CoEs are 'emerging' from existing institutes and are part of well-established Universities. The CoEs are embedded in existing University's core mandate-this ensures ownership and institutionalization of the CoEs for sustainability purposes. Sustainability of the COEs is anchored within the 'host' institutions mandate and regulations including student's admissions, facility and equipment maintenance, and future COEs investments. The respective Universities' current strategic plans take into account these CoEs. The Universities will run the training programs under the project not only through scholarships, but mostly by self-paying admissions which will continue to generate additional revenue. The CoEs at the target Universities will be ultimately autonomous and therefore will develop business and generate income to further finance operational costs. The service delivery aspects of the training at the CoEs include service that are highly specialised and in high demand. Utilization of the CoEs is therefore guaranteed. The target CoEs are Public institutions and therefore benefit from the respective Government's support through development grants and recurrent cost including teaching staff salaries. The EAC Secretariat Policy Organs for Education and Health have adopted these CoEs. A simulation for envisaged revenue collection from the CoEs through training and service delivery will be done through the EAC led studies and policy development work aiming for regional harmonization.

4.5. Risk management

Table 4.5.1 below shows the envisaged risks and mitigation measures adopted as articulated in the results-based logical framework. The risks are informed also by challenges encountered in other regional operations.

Table 4.5.1: Risks and mitigation

Potential Risks	Level	Mitigation Measures
Inadequate local capacity and systems for implementation.	Low	Provide technical assistance and close supervision and guidance to the PCU by the country offices.
Weak retention of skilled graduates.	Medium	The demand for highly specialized workforce is high in both public and private providers as well as medical schools. Governments have regulations binding 'students' benefitting from scholarships to commit to work for at least 3-5 years or to reimburse the scholarship. The project has adopted these regulations for each country.
Lack of political will to regulate regional higher education.	Low	Work with EAC Secretariat, Inter University Council of East Africa and the line Ministries on biomedical sciences programmes' accreditation frameworks.
Inadequate support for multinational projects due to delays in implementation.	Low	The project has analysed ongoing Bank supported regional projects in Education and Training and taken into account lesson learnt in its design.
Inadequate number of women enrolling in tertiary programs'	Medium	Targeted recruitment of women using multi-faceted approach based on best practice in collaboration with MINEDUC, University of Rwanda and the National council for Science and Technology'

4.6. Knowledge building

The project will contribute to generation of relevant data, information and evidence in biomedical sciences applications within the EAC. The project will support CoE to carry out relevant research in biomedical sciences. This research will generate knowledge and inform innovations to finding biomedical solutions relevant to the local society. The EAC secretariat will convene annual thematic forums for knowledge sharing and dissemination based on each CoEs thematic focus area. The EAC will also undertake studies and analyses on EAC Labour Market needs for biomedical skills and services to inform planning and relevant policies. In collaboration with the Inter University Council of East Africa (IUCEA)

and the National Commissions for Higher Education, the EAC will be supported to develop regional postgraduate admission criteria and guidelines in biomedical sciences to facilitate EAC labour mobility.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

The financing instruments proposed are four ADF loans in the aggregate amount of UA 66.25 million, to be extended to the Republics of Kenya, Tanzania, Uganda and Rwanda, respectively.

5.2. Conditions associated with Bank's intervention

Conditions Precedent to Entry into Force of the four loan Agreements: The entry into force of the four Loan Agreements shall be subject to fulfillment by the respective Borrowers of the provisions of section 12.01 of the General Conditions Applicable to the *African Development Fund Loan* Agreements and Guarantee Agreements (Sovereign Entities).

Conditions Precedent to First Disbursement of each of the four Loans: The obligations of the Fund to make the first Disbursement of each of the four loans shall be conditional upon the fulfillment by the relevant Borrower of the following conditions:

(i) establishment of the core Project Coordination Unit (PCU) in each Country comprising of: Project Coordinator/Manager; a Procurement Officer, Finance and Accounts officer, an Academic Programs Officer, A Research Officer, a Monitoring and Evaluation officer, and a Gender Focal Person (para 2.1.3.3); (ii) the opening of a Special Account by the Borrower's Executing Agency to receive the proceeds of the Loan (para 4.1.1); (iii) preparation of a project annual work plan and procurement plan and approval by the Steering Committee (para 4.1); and (iv)Written confirmation by the Borrower that Government owns the land on which any physical developments under the Project will be made, free of all encumbrances and/or third party claims.

5.3. Compliance with Bank Policies

This project complies with all applicable Banks' relevant policies. These include: (i) The December 2013 Bank's Mid Term Review report of the East Africa Regional Integration Strategy Paper (RISP); (ii) The Bank's 2013-2022 Strategy core operational priorities include Skills and Technology and Regional Integration as well as special focus on gender and fragile states; (iii) Human Capital Strategy 2014 -2018 main area of focus is skills development for competitiveness and jobs; and (iv) The Bank's Country Strategy Papers (CSP) for the target countries takes into account the need for skills development. For example, the Kenya's CSP 2014-2018 Pillar II is **'***Developing skills for an emerging labour market of a transforming economy'; Uganda's* CSP MTR 2014-2016 Pillar II is '*Skills development*'; Rwanda's combined 2012-16 CSP mid-term review Pillar 2 is '*Enterprise and Institutional Development'* includes developing skills and employability.

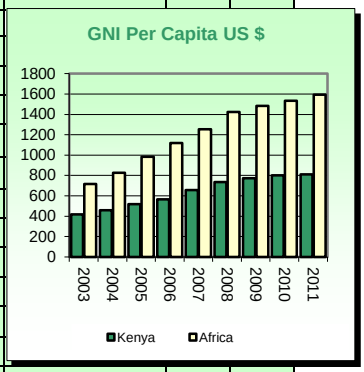
VI – RECOMMENDATION

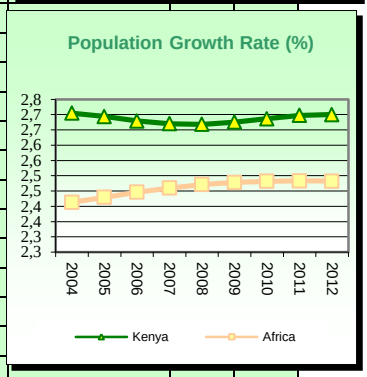
Management recommends that the Board of Directors approve the following proposed loans for the four countries: (i) (UA 25million) Twenty Five million to the Republic of Kenya, UA (12.5 million) Twelve Million and Five Hundred to the Republic of Rwanda, UA 6.25Million (Six Million and Twenty Five hundred) to the Republic of Tanzania and UA 22.5Million (Twenty two Million and Five Hundred) to the Republic of Uganda.

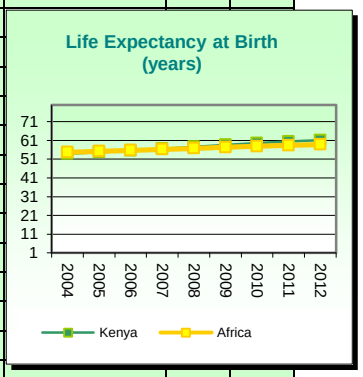
APPENDIX I: COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATORS :

