FINAL REPORT
ON
PROJECT STUDY
FOR
POWER SECTOR
OF
REGIONAL COOPERATION
IN
SOUTHERN AND EASTERN AFRICA

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JAPAN INTERNATIONAL COOPERATION AGENCY

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PROJECT STUDY FOR POWER SECTOR OF REGIONAL COOPERATION IN SOUTHERN AND EASTERN AFRICA

FINAL REPORT

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Abbreviations

AATIC	Asia-Africa Trade and Investment Conference
ADB	Asian Development Bank
AEC	African Economic Community
AfDB	African Development Bank
AFRC	African Energy Commission
AGOA	Africa Growth and Opportunity Act
AJCEP	ASEAN-Japan Comprehensive Economic Partnership
ASEAN	Association of South-East Asian Nations
ASGISA	The Accelerated and Shared Growth Initiative of South Africa
AU	African Union
BEMP	Botswana Energy Master Plan
BPC	Botswana Power Corporation
CAPP	Central Africa Power Pool
CCGT	Combined Cycle Gas Turbine
CDM	Clean Development Mechanism
CEC	Copperbelt Energy Corporation
CEGB	Central Electricity Generating Board
CEMAC	Communauté Économique et Monétaire de l'Afrique Centrale
CEPGL	Economic Community of the Great Lakes States
CEWARN	Conflict Early Warning and Response Mechanism
CfD	Contract for Difference
COMESA	Common Market for Eastern & Southern Africa
COMPACT	New Global Compact with Africa
CPI	Consumer Price Index
DAG	Development Assistance Group
DAM	Day Ahead Market
DAMPT	Day-ahead Market Trading Platform
DBSA	Development Bank of South Africa
DME	Department of Mines and Energy
DOE	Department of Energy
DRC	Democratic Republic of the Congo
DSM	Demand Side Management
DTI	Department of Trade and Industry
EAC	East African Cooperation
EAPMP	East African Power Master Plan Study
EAPP	East African Power Pool
ECCAS/CEEAC	Economic Community of Central Africa States/Communauté Économique Des États De

	L'Afrique Centrale
ECOSOCC	Economic, Social and Caltural Council
ECOWAS	Economic Community of East African States
EDD	Electricite du Djibouti
EdM	Electricidade de Mocambique,E.P.
EDM	Electricidade de Mocambique
EEA	Eritrea Electric Authority
EEPCO	Ethiopian Electric Power Corporation
EFTA	European Free Trade Association
EGP	Experts' Group on Power Interconnection and Trade
EMP	Lesotho Electricity Master Plan Study
ENE	Empresa National de Electricidade
ENEE	Ente Nazionale Energia Elettria
ENTRO	East Nile Technical Regional Office
EPA	Economic Partnership Agreement
EPF	GMS Electric Power Forum
EPRDF	Ethiopian People's Revolutionary Democratic Front
ERB	Energy Regulatory Board
FERC	Federal Energy Regulatory Commission
FG	Focal Group
FOCAC	Forum on China-Africa Cooperation
FRELIMO	Front for the Liberation of Mozambique
FTA	Free Trade Agreement
GEAR	Growth, Employment And Redistribution
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion
HAPUA	Heads of ASEAN Power Utilities/Authorities
HCB	Cahora Bassa Hydroelectricity
HIPC	Heavily Indebted Poor Countries
MNR	Ministry of Natural Resources
IBSA	India-Brazil-South Africa
ICA	Infrastructure Consortium fir Africa
IFC	International Finance Corporation
IGA	Inter-Governmental Agreement on Power Trade in the GMS
IGAD	Intergovernmental Authority on Development
IGADD	Intergovernmental Authority on Drought and Development
IMF	International Monetary Fund
IPP	Independent Power Producer
ISO	Independent System Operator
JIPSA	Joint Initiative on Priority Skills Acquisition

KANU	Kenya African National Union
KenGen	Kenya Electricity Generating Company Ltd.
KGRTC	Kafue Gorge Regional Training Center
KPLC	Kenya Power & Lighting Company Ltd.
LEC	Lesotho Electricity Corporation
LPG	Liquefied Petroleum Gas
MAP	Millennium Partnership for African Recovery Programme
MASSA	Malaysia South-South Association
MASSCORP	Malaysian South-South Corporation Berhad
MATRADE	Malaysia External Trade Development Corporation
MCC	Millennium Challenge Corporation
MIDA	Malaysian Industrial Development Authority
MITI	Ministry of International Trade and Industry
MDGs	Millennium Development Goals
MLTSF	the Medium-Long Term Strategic Framework
MMEWR	Ministry of Minerals, Energy and Water Resources
MOU	Memorandum of Understanding
MPLA	Popular Movement fir the Liberation of Angola
MTCP	Malaysian Technical Cooperation Program
MU	Mepanda Uncua
NAI	New African Initiative
NARC	National Rainbow Coalition
NBI	Nile Basin Initiative
NDS	National Development Strategy
NEC	National Electricity Corporation
NEPAD	New Partnership for Africa's Development
NERC	North American Electric Reliability Council
NETA	New Electricity Trading Arrangements
NPES	National Poverty Eradication Strategy
NSGRP	National Strategy fir Growth and Reduction of Poverty
OAU	Organization of African Unity
OECD	Organization for Economic co-operation and Development
ODA	Official Development Assistance
OIC	Organization of the Islamic Conference
OPPPI	Office for Promoting Private Power Investment
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PLF	Plan Load Factor
PRS	Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Paper
PTA	Preferential Trade Area for Eastern and Southern African States