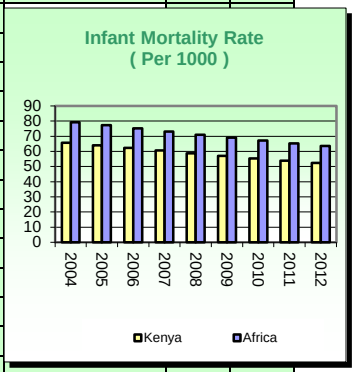
(A) KENYA

	Year	Kenya	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2011	580	30,323	98,458	35,811
Total Population (millions)	2012	43.2	1,070.1	0.0	0.0
Urban Population (% of Total)	2012	24.4	40.8	47.1	78.0
Population Density (per Km²)	2012	71.7	34.5	69.8	23.5
GNI per Capita (US $)	2012	850	1 604	3 795	37 653
Labor Force Participation - Total (%)	2012	36.6	37.8	68.7	72.0
Labor Force Participation - Female (%)	2012	46.3	42.5	38.9	44.5
Gender -Related Development Index Value	2007-2011	0.538	0.525	0.694	0.911
Human Develop. Index (Rank among 187 countries)	2008-2012	145	...	...	...
Popul. Living Below $ 1.25 a Day (% of Population)	2009-2011	43.4	40.0	20.6	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	2.7	2.3	1.3	0.3
Population Growth Rate - Urban (%)	2012	4.4	3.4	2.6	0.7
Population < 15 years (%)	2012	42.4	40.0	28.5	16.4
Population >= 65 years (%)	2012	2.6	3.6	6.0	16.6
Dependency Ratio (%)	2012	82.1	77.3	52.6	49.2
Sex Ratio (per 100 female)	2012	99.6	100.0	103.3	94.3
Female Population 15-49 years (% of total population)	2012	24.2	49.8	53.3	45.6
Life Expectancy at Birth - Total (years)	2012	61.1	58.1	68.2	77.7
Life Expectancy at Birth - Female (years)	2012	62.9	59.1	70.1	81.1
Crude Birth Rate (per 1,000)	2012	35.5	33.3	21.4	11.3
Crude Death Rate (per 1,000)	2012	8.5	10.9	7.6	10.3
Infant Mortality Rate (per 1,000)	2012	52.4	71.4	40.9	5.6
Child Mortality Rate (per 1,000)	2012	78.3	111.3	57.7	6.7
Total Fertility Rate (per woman)	2012	4.5	4.2	2.6	1.7
Maternal Mortality Rate (per 100,000)	2006-2010	360.0	415.3	240.0	16.0
Women Using Contraception (%)	2012	49.6	34.5	62.4	71.4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	13.9	49.2	103.7	291.9
Nurses (per 100,000 people)*	2004-2009	118.0	133.0	168.7	734.3
Births attended by Trained Health Personnel (%)	2006-2010	43.8	53.7	64.3	...
Access to Safe Water (% of Population)	2011	60.9	67.8	86.5	99.1
Access to Health Services (% of Population)	2000	77.0	65.2	80.0	100.0
Access to Sanitation (% of Population)	2011	29.4	40.2	56.8	96.1
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	6.2	4.6	0.9	0.5
Incidence of Tuberculosis (per 100,000)	2011	288.0	234.6	146.0	23.0
Child Immunization Against Tuberculosis (%)	2011	92.0	81.6	83.9	95.4
Child Immunization Against Measles (%)	2011	87.0	76.5	83.7	93.5
Underweight Children (% of children under 5 years)	2006-2011	16.4	19.8	17.0	1.4
Daily Calorie Supply per Capita	2009	2 092	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010-2011	1.8	5.9	2.9	7.4
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2009-2012	113.3	107.0	107.8	102.7
Primary School - Female	2009-2012	112.0	103.1	106.2	102.3
Secondary School - Total	2009-2012	60.2	46.3	66.4	100.4
Secondary School - Female	2009-2012	57.1	41.9	65.1	100.0
Primary School Female Teaching Staff (% of Total)	2009-2012	43.9	39.2	58.6	81.3
Adult literacy Rate - Total (%)	2007	72.2	71.5	80.2	…
Adult literacy Rate - Male (%)	2007	78.1	78.4	85.9	…
Adult literacy Rate - Female (%)	2007	66.9	64.9	74.8	…
Percentage of GDP Spent on Education	2008-2010	6.7	5.3	4.5	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	9.7	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	0.5	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	6.1	23.0	28.7	40.4
Per Capita CO2 Emissions (metric tons)	2009	0.3	1.2	3.0	11.6





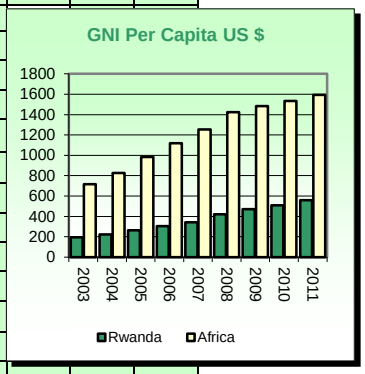


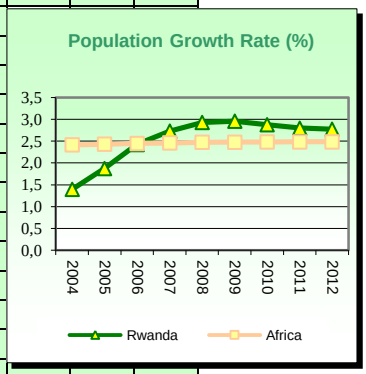


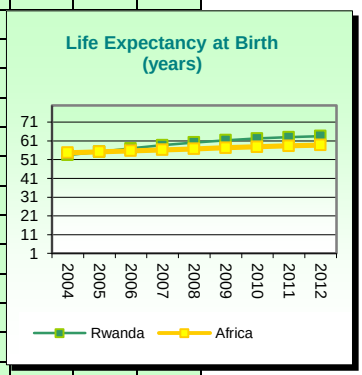
Sources: AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports. Note: N.A: Not Applicable; …: Data Not Available. Last update: October 2013

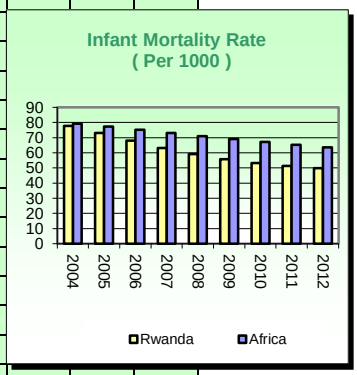
(B) RWANDA - COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Rwanda	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2011	26	30,323	98,458	35,811
Total Population (millions)	2012	11.5	1,070.1	0.0	0.0
Urban Population (% of Total)	2012	19.4	40.8	47.1	78.0
Population Density (per Km²)	2012	415.5	34.5	69.8	23.5
GNI per Capita (US $)	2011-2012	560	1 604	3 795	37 653
Labor Force Participation - Total (%)	2012	46.8	37.8	68.7	72.0
Labor Force Participation - Female (%)	2012	51.8	42.5	38.9	44.5
Gender -Related Development Index Value	2007-2011	0.459	0.525	0.694	0.911
Human Develop. Index (Rank among 187 countries)	2008-2012	167	...	...	...
Popul. Living Below $ 1.25 a Day (% of Population)	2009-2011	63.2	40.0	20.6	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	2.8	2.3	1.3	0.3
Population Growth Rate - Urban (%)	2012	4.3	3.4	2.6	0.7
Population < 15 years (%)	2012	43.9	40.0	28.5	16.4
Population >= 65 years (%)	2012	2.3	3.6	6.0	16.6
Dependency Ratio (%)	2012	84.2	77.3	52.6	49.2
Sex Ratio (per 100 female)	2012	95.4	100.0	103.3	94.3
Female Population 15-49 years (% of total population)	2012	24.5	49.8	53.3	45.6
Life Expectancy at Birth - Total (years)	2012	63.6	58.1	68.2	77.7
Life Expectancy at Birth - Female (years)	2012	65.2	59.1	70.1	81.1
Crude Birth Rate (per 1,000)	2012	35.8	33.3	21.4	11.3
Crude Death Rate (per 1,000)	2012	7.3	10.9	7.6	10.3
Infant Mortality Rate (per 1,000)	2012	49.8	71.4	40.9	5.6
Child Mortality Rate (per 1,000)	2012	73.7	111.3	57.7	6.7
Total Fertility Rate (per woman)	2012	4.6	4.2	2.6	1.7
Maternal Mortality Rate (per 100,000)	2006-2010	340.0	415.3	240.0	16.0
Women Using Contraception (%)	2012	51.4	34.5	62.4	71.4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	2.4	49.2	103.7	291.9
Nurses (per 100,000 people)*	2004-2009	77.2	133.0	168.7	734.3
Births attended by Trained Health Personnel (%)	2006-2010	69.0	53.7	64.3	...
Access to Safe Water (% of Population)	2011	68.9	67.8	86.5	99.1
Access to Health Services (% of Population)	2003	17.6	65.2	80.0	100.0
Access to Sanitation (% of Population)	2011	61.3	40.2	56.8	96.1
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	2.9	4.6	0.9	0.5
Incidence of Tuberculosis (per 100,000)	2011	94.0	234.6	146.0	23.0
Child Immunization Against Tuberculosis (%)	2011	99.0	81.6	83.9	95.4
Child Immunization Against Measles (%)	2011	95.0	76.5	83.7	93.5
Underweight Children (% of children under 5 years)	2006-2011	11.7	19.8	17.0	1.4
Daily Calorie Supply per Capita	2009	2 188	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010-2011	6.1	5.9	2.9	7.4
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2009-2012	141.7	107.0	107.8	102.7
Primary School - Female	2009-2012	143.5	103.1	106.2	102.3
Secondary School - Total	2009-2012	35.8	46.3	66.4	100.4
Secondary School - Female	2009-2012	36.7	41.9	65.1	100.0
Primary School Female Teaching Staff (% of Total)	2009-2012	51.6	39.2	58.6	81.3
Adult literacy Rate - Total (%)	2010	65.9	71.5	80.2	…
Adult literacy Rate - Male (%)	2010	71.1	78.4	85.9	…
Adult literacy Rate - Female (%)	2010	61.5	64.9	74.8	…
Percentage of GDP Spent on Education	2008-2010	4.8	5.3	4.5	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	49.5	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	3.9	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	18.0	23.0	28.7	40.4
Per Capita CO2 Emissions (metric tons)	2009	0.1	1.2	3.0	11.6