PWG	Planning Working Group
RDP	Reconstruction and Development Programme
REC	Regional Economic Communities
RENAMO	Rebel Mozambique National Resistance
RERA	Regional Electricity Regulators Association of Southern Africa
RPF	Rwandan Patriotic Front
RRC	Regional Reliability Council
RTO	Regional Transmission Organization
SACU	Southern Africa Customs Union
SADC	Southern African Development Community
SADCC	Southern African Development Coordination Conference
SADU	Southern African Development Community
SAPP	Southern Africa Power Pool
SDPRP	Sustainable Development and Poverty Reduction Program
SEB	Swaziland Electricity Board
STEM	Short Term Energy Market
SWAPO	Marxist South-West Africa People's Organization
TANESCO	Tanzania Electricity Supply Company Ltd.
TICAD	Tokyo International Conference on African Development
UDEAC	Customs and Economic Union of Central Africa
UEB	Uganda Electricity Board
UNIDO	U.N. industrial Development Organization
UNITA	the National Union for the Total Independent of Angola
USAID	U.S Agency for International Development
WAPP	West African Power Pool
WTO	World Trade Organization
ZESA	Zimbabwe Electricity Supply Authority
ZESCO	ZESCO Limited

Units

Length

mm	: Millimeters
cm	: Centimeters (10.0mm)
m	: Meters (100.0cm)
km	: Kilometers (1,000.0m)

Area

mm2	: Square-millimeters (1.0mm x 1.0mm)
cm2	: Square-centimeters (1.0cm x 1.0cm)
m2	: Square-meters (1.0m x 1.0m)
km2	: Square-kilometers (1.0km x 1.0km)

Volume

cm3	: Cubic-centimeters (1.0cm x 1.0cm x 1.0cm)
m3	: Cubic-meters (1.0m x 1.0m x 1.0m)

Weight

g	: grams
kg	: kilograms (1,000g)
ton	: Metric ton (1,000kg)

Time

sec.	: Seconds
min.	: Minutes (60 sec.)
hr.	: Hours (60 min.)

Currency

USD	: United State Dollars
¥	: Japanese Yen
ECU	: Euro Currency Unit

Electricity

V	: Volts
kV	: Kilo Volts (1,000V)
A	: Amperes
kA	: Kilo amperes (1,000A)
W	: Watts (active power)
kW	: Kilo Watts (10^3W)
MW	: Mega Watts (10^6W)
GW	: Giga Watts (10^9W)
Wh	: Watt-hours (watt x hour)
kWh	: Kilo Watt-hours (10^3Wh)
MWh	: Mega Watt-hours (10^6Wh)
GWh	: Giga Watt-hours (10^9Wh)
VA	: Volt-amperes
kVA	: Kilo Volt-amperes (10^3VA)
MVA	: Mega Volt-amperes (10^6VA)
Var	: Volt-amperes reactive (reactive power)
kVar	: Kilo Volt-amperes reactive (10^3Var)
MVar	: Mega Volt-amperes reactive (10^6Var)

SUMMARY

Summary

(1) Background and Objective of the Study

To implement any power network development, it is important to have a view of the regional power exchange consisting of power import from neighboring countries, which are potentially rich in primary energy such as hydropower, petroleum, coal or natural gas for power generation and/or power export with the use of abundant domestic resources as well as a view of domestic power system development. Power exchanges between neighboring countries have been increasing in African countries in which economic development and population growth are significant.

The Southern Africa Power Pool (SAPP), centered on the Republic of South Africa, has a role to promote power exchange in southern African countries. Social and economic conditions are greatly different in each of the SAPP countries. Particularly in the power sector, the scale of power network and technical level of each country are also different, e.g. electrification ratios of the countries widely range from a few percent to 68 %. Since power demands in these countries are rapidly increasing, regional power exchange as well as the development of their own power system is greatly expected.

On the other hand, the East Africa Power Pool (EAPP), formed by nine countries that include Kenya, Ethiopia, etc., was organized in 2005. The regional power exchange is also expected as an effective measure to reduce the power shortage in the EAPP countries.

Technical assistance from Japan to the African power sector has been executed by bilateral assistance focusing mainly on issues of the recipient country. Although a view of regional cooperation such as power exchanges and interconnection between neighboring countries has been considered in the formulation of the power development plans, any assistance directly targeting regional cooperation has not been executed.

Under such circumstance, the study of the power sector in a view of regional cooperation in the SAPP and EAPP has been conducted from January to March 2008, which involved seventeen countries to find out the possibility and framework of regional cooperation.

(2) Current Situation and Issues of Power Sector

(2-1) Southern Africa Power Pool (SAPP)

The SAPP was established in August 1995, with electric power utilities in twelve among fourteen member countries of SADC (except Mauricio and Madagascar) registered as members. The installed capacity and available power of existing power generations in the whole SAPP in 2007 were 54,711MW and 45,757MW, respectively. On the other hand, the peak demand in 2007 was

recorded at 43,755MW, which means that the power generation of the SAPP has a reserve margin of 4.4%. South Africa is the biggest country in the SAPP and more than 83% of the power generated is produced in the country. The primary energies for power generation in SAPP are composed of coal (74%), hydro (20%), nuclear (4%), and natural gas (2%). The southern part of the SAPP with South Africa, etc. has many coal-fired power plants which utilize their abundant coal resources. On the other hand, the northern part of SAPP with Zambia, Mozambique, Democratic Republic of Congo (DRC), etc., has a huge hydropower potential, while the eastern part of SAPP with Mozambique and Tanzania has natural gas resources.

Transmission lines, including direct-current transmission lines, have been constructed for interconnections between the countries in SAPP, except Angola, Tanzania and Malawi, but regional power transmission has not been effectively functional because the transmission capacity is insufficient to convey the generated power.

SAPP aims at a competitive power market, but at present, the power trades such as between IPP and Eskom, and between ZESCO and Eskom under the middle term contract are the main businesses for SAPP. The power trade under the Short Term Energy Market (STEM) is less than 1% of the power trade in the whole SAPP.