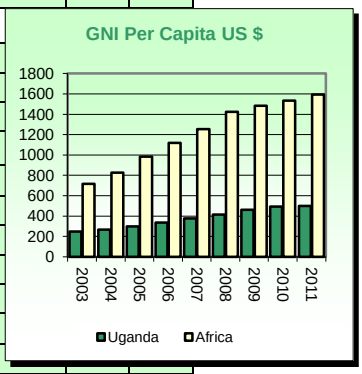


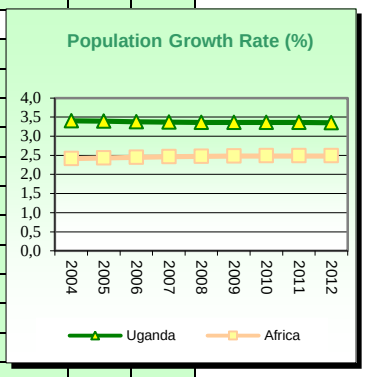


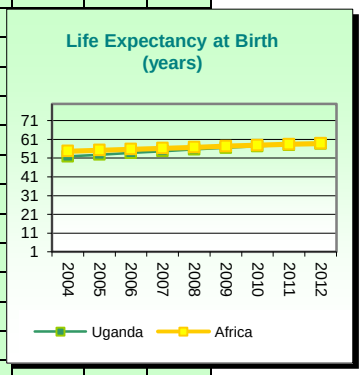
Sources: AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports. Note: N.A.: Not Applicable; …: Data Not Available. Last update: October 2013

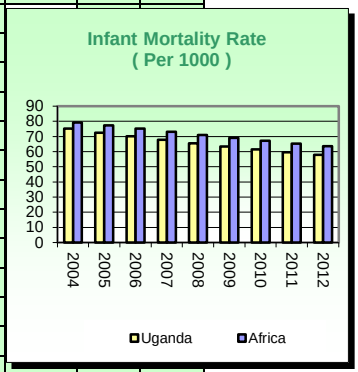
(C) UGANDA - COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Uganda	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2011	242	30,323	98,458	35,811
Total Population (millions)	2012	36.3	1,070.1	0.0	0.0
Urban Population (% of Total)	2012	16.0	40.8	47.1	78.0
Population Density (per Km²)	2012	48.9	34.5	69.8	23.5
GNI per Capita (US $)	2012	440	1 604	3 795	37 653
Labor Force Participation - Total (%)	2012	37.8	37.8	68.7	72.0
Labor Force Participation - Female (%)	2012	49.1	42.5	38.9	44.5
Gender -Related Development Index Value	2007-2011	0.509	0.525	0.694	0.911
Human Develop. Index (Rank among 187 countries)	2008-2012	161	...	...	...
Popul. Living Below $ 1.25 a Day (% of Population)	2009-2011	38.0	40.0	20.6	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	3.4	2.3	1.3	0.3
Population Growth Rate - Urban (%)	2012	6.0	3.4	2.6	0.7
Population < 15 years (%)	2012	48.6	40.0	28.5	16.4
Population >= 65 years (%)	2012	2.4	3.6	6.0	16.6
Dependency Ratio (%)	2012	103.1	77.3	52.6	49.2
Sex Ratio (per 100 female)	2012	100.5	100.0	103.3	94.3
Female Population 15-49 years (% of total population)	2012	21.9	49.8	53.3	45.6
Life Expectancy at Birth - Total (years)	2012	58.7	58.1	68.2	77.7
Life Expectancy at Birth - Female (years)	2012	62.2	59.1	70.1	81.1
Crude Birth Rate (per 1,000)	2012	43.7	33.3	21.4	11.3
Crude Death Rate (per 1,000)	2012	9.5	10.9	7.6	10.3
Infant Mortality Rate (per 1,000)	2012	57.8	71.4	40.9	5.6
Child Mortality Rate (per 1,000)	2012	87.4	111.3	57.7	6.7
Total Fertility Rate (per woman)	2012	6.0	4.2	2.6	1.7
Maternal Mortality Rate (per 100,000)	2006-2010	310.0	415.3	240.0	16.0
Women Using Contraception (%)	2012	37.0	34.5	62.4	71.4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	11.7	49.2	103.7	291.9
Nurses (per 100,000 people)*	2004-2009	130.6	133.0	168.7	734.3
Births attended by Trained Health Personnel (%)	2006-2010	57.4	53.7	64.3	...
Access to Safe Water (% of Population)	2011	74.8	67.8	86.5	99.1
Access to Health Services (% of Population)	2000	49.0	65.2	80.0	100.0
Access to Sanitation (% of Population)	2011	35.0	40.2	56.8	96.1
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	7.2	4.6	0.9	0.5
Incidence of Tuberculosis (per 100,000)	2011	193.0	234.6	146.0	23.0
Child Immunization Against Tuberculosis (%)	2011	86.0	81.6	83.9	95.4
Child Immunization Against Measles (%)	2011	75.0	76.5	83.7	93.5
Underweight Children (% of children under 5 years)	2006-2011	16.4	19.8	17.0	1.4
Daily Calorie Supply per Capita	2009	2 137	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010-2011	2.5	5.9	2.9	7.4
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2009-2012	113.2	107.0	107.8	102.7
Primary School - Female	2009-2012	114.2	103.1	106.2	102.3
Secondary School - Total	2009-2012	28.4	46.3	66.4	100.4
Secondary School - Female	2009-2012	25.6	41.9	65.1	100.0
Primary School Female Teaching Staff (% of Total)	2009-2012	40.9	39.2	58.6	81.3
Adult literacy Rate - Total (%)	2010	73.2	71.5	80.2	…
Adult literacy Rate - Male (%)	2010	82.6	78.4	85.9	…
Adult literacy Rate - Female (%)	2010	64.6	64.9	74.8	…
Percentage of GDP Spent on Education	2008-2010	3.3	5.3	4.5	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	33.8	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	2.0	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	14.5	23.0	28.7	40.4
Per Capita CO2 Emissions (metric tons)	2009	0.1	1.2	3.0	11.6









Sources: AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports. Note: N.A.: Not Applicable; …: Data Not Available. Last update: October 2013

(D) TANZANIA - COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Tanzania	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2011	947	30,323	98,458	35,811
Total Population (millions)	2012	47.8	1,070.1	0.0	0.0
Urban Population (% of Total)	2012	27.2	40.8	47.1	78.0
Population Density (per Km²)	2012	108.4	34.5	69.8	23.5
GNI per Capita (US $)	2012	570	1 604	3 795	37 653
Labor Force Participation - Total (%)	2012	46.9	37.8	68.7	72.0
Labor Force Participation - Female (%)	2012	49.7	42.5	38.9	44.5
Gender -Related Development Index Value	2007-2011	0.527	0.525	0.694	0.911
Human Develop. Index (Rank among 187 countries)	2008-2012	152	...	...	...
Popul. Living Below $ 1.25 a Day (% of Population)	2009-2011	67.9	40.0	20.6	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	3.0	2.3	1.3	0.3
Population Growth Rate - Urban (%)	2012	4.7	3.4	2.6	0.7
Population < 15 years (%)	2012	44.9	40.0	28.5	16.4
Population >= 65 years (%)	2012	3.2	3.6	6.0	16.6
Dependency Ratio (%)	2012	92.6	77.3	52.6	49.2
Sex Ratio (per 100 female)	2012	100.0	100.0	103.3	94.3
Female Population 15-49 years (% of total population)	2012	22.7	49.8	53.3	45.6
Life Expectancy at Birth - Total (years)	2012	60.9	58.1	68.2	77.7
Life Expectancy at Birth - Female (years)	2012	57.0	59.1	70.1	81.1
Crude Birth Rate (per 1,000)	2012	39.7	33.3	21.4	11.3
Crude Death Rate (per 1,000)	2012	8.8	10.9	7.6	10.3
Infant Mortality Rate (per 1,000)	2012	49.7	71.4	40.9	5.6
Child Mortality Rate (per 1,000)	2012	73.5	111.3	57.7	6.7
Total Fertility Rate (per woman)	2012	5.3	4.2	2.6	1.7
Maternal Mortality Rate (per 100,000)	2006-2010	460.0	415.3	240.0	16.0
Women Using Contraception (%)	2012	18.2	34.5	62.4	71.4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	0.8	49.2	103.7	291.9
Nurses (per 100,000 people)*	2004-2009	24.2	133.0	168.7	734.3
Births attended by Trained Health Personnel (%)	2006-2010	48.9	53.7	64.3	...
Access to Safe Water (% of Population)	2011	53.3	67.8	86.5	99.1
Access to Health Services (% of Population)	2000	42.0	65.2	80.0	100.0
Access to Sanitation (% of Population)	2011	11.9	40.2	56.8	96.1
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	5.8	4.6	0.9	0.5
Incidence of Tuberculosis (per 100,000)	2011	169.0	234.6	146.0	23.0
Child Immunization Against Tuberculosis (%)	2011	99.0	81.6	83.9	95.4
Child Immunization Against Measles (%)	2011	93.0	76.5	83.7	93.5
Underweight Children (% of children under 5 years)	2006-2011	16.2	19.8	17.0	1.4
Daily Calorie Supply per Capita	2009	2 363	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010-2011	2.9	5.9	2.9	7.4
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2009-2012	93.6	107.0	107.8	102.7
Primary School - Female	2009-2012	95.1	103.1	106.2	102.3
Secondary School - Total	2009-2012	35.1	46.3	66.4	100.4
Secondary School - Female	2009-2012	32.7	41.9	65.1	100.0
Primary School Female Teaching Staff (% of Total)	2009-2012	51.6	39.2	58.6	81.3
Adult literacy Rate - Total (%)	2010	67.8	71.5	80.2	...
Adult literacy Rate - Male (%)	2010	75.5	78.4	85.9	...
Adult literacy Rate - Female (%)	2010	60.8	64.9	74.8	...
Percentage of GDP Spent on Education	2008-2010	6.2	5.3	4.5	5.5
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	13.1	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	0.2	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	37.3	23.0	28.7	40.4
Per Capita CO2 Emissions (metric tons)	2009	0.2	1.2	3.0	11.6
Sources: AfDB Statistics Department Databases; World Bank: World Development Indicators; last update : October 2013 UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports. Note : n.a. : Not Applicable ; … : Data Not Available.					

APPENDIX II: TABLE OF ADB'S PORTFOLIO IN THE COUNTRY
(A) KENYA PORTFOLIO AT MARCH 27, 2014

Sector Name	Long name	Fin.project	Loan Number	Status of	Approval Date	Completion Date	PFI STATUS	Net loan	Disb. Ratio
Agriculture	KENYA-DRGHT RSILCE & SUSTAIN.LIVIHOOD	P-Z1-AAZ-011	2100150028345	APVD	12/19/2012	12/31/2018	NO SUPERVISION	37,410,000	0.5
	KIMIRA-OLUCH SMALLHOLDER IRRIGATION DEVE	P-KE-AAZ-001	2100150012296	OnGo	05/31/2006	12/31/2014	NON PP / NON PPP	22,978,992	91.0
			2100155007220	OnGo	05/31/2006	12/31/2014	NON PP / NON PPP	1,153,332	91.2
	SMALLSCALE HORTICULTURE DEVELOPMENT PRO	P-KE-AAZ-002	2100150014943	OnGo	09/05/2007	12/31/2014	NON PP / NON PPP	17,000,000	63.1
Finance	GUARANTEE FACILITY - WOMEN ENTERPRISES DE	P-KE-HAZ-001	2000140000202	OnGo	10/19/2005	12/31/2013	NON PP / NON PPP	6,471,780	0.0
Power	ADF - PRG FOR TURKANA T-LINE	P-KE-FA0-006	2000140000151	APVD	10/02/2013	03/03/2015	NO SUPERVISION	0	0.0
			2100140000001	APVD	10/02/2013	03/03/2015	NO SUPERVISION	0	0.0
	ETHIOPIA-KENYA ELECTRICITY HIGHWAY(KENYA	P-Z1-FA0-044	2100150027845	OnGo	09/19/2012	12/31/2018	NO SUPERVISION	75,000,000	1.5
	LAKE TURKANA WIND POWER PROJECT	P-KE-FZ0-004	2000130010534	APVD	04/26/2013	02/25/2013	NO SUPERVISION	0	0.0
	LAKE TURKANA WIND POWER SUB DEBT	P-KE-FZ0-005	2000130010533	APVD	04/26/2013	02/22/2014	NO SUPERVISION	0	0.0
	MENENGAI GEOTHERMAL DEVELOPMENT PROJECT	P-KE-FZ0-003	2100150026101	OnGo	12/14/2011	12/31/2017	NON PP / NON PPP	80,000,000	44.2
			5565130000101	OnGo	12/14/2011	12/31/2017	NON PP / NON PPP	4,853,835	16.0
			5565155000401	OnGo	12/14/2011	12/31/2017	NON PP / NON PPP	11,325,615	18.3
	MOMBASSA NAIROBI TRANSMISSION LINE	P-KE-FA0-003	2100150019893	OnGo	05/06/2009	12/31/2015	NON PP / NON PPP	50,000,000	46.6
	NELSAP INTERCONNECTION PROJECT - KENYA	P-Z1-FA0-032	2100150022643	OnGo	06/16/2010	12/31/2014	NON PP / NON PPP	39,770,000	16.5
	NELSAP INTERCONNECTION PROJECT-NBI	P-Z1-FA0-030	2100155018469	OnGo	11/27/2008	12/31/2014	NON PP / PPP	1,210,000	66.8
	POWER TRANSMISSION IMPROVEMENT PROJECT	P-KE-FA0-004	2100150023752	OnGo	12/06/2010	12/31/2013	NON PP / NON PPP	46,700,000	20.4
	THIKA THERMAL POWER PROJECT	P-KE-FAA-001	2000130008130	OnGo	12/07/2011	06/01/2026	NON PP / NON PPP	25,079,881	100.0
Social	COMMUNITY EMPOWERMENT PROJECT (CEISP)	P-KE-IZ0-001	2100150015794	OnGo	12/17/2007	07/31/2014	NON PP / NON PPP	17,000,000	49.3
	SUPPORT FOR TIVET PROJECT	P-KE-IAE-001	2100150018493	OnGo	12/16/2008	12/31/2013	NON PP / NON PPP	25,000,000	49.8
	SUPPORT TO HEST TO ENHANCE QUALITY	P-KE-IAD-001	2100150027993	OnGo	11/14/2012	06/30/2018	NO SUPERVISION	28,000,000	0.3
Transport	ARUSHA - NAMANGA-ATHI RIVER ROAD DEV PJ	P-Z1-DB0-040	2100150013893	OnGo	12/13/2006	12/31/2012	NON PP / NON PPP	49,241,000	90.2
	EMERGENCY ASSISTANCE TO ADDRESS THE DAMA	P-KE-DA0-002	5000199003168	OnGo	09/30/2013	04/30/2014	NO SUPERVISION	647,178	0.0
	ETHIOPIA - MOMBASA - NAIROBI-ADDIS ABABA	P-Z1-DB0-095	2100150025546	OnGo	11/30/2011	12/31/2018	NOT RATED	120,000,000	19.0
	MOMBASA-NAIROBI-ADDIS CORRIDOR II - KEN	P-Z1-DB0-027	2100150020744	OnGo	07/01/2009	12/31/2015	NON PP / NON PPP	125,000,000	40.0
	MULTINATIONAL: EAST AFRICA: ARUSHA-VOI	P-Z1-DB0-075	2100150028894	OnGo	04/16/2013	12/31/2018	NO SUPERVISION	75,000,000	0.0
	OUTER RING ROAD IMPROVEMENT PROJECT	P-KE-DB0-020	2100150030144	APVD	11/13/2013	12/31/2017	NO SUPERVISION	77,040,000	0.0
			2100155026117	APVD	11/13/2013	12/31/2017	NO SUPERVISION	560,000	0.0
	REHABILITATION OF TIMBOROA ELDORET ROAD	P-KE-DB0-019	2100150023344	OnGo	11/24/2010	12/31/2016	NON PP / NON PPP	35,000,000	53.5
	RIFT VALLEYKENYA-UGANDA RAILWAYS CONCESS	P-Z1-DC0-011	2000130007480	OnGo	07/13/2011	07/15/2026	PP /	25,887,119	57.6
Water Sup/Sanit	INTEGRATED LAND & WATER MANAGEMENT	P-KE-EAZ-002	5600155001501	OnGo	01/13/2009	04/30/2014	NON PP / NON PPP	1,731,494	99.8
	LAKE VICTORIA WATER AND SANITATION PROG.	P-Z1-EA0-004	2100155019967	OnGo	12/17/2010	12/31/2015	NOT RATED	72,980,000	11.3
	NAIROBI RIVERS BASIN REHABILITATION AND	P-KE-EB0-003	2100150023655	OnGo	12/06/2010	12/31/2015	NON PP / NON PPP	35,000,000	35.9
	SCALING UP RAINWATER MANAGEMENT	P-KE-EAZ-003	5600155002901	OnGo	07/05/2012	12/31/2015	NO SUPERVISION	615,394	29.0
	SMALL MED TOWNS WATER SUPPLY & WASTE WAT	P-KE-E00-007	2100150021543	OnGo	11/03/2009	12/31/2014	NON PP / NON PPP	70,000,000	30.8
	THWAKE MULTIPURPOSE WATER DEVELOPMENT PR	P-KE-E00-008	2100150029993	APVD	10/30/2013	12/31/2019	NO SUPERVISION	61,680,000	0.0
			2100155025973	APVD	10/30/2013	12/31/2019	NO SUPERVISION	1,210,000	0.0
	WATER SERVICES BOARDS SUPPORT PROJECT	P-KE-E00-005	2100150015546	OnGo	11/21/2007	06/30/2014	NON PP / NON PPP	35,190,000	69.5
			5800155000101	OnGo	12/05/2007	06/30/2014	NON PP / NON PPP	10,040,878	74.0