South Africa was facing a serious power crisis from the end of the last year and as a countermeasure, a load shedding to the mining industries and consumers has been periodically conducted in January 2008, in addition to a 10% power cut to the neighboring countries. The power crisis affected social and economic situations in the neighboring countries as well as in South Africa. In fact, a reserve margin of power supply in South Africa was estimated at low 1-2% and over 90% of the electricity have been distributing by deteriorated coal-fired power plants, which were constructed more than 20 years ago. Under such situation, the power crisis was caused by unscheduled shutdowns of coal-fired power plants damaged due to poor quality of wet-coal in rainy season.

Although it was forecasted that power demand in whole SAPP exceeds the power supply in 2007 and several measures have been considered, large-scale power projects in countries other than South Africa were first conceived a few decades ago but have hence progressed too little. This is best exemplified by DRC Inga development project and other massive power development projects. Moreover, the lack of political stability in each country has caused long-term delays in these projects. The lack of continuity of local authorities and official organizations of these individual countries is mentioned as an issue of policy and rules.

The power crisis in South Africa was caused by a power shortage of own country, but regional power interconnections to supplement South Africa is also pointed out as an issue of SAPP.

After the power crisis in the beginning of 2008, the load shedding has been decreasing by recovery of the coal-fired power plants and energy conservation, however, a reduction of mining

productions and a postpone of large-scale construction projects was reported. To cope with power demand expansion with an annual rate of 4% in future, South Africa has a plan to develop 40,000MW of new power generations up to 2026, in addition to the repair and replacement of existing coal-fired power plants. Out of the 40,000MW, 20,000MW of nuclear power will serve as the base load plus the power from the coal-fired power plants.

Since South Africa has a large share of SAPP on the power generation as well as power consumption, it is a key issue of SAPP to secure a stable and reliable power situation in South Africa from the view point of regional cooperation.

(2-2) East Africa Power Pool (EAPP)

The EAPP was established in May 2005 after 10 years of the SAPP with nine member countries of the Common Market for Eastern and Southern Africa (COMESA) and Nile Basin Initiative (NBI), but it has not been fully functional yet. While operating standards and rules of the EAPP are still being formulated, the Master Plan for the Power Sector in East Africa was prepared by EAC in May 2005, although the studied area was limited to the three countries of Uganda, Kenya and Tanzania.

The NBI has an important plan for the power sector of eastern African countries. On the other hand, the East Nile Technical Regional Office (ENTRO), which was established in 2002 as an umbrella of NBI under the leadership of Egypt, Sudan and Ethiopia, is executing the feasibility study of potential hydropower generation targeted for the three countries. The feasibility study was divided into two phases and the final report of Phase I was approved in December 2007. Evaluation of power interconnections among the three countries and feasibility study for three proposed hydro power projects in Sudan and Ethiopia was done in Phase I. Based on the result of Phase I, feasibility study for the power interconnections is progressing as Phase II, which will be completed in December 2008.

There are some existing member countries in the EAPP such as Ethiopia and Kenya, which are developing their domestic power system by themselves, and regional interconnection exists only between Uganda and Kenya. As an issue of the EAPP, the master plan study for the development of regional cooperation including the whole EAPP, with its nine member countries, needs to be implemented, in addition to settling financial, human resource, formation etc. in the aspects of policy and rules of EAPP.

(3) Framework of Regional Cooperation of Electric Power Sector

Taking the current situations and issues in the power sector of the SAPP and EAPP into consideration, the following six (6) frameworks to the regional cooperation are proposed.

(3-1) Development of Power Generation

To secure a stable and reliable power supply, it is necessary to produce the electric power with a reserve margin of 10 to 15%, which is assumed to be the standard for a steady power supply.

At present, it is necessary to reform the balance of power resources, more than 80% of which rely on the coal-fired thermal power plants of South Africa, so that several power resources such as hydro, coal, gas, nuclear, etc. can be well-utilized.

The development of a huge potential hydropower resource extending to the northern part of the SAPP is greatly effective for the power balance to be achieved. Hydro-power generation has some risks due to meteorological conditions while using fuel is free from these risks. However, with the advantage of several countries in South Africa having hydro-power potential, power exchanges between neighboring countries could make best use of each other to supplement water output shortage, from a micro-viewpoint. On the other hand, from the macro-viewpoint, the development plan that enables flexibility of regional power exchanges among countries with the hydro resources in the northern part, coal and nuclear resources in the southern part, and with natural gas resources in the eastern part, will be the most effective for regional cooperation in the power sector.

From the viewpoint of efficient utilization, the development of a pumped storage hydropower plant that uses surplus electricity from nuclear power generation being developed as the base load of South Africa, will also be effective. Technology from Japan can be best utilized in this field.

(3-2) Regional Interconnections

When electric power development is established, it is necessary to prepare a transmission line network plan that will deliver the power generated to the demand side at the same time. In this aspect, the present regional network does not necessarily have sufficient capacity to transmit the power. Interconnection between two countries, both with sufficient power transmission capacities, is essential to maintain a stable regional power supply as well as domestic transmission lines.

The electrification ratios in many of subject countries are in extremely low levels of 30% or less. The improvement of the electrification ratios, therefore, is a priority issue, which requires enhancing the transmission lines and distribution lines and having an independent power supply. Regional interconnection through or across the countries will be a great help to improve the electrification ratio. The synergy effect can be expected by distributing the electric power from the interconnection to the border regions of the country, instead of being

concentrated to the city to meet its required power demands.

It is important to formulate the electric power development plan in each country consisting power generation, transmission lines, distribution lines and rural electrification, and taking into account its relationship to the regional electric power development plan.

(3-3) Interconnection between SAPP and EAPP

The SAPP is working on Electric Power Development concerning the electric power flexibility in the region and the examination of the transmission line plan etc. and aims at getting move from Cooperative Pool to Competitive Pool. On the other hand, EAPP has just been established and is not yet functional, although there exists an interconnection between Uganda and Kenya. It is important for the EAPP to establish a policy of regional cooperation including the interconnection to SAPP, which has abundant electric power resources. The interconnection between the SAPP and EAPP will be much effective to exchange power at peak demand considering a time difference of only one hour.

(3-4) Energy Conservation

Of the whole installed capacity of the power generation in the SAPP, the available power is only 83.6%, which means that 9,300MW corresponding to 16.4% of the power has been lost. On the other hand, it was reported that one of reasons of the current power crisis are the unscheduled shutdowns due to damages of the deteriorated coal-fired power plants in South Africa, which were constructed more than 20 years ago. To effectively increase the available power, therefore, it is necessary to inspect the existing operating situation of all thermal and hydropower plants in the region and to formulate countermeasures for improvement of the power plants.

In addition to the improvement of the power generating capacity, an essential measure to ensure stable and reliable power supply is to reduce transmission loss. Aside from technical losses, non-technical losses, which are caused by electricity theft, incomplete tariff collecting system, and loss of current meters due to deterioration, often become a problem particularly in developing countries. Transmission loss in these countries is relatively at a high level of 20-30%, while that in advanced countries, including Japan, is 10% or less. Non-technical loss often originates from the problem of tariff collection system and then a fundamental improvement including the management system is required. Countermeasures are urgently required in the countries in SAPP and EAPP which have a higher transmission loss.

In view of the power crisis, the Government of South Africa has announced a Demand Side Management (DSM) that reduces power consumption from the customer side, which is caused by the rapid growth of power demand. It aims at reducing the whole power consumption by 10%. This 10% reduction corresponds to a savings in electrical power of

3,600MW at peak time in South Africa. The technical assistance for energy conservation by Japan, which is the most advanced country in this field, is effected to implement the energy conservation measures.

(3-5) Capacity Building

In order to sustain operations of a power plant continuously in the long-term, it is necessary to carry out appropriate maintenance works. These operation and maintenance works are succeeded by the electric power utilities and they are requested to transfer and maintain the abilities for the proper operation and maintenance. The ZESCO training center in Zambia, which is adjacent to the Kafue Gorge hydropower plant, was built at the same time as the construction of the power plant in 1971. The training center has been operating well and trainees from Zambia as well as from other African nations are accepted. The training center has been highly evaluated and is a good example to demonstrate the functions of a well-managed training center. At present, there are 37 training courses being offered, mainly for the operation and maintenance of the hydropower system, control system and power transmission system. The number of trainees has been increasing, and upgrading of training equipment has been indispensable in recent years. It is expected that enhancement of the training center will greatly contribute to improve the management capability for operation and maintenance of utilities in African nations.

On the other hand, it was reported that one of reasons for the power crisis in South Africa is the lack of operation and maintenance management capability of staff for the power plants. Technology has not been properly transferred to the staff. Training in Japan targeting the executive staff of African nations is thus recommended to effectively strengthen their management capacity by giving to them the chance to be introduced to the modern and latest technology in Japan

(3-6) Harmonization and Coordination of the Power Pools

In order to enhance coordination within and among the SAPP or EAPP, it is essential to strengthen the functions of the power pool systems. Given this, there is an urgent need to support policy making and institutional system designs and to execute the developed policies and strategies, aiming at strengthening effective coordination among the member countries.

The following five (5) strategies are the recommended directions for project implementation, where tools and techniques adopted by the Japanese government in projects of other developing countries can be fully utilized.

1. <u>Build a Framework that Contributes to the Sharing of Information</u>

Promote sharing of power sector policy and institutional systems among the SAPP and EAPP countries, and build a platform (database) upon which actions leading to coordination can be facilitated.

2. Develop Human Resources and Upgrade Skills in Policy Making and Institutional Designs Toward Coordination

   Keeping coordination in mind, develop human resources and implement training leading to the acquisition of skills to build power sector policies/strategies and institutional systems

3. Support the Initiation of Process of Improvement Toward the Building Common Policies and Institutional Systems

   Implement support for the formulation of common processes and simplification of the procedures to build policies/strategies and institutional systems and leading to coordination

4. Strengthen Functions, Networking, Standardize Governmental Regulatory Institutions and Power Suppliers

   Taking into consideration that networking alone will be insufficient between the governments, regulatory institutions, and power suppliers, build a framework to improve the functions of theses various bodies in order to strengthen regional coordination and promote networking and standardization between them.

5. Strengthen Coordination with International Agencies

   In order to facilitate the strengthening of coordination of the SAPP and EAPP, strengthening coordination with international agencies such as AU and NEPAD will be essential. Moreover, transfer of technologies and funds involving bilateral and multilateral donors will be vital, and formulation of a coordination strategy with such agencies will be necessary.

CHAPTER 1

INTRODUCTION

Chapter 1 Introduction

1.1 Background and Objective of the Study

(1) Background of the Project

To implement the development of power network, it is important to have a view on regional power exchange such as power import from neighboring countries that are potentially rich in primary energy of hydropower, petroleum, coal and natural gas, necessary for generating and/or exporting power, through utilization of abundant domestic resources. Moreover, it is equally important to have a view on domestic power system development. Power exchange have been increasing between neighboring African countries where economic development and population growth are significant, and where several power pools for exchange were founded as shown in the figure below.