(B) RWANDA PORTFOLIO AT MARCH 27, 2014

Sector Name	Long name	Fin.project	Loan Number	Status of	Approval Date	Completion Date	PFI STATUS	Net loan	Disb. Ratio
Agriculture	LIVESTOCK INFRASTRUCTURE SUPPORT PROGRAM	P-RW-AAE-004	2100150024693	OnGo	06/29/2011	12/31/2017	NON PP / NON PPP	21,810,000	100
	PROJET DEV. RURAL DU BUGESERA (RWANDA)	P-Z1-AB0-002	2100155016468	OnGo	09/25/2009	12/31/2017	NON PP / NON PPP	14,980,000	30
Finance	BANK OF KIGALI	P-RW-HAB-001	2000130007730	OnGo	11/19/2010	02/29/2020	NON PP / NON PPP	7,766,136	100
	BANK OFE KIGALI FAPA TA	P-RW-HAB-003	5700155001452	OnGo	01/11/2011	01/20/2015	NON PP / NON PPP	354,136	6
	BANQUE RWANDAISE DE DEVELOPPEMENT	P-RW-HAA-004	2000120003070	OnGo	11/19/2010	02/28/2022	NON PP / NON PPP	5,177,424	100
	RWANDA DEVELOPMENT BANK (TA)	P-RW-HAA-006	5700155001451	APVD	01/11/2011	06/12/2014	NO SUPERVISION	472,958	0
	TROISIEME LIGNE DE CREDIT A LA BRD	P-RW-HAA-002	2100150000805	OnGo	11/16/2000	06/30/2006	NOT RATED	5,994,692	100
			2150150003158	OnGo	11/16/2000	06/30/2006	NOT RATED	4,256,394	100
Multi-Sector	COMPETITIVENESS AND ENTERPRISE DEV. PROJ	P-RW-KF0-003	2100155013917	OnGo	12/29/2008	06/30/2014	NON PP / NON PPP	5,000,000	86
	RWANDA PRIVATE SECTOR FEDERATION	P-RW-KB0-001	5700155000452	OnGo	08/27/2008	10/01/2012	NON PP / NON PPP	647,144	100
Power	KIVU WATT	P-RW-FG0-001	2000130007485	OnGo	02/03/2011	02/15/2026	NOT RATED	16,179,450	93
	NELSAP INTERCONNECTION PROJECT - RWANDA	P-Z1-FA0-031	2100155018518	OnGo	11/27/2008	12/31/2014	NON PP / PPP	30,470,000	10
	REGIONAL RUSUMO HYDROPOWER - RWANDA	P-Z1-FAD-008	2100150030546	APVD	11/27/2013	08/31/2019	NO SUPERVISION	18,884,000	0
			2200160001239	APVD	11/27/2013	08/31/2019	NO SUPERVISION	6,500,000	0
	SCALING-UP ENERGY ACCESS PROJECT	P-RW-FA0-006	2100150029445	APVD	06/26/2013	08/31/2018	NO SUPERVISION	15,494,000	0
			2100155025166	APVD	06/26/2013	08/31/2018	NO SUPERVISION	11,871,000	0
Social	INTEGRATED HOUSEHOLD LIVING CONDITION SU	P-RW-I00-003	2100155027016	APVD	12/18/2013	12/31/2015	NO SUPERVISION	0	0
	REGIONAL ICT CENTRE OF EXCELLENCE PROJ	P-RW-IAD-003	2100150023544	OnGo	12/14/2010	06/30/2016	NON PP / NON PPP	8,600,000	2
	SKILLS DEVELOPMENT IN THE ENERGY SECTOR	P-RW-IA0-003	5700155001851	APVD	09/30/2013	12/31/2020	NO SUPERVISION	0	0
	SUPPORT TO SCIENCE AND TECHNOLOGY SKILLS	P-RW-IAD-002	2100155013519	OnGo	11/11/2008	06/30/2014	NON PP / PPP	6,000,000	38
Transport	MULTINATIONAL (BURUNDI-RWANDA): PROJET D RUBAVU-GISIZA ROAD	P-Z1-DB0-099	2100150027043	OnGo	06/27/2012	12/31/2018	NON PP / NON PPP	40,525,000	0
			2100155023017	OnGo	06/27/2012	12/31/2018	NON PP / NON PPP	4,525,000	0
	MULTINATIONAL (BURUNDI-RWANDA): NYAMITANGA-RUHWA-NTENDEZI-MWITYAZO	P—Z1-DB0-047		OnGo	16//12/2008	12/31/2014	NonPP/NonPPP	50,620,000	64.2
	PHASE 2 CHEMIN FER DSM-ISAKA-KIGA/KEZA-M	P-Z1-DB0-060	2100155016967	OnGo	11/17/2009	11/30/2014	NON PP / PPP	1,670,000	58.9
			2100155016967	OnGo	11/17/2009	12/31/2012	NON PP / PPP	1,670,000	45
	PROJET DE ROUTE BUTARE-KITABI-NTENDEZI	P-RW-DB0-012	2100155014817	OnGo	03/25/2009	12/31/2013	NON PP / NON PPP	16,000,000	69
Water Sup/Sanit	DEUXIEME SOUS-PROGRAMME D'AEPA EN MILIEU	P-RW-E00-005	2100155015717	OnGo	07/01/2009	12/31/2013	NON PP / NON PPP	10,000,000	87
			5800155000301	OnGo	07/01/2009	12/31/2013	NON PP / NON PPP	6,211,956	100

(C) UGANDA PORTFOLIO AT MARCH 27, 2014

Sector Name	Long name	Fin.project	Loan Number	Status of	Approval Date	Completion Date	PFI STATUS	Net loan	Disb. Ratio
Agriculture	AGRIC. INFRASTRUCTURE IMPROVEM CAIIP2	P-UG-AB0-002	2100150017394	OnGo	09/17/2008	12/31/2014	NON PP / NON PPP	45,000,000	55
	CAIIP 3	P-UG-AB0-003	2100150024294	OnGo	05/03/2011	12/31/2018	NON PP / NON PPP	40,000,000	1
	COMMUNITY AGRICULTURAL INFRASTRUCTURE I	P-UG-AB0-001	2100150013795	OnGo	01/31/2007	12/31/2014	NON PP / NON PPP	30,000,000	92
	MARKETS AND AGRICULTURAL TRADE IMPROVEME	P-UG-AAZ-001	2100150019294	OnGo	03/25/2009	12/31/2015	NON PP / NON PPP	38,000,000	80
Finance	EFC OUGANDA FAPA GRANT	P-UG-HB0-001	5700155001552	APVD	06/05/2012	07/21/2016	NO SUPERVISION	605,412	0
	HOUSING FINANCE BANK OF UGANDA	P-UG-HA0-002	2000130008631	OnGo	11/23/2011	01/31/2022	NON PP / NON PPP	3,235,890	100
			2000130008632	OnGo	11/23/2011	01/31/2022	NON PP / NON PPP	9,566,497	67
Power	BUJAGALI HYDROPOWER PROJECT	P-UG-FAB-004	2000120001419	OnGo	05/02/2007	12/31/2012	NOT RATED	71,189,578	100
	BUJAGALI INTERCONNECTION PROJECT	P-UG-FA0-002	2100150014594	OnGo	06/28/2007	12/31/2013	NON PP / NON PPP	19,210,000	87
			6550655000301	OnGo	10/30/2007	12/31/2013	NON PP / NON PPP	22,029,997	0
	BUSERUKA HYDROPOWER PROJECT	P-UG-FAB-005	2000130004330	OnGo	07/09/2008	12/31/2023	NOT RATED	5,824,602	100
	BUSERUKA II	P-UG-FAB-006	2000120003469	OnGo	07/04/2011	12/31/2023	NON PP / NON PPP	2,588,712	100
	ELECTRICITY TRANSPORT	P-UG-FA0-004	2100150019944	OnGo	12/16/2008	12/31/2013	NON PP / NON PPP	52,510,000	27
	NELSAP INTERCONNECTION PROJECT – UGANDA	P-Z1-FA0-033	2100150022696	OnGo	11/27/2008	12/01/2017	NON PP / PPP	7,590,000	20
			6550655000651	OnGo	03/26/2010	12/01/2017	NON PP / PPP	34,183,170	0
Social	HIGHER EDUCATION SCIENCE AND TECHNOLOGY	P-UG-IAD-001	2100150028093	OnGo	11/21/2012	12/31/2016	NON PP / NON PPP	67,000,000	1
	POST PRIMARY EDUC&TRAINING REHAB(EDU IV)	P-UG-IAC-001	2100150018143	OnGo	11/25/2008	12/31/2014	NON PP / NON PPP	52,000,000	62
	RURAL INC. & EMP. ENHANC. PROJ. (RIEEP)	P-UG-IE0-003	2100150021295	OnGo	11/17/2009	07/31/2015	NON PP / NON PPP	10,210,000	85
	SUPPORT TO MULAGO HOSPITAL	P-UG-IB0-006	2100150025094	OnGo	07/06/2011	12/31/2016	NOT RATED /	46,000,000	9
			2200160000889	OnGo	07/06/2011	12/31/2016	NOT RATED /	10,000,000	0
Transport	KAMPALA-JUBA-ADDIS ABABA-DJIBOUTI CORRID	P-Z1-DB0-108	5150155001051	APVD	09/30/2013	06/30/2013	NO SUPERVISION	2,364,916	0
	ROAD SECTOR SUPPORT PROJECT 2	P-UG-DB0-018	2100150015793	OnGo	12/17/2007	12/31/2013	NON PP / NON PPP	56,650,000	92
			2100155010666	OnGo	12/17/2007	12/31/2013	NON PP / NON PPP	1,292,373	100
	ROAD SECTOR SUPPORT PROJECT 3	P-UG-DB0-020	2100150020793	OnGo	09/25/2009	12/31/2015	NON PP / NON PPP	80,000,000	82
	ROAD SECTOR SUPPORT PROJECT 4	P-UG-DB0-021	2100150028796	APVD	03/13/2013	12/31/2017	NO SUPERVISION	72,940,000	0
Water Sup/Sanit	KAMPALA SANITATION PROGRAM	P-UG-E00-008	2100150019895	OnGo	12/16/2008	12/31/2014	NON PP / NON PPP	35,000,000	27
	KAWEMPE URBAN POOR SANITATION IMP. PJCT	P-UG-EB0-002	5600155003102	OnGo	01/04/2013	12/31/2016	NO SUPERVISION	892,594	42
	WATER SUPPLY AND SANITATION PROGRAMME	P-UG-E00-011	2100150025394	OnGo	10/05/2011	12/31/2017	NON PP / NON PPP	40,000,000	25
			5800155000701	OnGo	10/05/2011	12/31/2017	NON PP / NON PPP	3,570,090	100

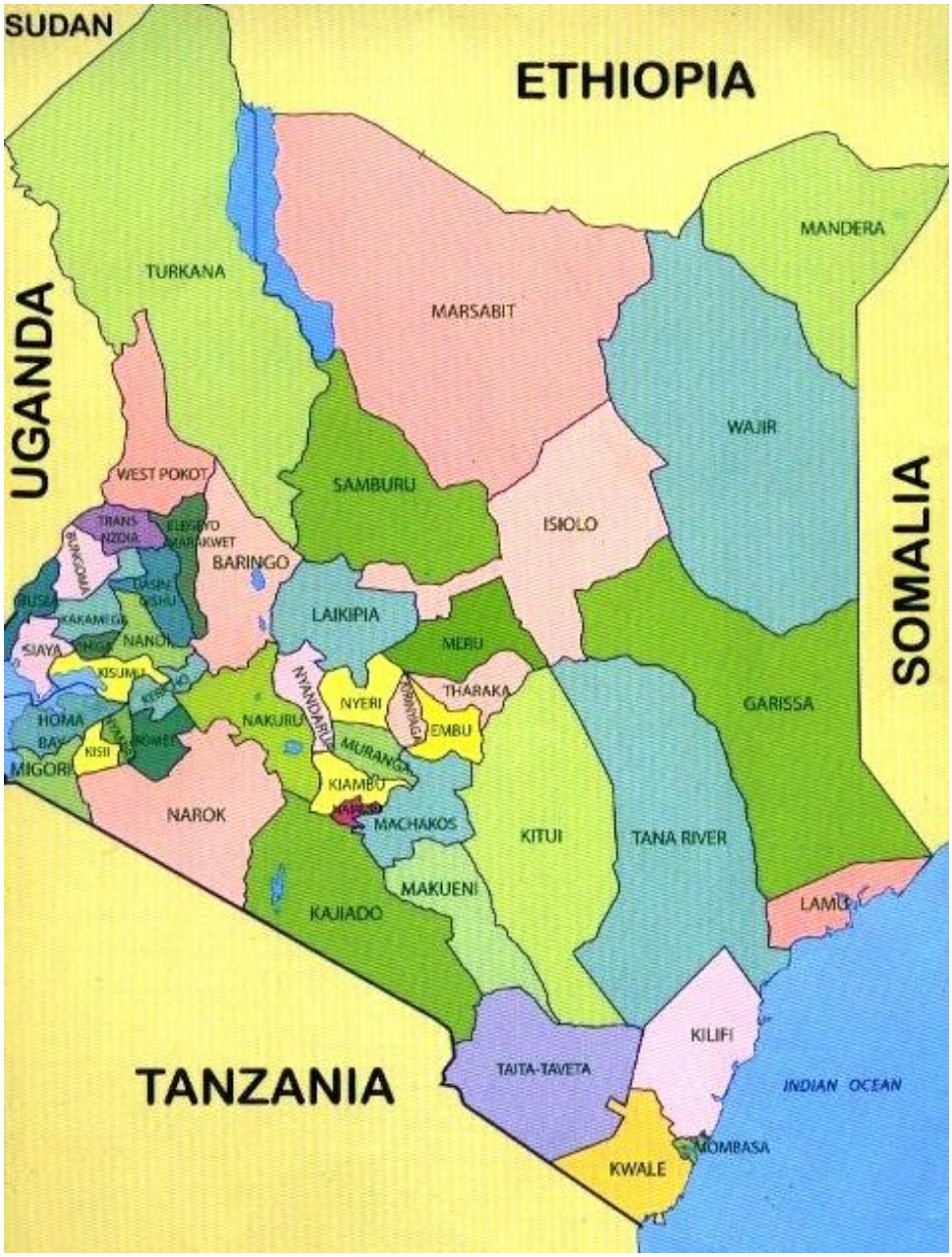
(D) TANZANIA PORTFOLIO AT MARCH 27, 2014