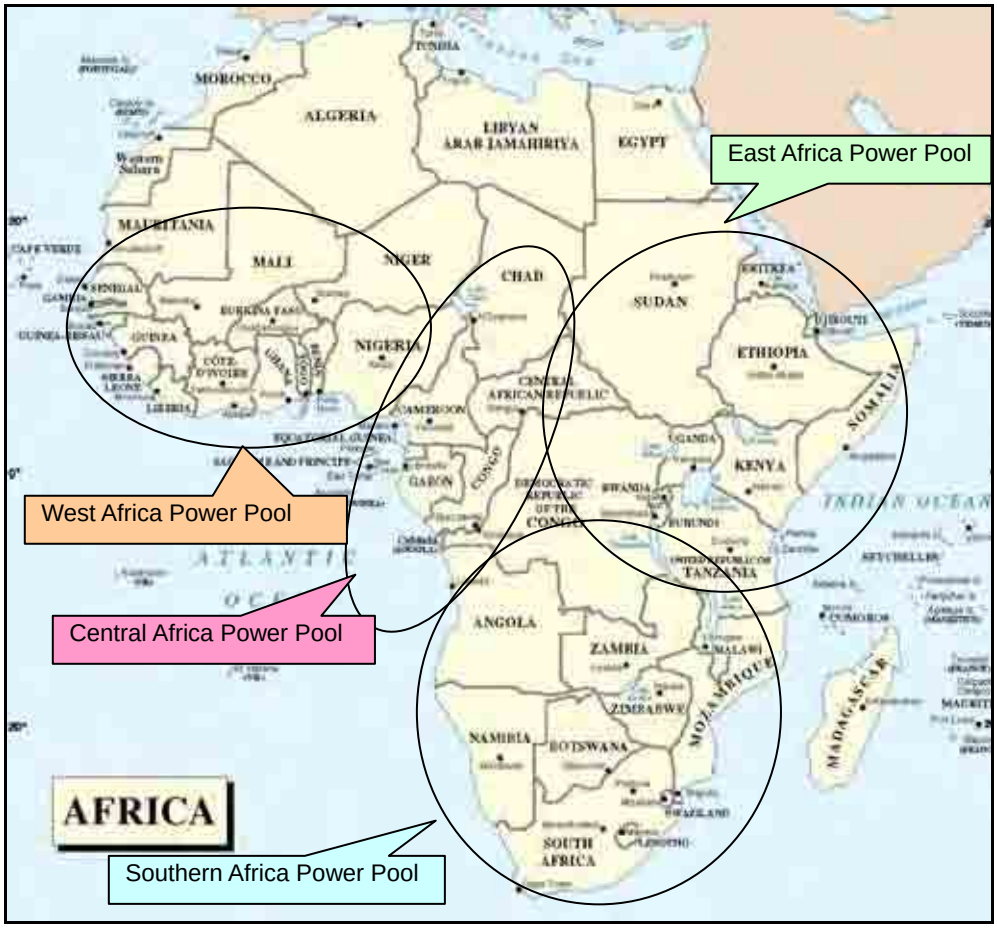


Figure 1.1-1 Power Pools in Africa

Among these power pools, the Southern Africa Power Pool (SAPP), converged in the Republic of South Africa, is the framework for promoting power exchange in southern African countries. Populations and economic development conditions generally vary among countries that constitute SAPP. Particularly in the power sector, the scale of power network and technical level of each country, e.g. electricity ratios, vary from a few percentage to as much as 68 percent. Since electricity demands in these countries are rapidly increasing, the regional power exchanges as well as the development of their own power sources are deemed necessary. Furthermore, Tanzania, located on the eastern edge of SAPP, has plans to be a member of the East Africa Power Pool (EAPP). If the two power pools are merged, a huge power market with a scale of 540 million consumers will be formed.

The official development assistance from Japan to the African power sector has been executed, considering specific problems of each country. Although the view on regional cooperation such as power exchanges between neighboring countries were considered through the formulation of a power development plan, the assistance directly targeted regional cooperation, including inter-exchange transmission lines that have not been implemented. Moreover, the possibility and framework of Japan's assistance as well as an individual project subject to the regional cooperation has not been examined.

(2) Objective of the Study

In order to execute technical assistance to power sectors in African countries effectively in the near future the objectives of the study were identified as follows, based on the above mentioned project background

a) To grasp the current situation of power sectors in Southern and Eastern Africa, and to clarify relevant issues;
b) To recommend regional cooperation program and specific projects such as power development and power system development;
c) To determine aspects on organizations, establishments, systems and technical standards which are necessary in promoting regional cooperation

In addition, a framework on the assistance for power sectors to each target country should be established based on the recommended regional cooperation.

(3) Study Area

The scope of the study covers the following 17 countries, which are also shown in Figure 1.1-2:

a) Twelve countries that acceded SAPP, i.e. Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Republic of South Africa, Swaziland, Tanzania, Democratic Republic of the Congo, Zambia and Zimbabwe;
b) Five countries of nine countries that acceded EAPP have the potential to become bases of regional cooperation, i.e. Kenya, Uganda, Rwanda, Burundi and Ethiopia

Target region or countries for the survey are mentioned in the succeeding sections.

Source: Study Team

Figure 1.1-2 Study Area

1.2 Methodology of the Study

(1) Selection Principle of Target Countries for the Field Survey

Since it was virtually impossible to visit all the 17 countries within the short study period, it was necessary to make a shortlist of target countries to visit. Thus, the following selection criteria are established:

a) Those that have power development plans with high level of importance and urgency from the viewpoint of regional cooperation. These include those with high primary

energy potential such as hydropower, petroleum, coal and natural gas.

b) Those that have inter-exchange transmission line plans with high level of importance from the viewpoint of regional cooperation
c) Bases of establishment and organization of regional cooperation exist
d) Existence of main power demand center in the region
e) Bases of main donors exist such as World Bank (WB) and African Development Bank (AfDB), etc.
f) Relatively stable political condition and security

Source information on power generating projects of each country is significant to generally view the relevant aspects in the region. However, existing regional integrated organizations and power pools in Africa do not always acquire such information. Thus, the study team initiated visiting the offices of power utilities in selected countries in order to obtain the latest information on specific projects related to power generation and transmission lines, which could have significant impact to the power supply in the region.

In addition, it was necessary to study the trends and concepts of AfDB, the main donor in Africa, in order to recommend an appropriate regional cooperation program. For this reason it was realized necessary to conduct interviews with the AfDB head office in Tunis, as well as its branch offices, which controls the assistance program for the whole of Africa.

Based on the above mentioned criteria, the following eight countries were selected as the target countries for site visit. Consequently, in order to conduct the site visit efficiently, the study team was divided into three, namely, A-Team, B-Team and C-Team.

Table 1.2-1 Countries and Major Visits

No.	Countries	Major Visits	Project and Reason
1	Ethiopia	EEPCO, EAPC, WB, AU, ECA	Hydro power Transmission line All regional cooperation
2	Tanzania	Department of Energy (DOE), Tanesco, Nile Basin Power Trading, EAC (Arusha)	Hydro power Transmission line All regional cooperation
3	Zimbabwe	SAPP	All regional cooperation
4	Zambia	DOE, Zesco, WB	Hydro power Transmission line
5	Mozambique	DOE, EdM, AfDB, IFC, CVRD	Hydro Power Gas/Coal fired power
6	South Africa	Eskom, Ministry Energy and Minerals, DBSA, WB, IFC, Nepad, Fieldstone	Coal fired power Transmission line All regional cooperation
7	Lesotho	Ministry of Natural Resources, DOE	Hydro power All regional cooperation
8	Tunisia	AfDB Head Office	All regional cooperation

(2) Principle of Recommendation for Regional Cooperation Program

In order to coordinate the regional cooperation programs that are intended to raise the level of whole power sectors effectively, the following matters were studied:

a) Issues on regional cooperation of power sector in each country
b) Current situation and issues of ongoing regional projects
c) Technical possibilities of power generation planning and system configuration

Furthermore, considering the current situation of each concerned country, the measures to optimize the development of the power sector in the region was studied.

The study flow for establishing the framework of regional cooperation for power sector is shown in the next figure:

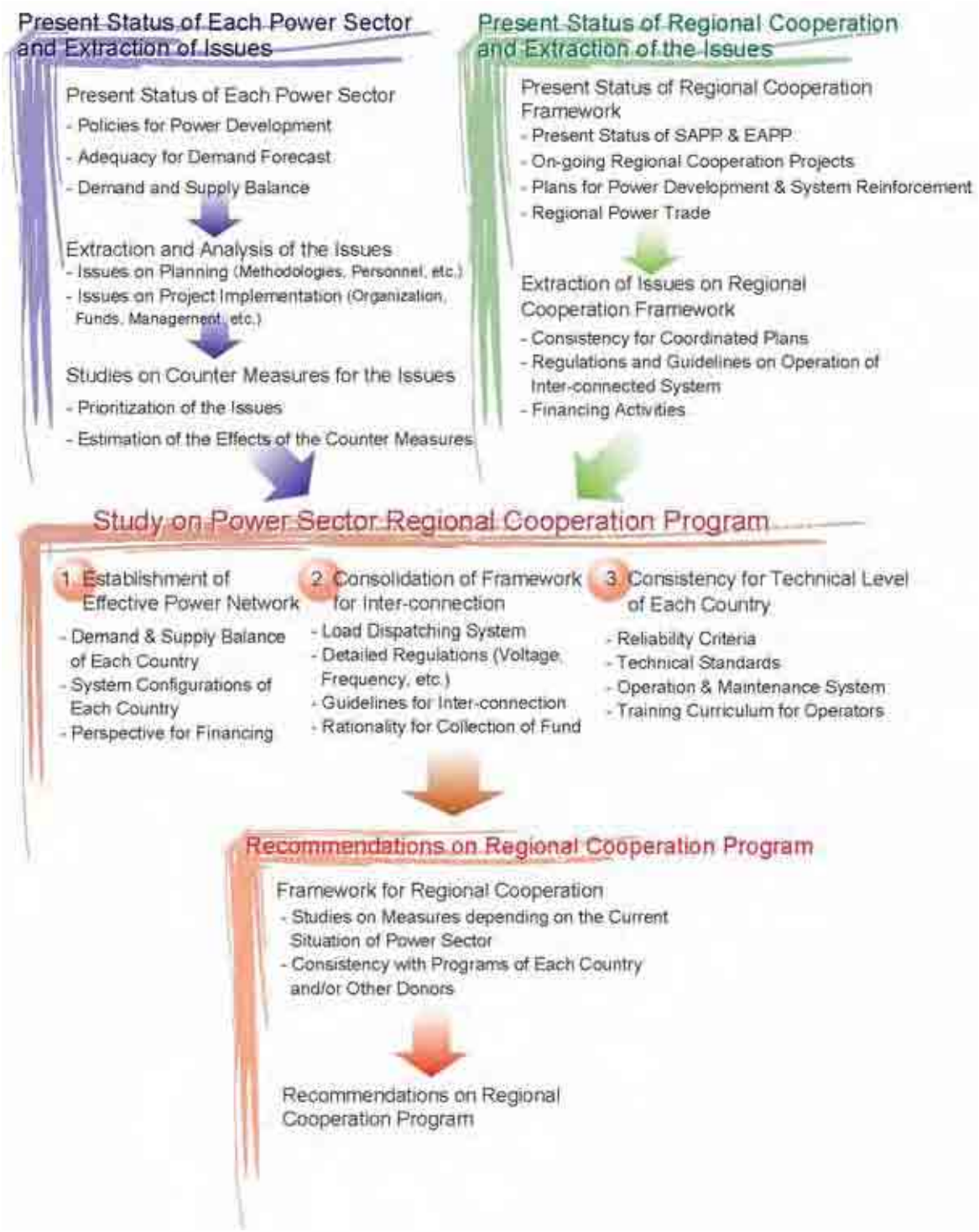


Figure 1.2-1 Study Flow for Framework of Regional Cooperation

(3) Site Visits

Regardless of the actual designated tasks of each team member, they were all motivated to participate in conducting field survey activities effectively, including data collection and acquiring replies based on “questionnaires” provided for each visited country.