	LOAN/ GRANT NO	SOURCE OF FINANCE	APPROVAL DATE	ENTRY INTO FORCE	EFFECTIVE 1ST DISB	CLOSING DATE	APPROVED AMOUNT (UA million)	TOTAL DISBURSED	% DISBURSED
A. NATIONAL OPERATIONS:									
AGRICULTURE									
Marketing Infrastructure, Value Addition and Rural Finance Program (MIVARFP)	2100150024993	ADF	29-Jun-2011	22-Mar-2012	22-Mar-2012	31-Dec-2016	40.00	5.41	13.52
SUB-TOTAL (AGRICULTURE)							**40.00**	**5.41**	**13.52**
TRANSPORT									
Singida-Minjingu-Babati Road Upgrading	2100150015095	ADF	17 Sep 2007	13-Feb-2008	8-Apr-2009	31-Dec-2014	60.00	53.23	88.72
Tanzania Road Sector Support Programme I	2100150021395	ADF	2-Dec-2009	20-Sep-2010	17-Feb-2011	31-Dec-2015	152.00	69.73	45.88
Tanzania Road Sector Support Programme II	2100150026596	ADF	5-Apr-2012	7-May-2013	27-Nov-2013	30-Sep-2017	140.00	10.09	7.20
SUB-TOTAL (TRANSPORT)							**352.00**	**133.05**	**37.80**
WATER SUPPLY/SANITATION									
Rural Water Supply and Sanitation Programme II	2100150022943	ADF	15-Sep-2010	24-Oct-2011	24-Nov-2011	31-Dec-2015	59.00	53.50	90.67
	5800155000551	RWSSF	15-Sep-2010	24-Oct-2011	24-Nov-2011	31-Dec-2015	5.80	5.80	100.00
Zanzibar Water & Sanitation Project	2100150017993	ADF	11-Nov-2008	23-Jul-2009	14-Oct-2009	31-Dec-2014	25.00	17.80	71.20
	5800155000251	RWSSF	11-Nov-2008	22-Dec-2008	14-Oct-2009	31-Dec-2014	2.78	2.39	85.67
Zanzibar Urban Water & Sanitation Project	2100150028294	ADF	19-Dec-2012	8-Jul-2013	19-Aug-2013	31-Dec-2017	14.00	0.10	0.68
SUB-TOTAL (WATER SUP/SANIT)							**106.59**	**79.58**	**74.66**
ENERGY									
Electricity V Project	2100150015553	ADF	14 Dec. 2007	28-Nov-2008	16-Jun-2010	30-Jun-2014	28.68	8.65	30.16
	2100155010487	ADF-G	14 Dec. 2007	28-Nov-2008	13-Nov-2009	30-Jun-2014	1.32	1.01	76.21
Iringa-Shinyanga Transmission Line	2100150023196	ADF	26-Oct-2010	28-Mar-2012	14-May-2012	31-Dec-2014	45.36	5.35	11.79
SUB-TOTAL (ENERGY)							**75.36**	**15.00**	**19.91**
SOCIAL									
Support to Maternal Mortality Reduction Project	2100150013043	ADF	11-Oct-2006	5-Mar-2007	5-Mar-2007	30-Jun-2014	40.00	31.24	78.09
Small Enterpreneurs Loan Facility (SELF) II	2100150022293	ADF	10-May-2010	30-Jul-2010	22-Oct-2010	31-Dec-2015	20.00	11.67	58.35
Alternative Learning and Skills Development (ALSD) II	2100150024593	ADF	29-Jun-2011	2-Mar-2012	23-Mar-2012	31-Dec-2016	15.00	0.56	3.72
Support to Technical Vocational Education and Training & Teacher Education		ADF	2-Apr-2014				34.00	0.00	0.00
SUB-TOTAL (SOCIAL)							**109.00**	**43.46**	**39.88**
MULTI-SECTOR									
CRDB SME Partial Credit Guarantee Facility	2000140000001	ADB	22-Jul-2008			1-Apr-2016	4.90	0.00	0.00
Institutional Support for Good Governance (ISPGG) II	2100150022944	ADF	20-Sep-2010	8-Mar-2011	23-May-2011	31-Dec-2014	5.20	4.59	88.36
EFC Tanzanie- Fund for Africa Private Sector Assistance (FAPA Grant)	5700155001551	FAPA	1-Jun-2012	28-Dec-2013			0.62	0.00	0.00
SUB-TOTAL (MULTI SECTOR)							**10.72**	**4.59**	**42.87**
TOTAL (NATIONAL)							**693.66**	**281.10**	**40.52**
B. MULTINATIONAL OPERATIONS:									
Dsm-Isaka-Kigali/Keza-Musongati Railway Phase2	2100150021393	ADF	17-Nov-2009	26-Apr-2011	1-Dec-2011	30-Nov-2014	1.66	0.98	59.27
Arusha - Namanga - Athi River Rd Upgr. (TZ/Ken)	2100150013894	ADF	13-Dec-2006	11-May-2007	28-Oct-2008	31-Dec-2014	0.54	0.21	38.48
Arusha - Namanga - Athi River Rd Upgr. (TZ/Ken)	2100155008616	ADF -G	18 Dec. 2006	29-Jun-2007	29-Jun-2007	31-Dec-2014	3.50	2.99	85.27
East Africa Transport and Trade Facilitation (EAC)	2100155010468	ADF-G	29 Nov. 2006	22-Aug-2007	22-Aug-2007	30-Nov-2014	6.20	3.26	52.52
Transit Transport Facilitation Agency (TTFA)	5150155000006	NEPAD IPPF	22-Dec-2010	22-Feb-2011	14-Feb-2011	30-Nov-2014	0.32	0.08	25.82
Arusha-Holili/Taveta-Voi Road Project	2100150028893	ADF	16-Apr-2013	18-Nov-2013	18-Nov-2013	31-Dec-2018	79.90	0.00	0.00
Lake Victoria Water Supply & Sanitation Programme Phase II (LVWSSP)	2100155019967	ADF	17-Dec-2010	23-Nov-2011	23-Nov-2011	31-Dec-2015	17.48	1.56	8.91
The EAC Payments & Settlement Systems Integration Project (EAC - PSSIP)	2100155023918	ADF-G	5-Dec-2012	9-Sep-2013	9-Sep-2013	30-Jan-2017	15.00	0.33	2.21
Regional Rusumo Hydropower	2100150030545	ADF	27-Nov-2013	11-Jan-2014			22.41	0.00	0.00
SUB TOTAL (MULTINATIONAL)							**147.01**	**9.40**	**6.40**
GRAND TOTAL (NATIONAL/MULTINATIONAL)							**840.68**	**290.51**	**34.56**

	LOAN/ GRANT NO	SOURCE OF FINANCE	APPROVAL DATE	ENTRY INTO FORCE	EFFECTIVE 1ST DISB	CLOSING DATE	APPROVED AMOUNT (UA million)	TOTAL DISBURSED	DISB RATE (Amt Disb/Total Loan)
C. OTHER MULTINATIONAL OPERATIONS:									
SADC: Shared Watercourses Support Project for Buzi, Save & Ruvuma River Basins	2100155006567	ADF-G	25-Jan-2006	1-Feb-2008	1-Feb-2008	30-Jun-2014	9.38	7.52	80.22
SADC: Support to the control of communicable diseases (HIV/AIDS, Malaria & TB)	2100155007217	ADF-G	31-May-2006	15-Dec-2006	15-Dec-2006	31-Dec-2014	20.00	11.39	56.94
Programme to Build Statistical Capacity for MDGs Monitoring and Results Measurement (40 countries)		ADF-G	18-Jan-2012	9-Mar-2012	9-Mar-2012	30-Jun-2014	20.00	20.00	99.99
Songwe River Basin Development Programme (Malawi and Tanzania)	5600155002301	AWF-TF	25-May-2010	4-May-2011	4-May-2011	31-Dec-2014	0.49	0.21	42.50
	5600155002302	AWF-TF	25-May-2010			31-Dec-2014	2.65	0.81	30.70
NB: AWF-TF denominated in EUROs; NEPAD IPPF denominated in USD	5150155000008	NEPAD IPPF	28-Apr-2010	9-Mar-2012	9-Mar-2012	31-May-2014	1.07	0.29	27.23
TOTAL (OTHER MULTINATIONAL)							**53.60**	**40.23**	**75.05**

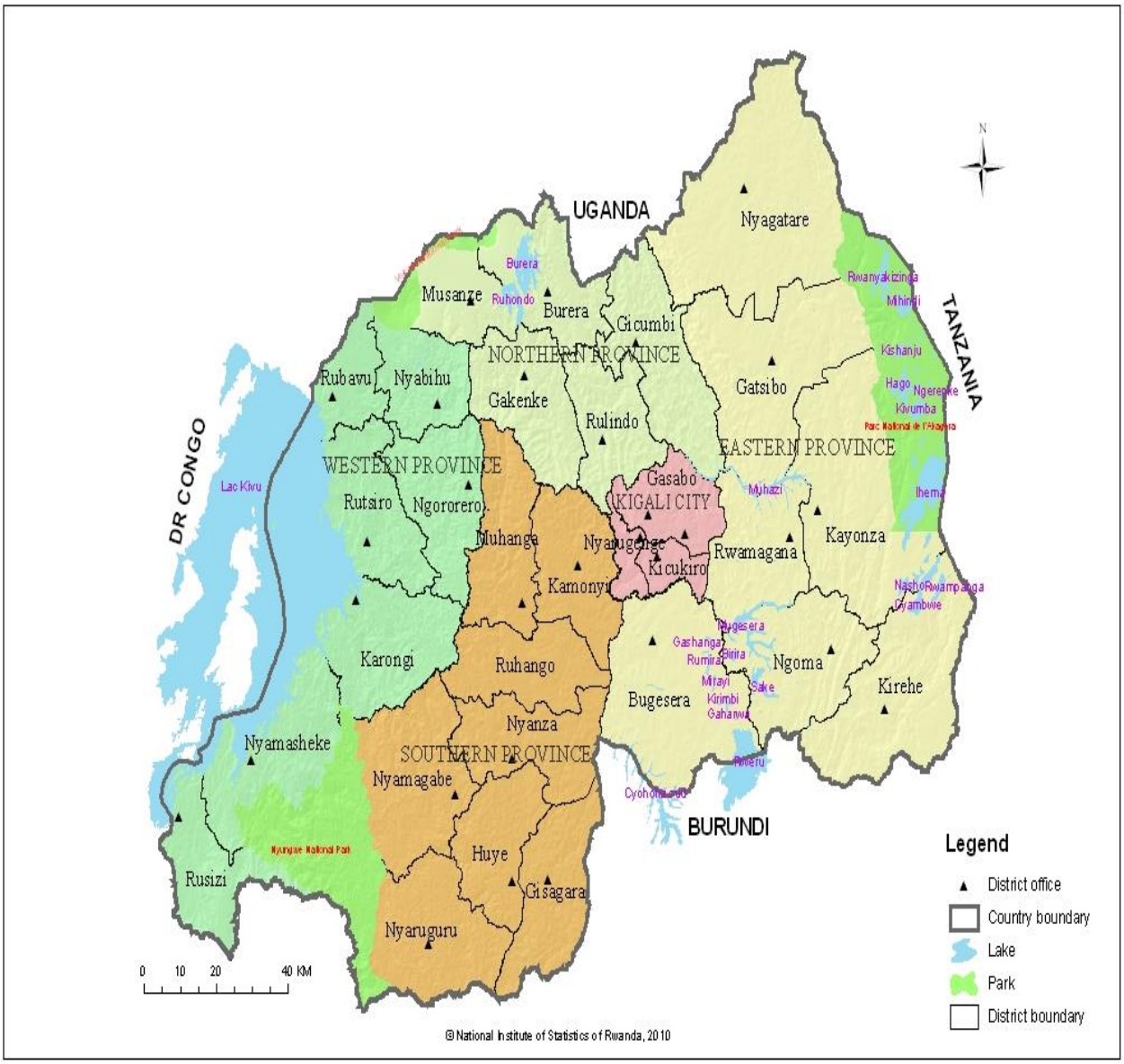
ANNEX III: MAP OF THE PROJECT AREA

(A) MAP OF KENYA[9]



[9] This map is intended exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning legal status of the territory nor any approval or acceptance boarders.