1) A-Team Site Visit

A-Team was composed of three specialists, namely, the Team Leader/Regional Power Development Planner, the Power Development Planner-A and the Power System Planner-B. The eight countries they visited were South Africa, Zimbabwe, Zambia, Lesotho, Mozambique, Tanzania, Ethiopia and Tunisia. The team mainly conducted studies on the framework related to regional cooperation and trend of other donors, in order to determine the appropriate regional cooperation program.

A-Team visited and interviewed the following organization and establishment;

Table 1.2-2 Countries and Visited Organization and Establishment of A-Team

No.	Countries	Organizations and Establishments	Contents
1	Ethiopia	EEPCO	Domestic power supply and demand Power generating and Transmission line
		EAPC	Regional power supply and demand Transmission line All regional cooperation
		World Bank	Situation and project of EEPCO
		AU	Power condition of South/East Africa
		ECA	Power condition of South/East Africa
2	Tanzania	Department of Energy	Domestic power supply and demand Power generating and Transmission line
		Tanesco	Domestic power supply and demand Power generating and Transmission line
		Nile Basin Power Trading	Regional power supply and demand Transmission line All regional cooperation
		EAC	Regional power supply and demand Transmission line All regional cooperation
3	Zimbabwe	SAPP	Regional power supply and demand Transmission line All regional cooperation
4	Zambia	Department of Energy	Domestic power supply and demand Power generating and Transmission line
		Zesco	Domestic power supply and demand Power generating and Transmission line
		World Bank	Correspondence to Zesco and power project
		UNECA	Regional power supply and demand Transmission line All regional cooperation
5	Mozambique	Department of Energy	Domestic power supply and demand

			Power generating and Transmission line
		EdM	Domestic power supply and demand Power generating and Transmission line
		AfDB	Domestic power supply and demand Power generating and Transmission line
		IFC	Domestic power supply and demand Power generating and Transmission line
		CVRD	Moatize coal fired power project
6	South Africa	Eskom	Domestic power supply and demand Power generating and Transmission line
		African Forum for Utility Regulators	Domestic power supply and demand Power generating and Transmission line
		DBSA	Regional power supply and demand Transmission line All regional cooperation
		World Bank	Regional power supply and demand Transmission line All regional cooperation
		IFC	Regional power supply and demand Transmission line All regional cooperation
		Nepad	Regional power supply and demand Transmission line All regional cooperation
7	Lesotho	Ministry of Natural Resources Department of Energy	Domestic power supply and demand Power generating and Transmission line
8	Tunisia	AfDB Head Office	Regional power supply and demand Transmission line All regional cooperation

2) B-Team Site Visit

B-team was composed of two specialists, namely, the Electric Energy Policy and Institution Specialist and the Power Demand and Socio Economy Analyst. The two countries they visited include South Africa and Ethiopia.

B-Team mainly collected, organized and analyzed basic information regarding politics, economy and power sector of the target 17 countries.

Table 1.2-3 Countries and Visited Organization and Establishment of B-Team

No.	Countries	Organizations and Establishments	Contents
1	Ethiopia	AU	Power condition of South/East Africa
		EEPCO	Domestic power supply and demand
		Ethiopian Electricity Agency	Domestic power supply and demand
		Ethiopian Investment Agency	Power condition of South/East Africa
		AACCSA	Domestic power supply and demand
		Ethiopian Privatization & Supervising Agency of Public Enterprises	Power condition of South/East Africa
		Central Statistics Authority	Power condition of South/East Africa
2	South Africa	NEPAD	Regional power supply and demand All regional cooperation
		Department of Science & Technology	Domestic power supply and demand

NERSA	Domestic power supply and demand
Business Unit of South Africa	Domestic power supply and demand
African Forum for Utility Regulator of SA	Regional power supply and demand All regional cooperation
DME	Domestic power supply and demand
Statistics South Africa	Domestic power supply and demand

3) C-Team Site Visit

C-Team was composed of two specialists, namely, the Power Development Planner-B and the Power System Planner-B. The three countries they visited were South Africa, Zambia and Mozambique.

C-Team mainly conducted site surveys of specific projects on power development and system reinforcement. Accordingly, they visited Arnot Coal-thermal Power Plant in South Africa and Kafue Gorge Training Center in Zambia.

Table 1.2-4 Countries and Visited Organization and Establishment of C-Team

No.	Countries	Organizations and Establishments	Contents
1	South africa	Eskom	Domestic power supply and demand Power generating and Transmission line
		Arnot Coal-fired Power Plant	Investment for Existing Power Plant
2	Zambia	Zesco	Domestic power supply and demand Power generating and Transmission line
		Kafue Gorge Regional Training Center	Investment for Management of Power Plant and Training Center
3	Mozambique	MOE	Domestic power supply and demand Power generating and Transmission line
		EdM	Domestic power supply and demand Power generating and Transmission line
		HCB	Domestic power supply and demand Power generating and Transmission line

1.3 Contents of the Report

This report consists of five chapters as listed below. Chapter 2 describes the current situation on politics, economics and power demands of each target country. Chapter 3 provides an update on the situation and issues of power sector of each target country. Chapter 4 describes the current situation and issues on regional cooperation of each power sector. Finally, based on Chapter 3 and 4, Chapter 5 provides recommendations on the framework on regional cooperation in the power sector.