(B) MAP OF RWANDA[10]



[10] This map is intended exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning legal status of the territory nor any approval or acceptance boarders.

(C) MAP OF UGANDA[11]

[11] This map is intended exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning legal status of the territory nor any approval or acceptance boarders.

(D) MAP OF TANZANIA[12]

[12] This map is intended exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning legal status of the territory nor any approval or acceptance boarders. This map is copied from Tanzania's CSP.

APPENDIX IV: SUMMARY PROCUREMENT ARRANGEMENTS

(A) KENYA: EAST AFRICA KIDNEY INSTITUTE

Project Categories	***[in millions UA]***			
	Use of NPP or CPS	**Use of Bank's procedures**	**Non-Bank-Funded**	**Total**
1. Civil Works **2.**				
1.1 Upgrading of learning facilities for the Kidney Institute	N/A	12.48	-	12.48
3. Goods				
2.1 Equipment for Upgrading of learning facilities for the Kidney Institute	N/A	3.53		3.53
2.2 Equipment for Research, Treatment & Training	N/A	3.56		3.56
4. Consulting Services				
3.1 Design & Supervision consultants	N/A	1.68		1.68
3.2 Technical Assistance for impact evaluation and research, data collection and creation of databases	N/A	0.84		0.84
3.3 Research development Plan	N/A	1.40		1.40
3.4 Staffing Needs Analysis	N/A	0.28		0.28
3.5 Capacity Building	N/A	0.54		0.54
3.6 Training of students at MSc and PhD	N/A	2.52		2.52
3.7 Audit	N/A	0.01		0.01
5. Miscellaneous				
Administration cost	N/A	1.16		1.16
TOTAL		**28.00**		**28.00**

+ Figures in brackets [ ] are amounts financed by the Bank Group.

(B) RWANDA: CENTRE OF EXCELLENCE IN BIOMEDICAL ENGINEERING

Project Categories	***[in millions UA]***			
	Use of NPP or CPS	**Use of Bank's procedures**	**Non-Bank-Funded**	**Total**
1. Civil Works				
1.1 Construction of CoE Infrastructure for Programmes in: eHealth, Scientific Skills for Rehabilitation and Mobility Sciences, Bio-medical equipment Management and Maintenance	-	5.902[5.902]	-	5.902[5.902]
2. Goods				
2.1 Procurement of Specialist Equipment	-	1.752		1.752
3. Consulting Services				
3.1 Curricula Design	-	0.460		0.460
3.2 Programme Start-up	-	1.095		1.095
3.3 Support from International Institutions in ensuring the latest up to date global knowledge deployed in the three programme components	-	0.986		0.986
3.4 Consultancy to provide document for standardization and integration of training at higher levels in EAC region	-	0.037		0.037
3.5 Consultancy to provide document for strategy for EAC COE in various sectors		0.044		0.044
3.6 Support to EAC Secretariat and EAC Ministries in the member countries to propagate the COE approach at national levels		0.030		0.030
3.7 Support to Inter University Council of EAC and the National Councils of Higher Education in undertaking the coordination of the integration activity	-	0.037		0.037
3.8 Project coordinator		0.197		0.197
3.9 Engineer / Architect		0.140		0.140
3.10 Audit	-	0.117		0.117
4. Others				
4.1 Scholarships	1.336			1.336
5. Miscellaneous				
5.1 Holding meetings and validation workshops organized by EAC and national governments	0.058			0.058
5.2 Publication and hosting of the final strategy on EAC and national websites.	0.022			0.022
5.3 Administration cost	0.236			0.236
TOTAL	1.652	10.797		12.449

+ Figures in brackets [ ] are amounts financed by the Bank Group.

(C) UGANDA: EAST AFRICA CANCER INSTITUTE

	Project Categories	UA 'Million			
		Use of Country System	Use of Bank's Procedures	Non-Bank Funded	Total
	Civil Works				
1	Construction of multipurpose building (Cancer Treatment and Special Cases Ward; Research Laboratories and Training facilities; e-Learning Centre and e-Library		5.30[5.30]		5.30[5.30]
2	Relocation of Nutrition Department	0.60[0.00]			0.60[0.00]
	Goods				
1	Equipment for Laboratories, training facility and furniture		1.51[1.51]		1.51[1.51]
2	Equipment for Cancer Diagnosis, Care and related furniture		4.31[4.31]		4.31[4.31]
3	ICT Equipment for Training and Telemedicine		0.80[0.80]		0.80[0.80]
4	Cell-line repository, tumour and sample repository		0.36[0.36]		0.36[0.36]
5	LCMS, Spares and Consumables		0.22[0.22]		0.22[0.22]
6	Equipment for Outreach Centres (Arua & Mayuge)		0.52[0.52]		0.52[0.52]
7	Motor Vehicles (4 SW, P/up, Van & Mobile Cancer Field Truck)	0.20[0.20]			0.20[0.20]
8	Office Equipment	0.01[0.01]			0.01[0.01]
	Consultancy Services				
1	Design, Preparation of Bidding Documents and construction Supervision		0.79[0.79]		0.79[0.79]
2	Development of Equipment and ICT requirements for COE		0.11[0.11]		0.11[0.11]
3	Establish a continuous Medical Education System for UCI and MAKCHS		0.08[0.08]		0.08[0.08]
4	Training Needs Assessment for UCI		0.15[0.15]		0.15[0.15]
5	Project Impact Evaluation		0.16[0.16]		0.16[0.16]
6	Project Financial Audit and Monitoring & Evaluation		0.13[0.13]		0.13[0.13]
7	Individual Consultants (PC, FMS, M&E Specialist, ICT Expert, Procurement Specialist & Bio Medical Engineer)		0.70[0.70]		0.70[0.70]
	Training and Capacity Building				
1	Training for in-post Staff (7PhDs, 15MMED, 25 other programmes and	4.28[4.28]			4.28[4.28]

Project Categories		UA 'Million			
		Use of Country System	**Use of Bank's Procedures**	**Non-Bank Funded**	**Total**
	10 Fellowship)				
2	Scholarships for post-graduate training in cancer 20 PhDs., 20 Masters and 20 Fellowships)	1.21[1.21]			1.21[1.21]
3	Training to support National Cancer Control	1.23[0.48]			1.23[0.48]
4	Training Support Staff	0.62[0.62]			0.62[0.62]
	Miscellaneous Items				
1	Operating Costs	0.60[0.00]			0.60[0.00]
2	Operating cost MAK-CHS	0.30[0.00]			0.30[0.00]
3	Operation Support Staff	0.06[0.06]			0.06[0.06]
4	Support to EAC (Regional integration strategy on health higher education and research, Strategic Plan for expanding CoE to other RMC, Labour Analysis & Secretariat activities)	0.33[0.33]			0.33[0.33]
5	Publication and hosting of the final strategy on EAC and national websites	0.02[0.02]			0.02[0.02]
6	Meetings and Validation Workshops	0.11[0.11]			0.11[0.11]
7	Support to IUCEA & NCHE	0.04[0.04]			0.04[0.04]
	Total	**9.61[7.36]**	**15.14[1514]**		**24.75[22.50]**

+ Figures in brackets [ ] are amounts financed by the Bank Group.

(D) TANZANIA: EAST AFRICA HEART INSTITUTE

Project Categories	*[in millions UA]*			
	Use of NPP or CPS	Use of Bank's procedures	Non-Bank-Funded	Total
1. Civil Works				
1.1 Construction of Multipurpose Building	N/A	[3.45]	-	[3.45]
2. Goods				
2.1 Equipment for Cardiovascular Institute	N/A	[1.63]	-	[1.63]
3. Consulting Services				
3.1 Consultant for Design & Supervision of Civil Works	N/A	[0.37]	-	[0.37]
3.2 Technical Assistance to East Africa Cardiovascular Institute.	N/A	[0.06]	-	[0.06]
3.3 Audits, Monitoring and Evaluation	N/A	[0.06]	-	[0.06]
4. Training				
4.1 Five (5) Scholarship- Faculty Training in CVS	N/A	[0.47]	-	[0.47]
5. Miscellaneous				
Operating Costs	N/A	[0.68]		[0.71]
TOTAL		**[6.75]**		**[6.75]**