Chapter 1 Introduction
Chapter 2 Current Situations of Surveyed Countries
Chapter 3 Current Situations and Issues of the Power Sector of Surveyed Countries
Chapter 4 Current Situations and Issues of Regional Cooperation in the Power Sector
Chapter 5 Proposal on Framework for Regional Cooperation in the Power Sector

CHAPTER 2

CURRENT SITUATIONS OF SURVEYED COUNTRIES

Chapter 2 Current Situations of Surveyed Countries

2.1 Current Political and Economic Situations

(1) Angola

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.1 Map of Angola

Immediately after the independence of Angola from Portugal on 11 November, 1975, a civil war broke out between the Movement for the Liberation of Angola (MPLA) and the National Union for the Total Independence of Angola (UNITA). Although the MPLA took political power, the war lasted for 27 years. The MPLA deserted socialism in 1990 and national elections were held in 1992, raising the momentum toward peace temporarily. The two groups resumed fighting as the UNITA was dissatisfied with the election results. Although the two groups concluded a peace agreement in 1994, mediated by the UN, they began fighting again in 1998. An estimated total of 1.5 million lives were lost and 210,000 people were displaced in the long-lasted conflict. The death of UNITA leader Jonas Savimbi ended the conflict in 2002 and the MPLA is now ruling the country. Although President Jose Eduardo dos Santos intended to hold assembly elections in 2007, it was postponed to 2008 due to delaying registration of voters. Presidential election is also planned to be held in 2009.

Angola is rich in natural resources. It is the second biggest oil producer in Sub-Saharan Africa, next to Nigeria, and is also a major diamond producer. Taking advantage of such

natural resources to steer its macro economy, Angola has one of the highest real GDP growth rates in the world. According to the IMF's World Economic Outlook (WEO), the growth rate in 2006, 2007 and 2008 are 18.6 percent, 23.1 percent and 27.2 percent, respectively. The recent rapid economic growth is driven by oil production, which accounts for about 85 percent of GDP. Annual economic growth averaged over 15 percent from 2004 to 2007 because of an increase in oil production[1]. The construction sector and agriculture also contributed greatly to the economic growth for the economic reconstruction, the resettlement of displaced persons, in particular, after the end of the civil war. This is mainly due to the concentration of population in the capital of Luanda. The government has an urban development plan in the southern region. Angola received a low-interest loan of up to two billion dollars from China for the construction of public infrastructure in 2004. Since then, it has continued to receive new loans from China. The repayment is made with oil and Angola became the world's biggest oil exporter to China in 2006. Financially, the central bank has accumulated foreign reserves since 2003. Taking advantage of it, the country has been carrying out a program to stabilize the exchange rate. Revenues from oil exports have enabled continuation of the program and eased the long-lasting high inflation.

Most of the population is still engaged in low-productivity subsistence agriculture to make a living. About 50 percent of food is imported. As the nation is rich in natural resources and Atlantic fisheries have a big potential, the country will likely continue to enjoy economic growth if the national governance is improved.

[1] Angola joined OPEC in 2006. Although the government hoped to have a daily quota of 2 to 2.5 million barrels, it was assigned with 1.9 million barrels in 2007.

Table 2.1.1 Major Social and Economic Indicators (Angola)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	5.6	6.9	9.4	12.4	14.2	14.6	15.0	15.5	15.9
Population growth (Annual %)	1.9	2.5	3.0	2.7	2.7	2.8	2.9	2.9	2.9
Population ages 0-14 (% of total)	45.3	46.3	46.9	47.3	46.9	46.8	46.7	46.6	46.5
Population ages 15-64 (% of total)	52.1	51.1	50.5	50.2	50.6	50.7	50.8	51.0	51.1
Population ages 65 and above (% of total)	2.7	2.7	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Urban population (% of total)	12.8	19.8	31.1	44.5	50.7	51.3	52.0	52.6	53.3
Urban population growth (Annual %)	5.6	7.4	7.2	5.7	4.0	4.1	4.2	4.2	4.1
Population density (People per square kilometer)	4.5	5.6	7.5	9.9	11.4	11.7	12.1	12.4	12.8
GDP growth (Annual %)			2.4	1.3	3.1	14.5	3.3	11.2	20.6
GDP per capita (Constant 2000 US$)		861.1	791.6	620.7	662.4	737.4	740.2	799.4	936.9
GDP per capita, PPP (Constant 2000 international $)		1,909.1	1,755.2	1,376.3	1,468.7	1,635.0	1,641.1	1,772.4	2,077.2
Agriculture, value added (% of GDP)			15.6	10.1	8.2	7.9	8.3	8.6	7.2
Industry, value added (% of GDP)			39.6	60.0	64.9	68.2	67.4	66.1	74.0
Manufacturing, value added (% of GDP)			7.9	4.6	3.9	3.7	3.9	4.0	3.6
Food, beverages and tobacco (% of value added in manufacturing)					..	..	..	..	..
Textiles and clothing (% of value added in manufacturing)					..	..	..	..	..
Chemicals (% of value added in manufacturing)					..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)					..	..	..	..	..
Other manufacturing (% of value added in manufacturing)					..	..	..	..	..
Services, etc., value added (% of GDP)			44.7	29.9	27.0	24.0	24.3	25.3	18.7
Employment in agriculture (% of total employment)					..	..	..	..	..
Employment in industry (% of total employment)					..	..	..	..	..
Employment in services (% of total employment)					..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.0	0.0	0.0	1.4	22.1	43.5	74.6	83.5	87.2
Real effective exchange rate index (Year 2000 = 100)					..	..	..	..	..
Consumer prices inflation (Annual %)				1,042.7	169.7	95.6	98.2	43.5	23.0
Money and quasi money (M2) as % of GDP				15.3	14.7	15.1	13.8	12.8	11.1
Money and quasi money growth (Annual %)				1,015.0	160.6	158.6	63.9	37.0	60.5
Lending interest rate (%)				115.1	96.0	97.3	96.1	82.3	67.7
Real interest rate (%)				-55.7	-6.0	-10.5	-3.2	27.8	16.9
General government final consumption expenditure (% of GDP)			32.0	42.2	..	..	..	..	..
Household final consumption expenditure, etc. (% of GDP)			43.1	44.3	..	..	..	..	..
Final consumption expenditure, etc. (% of GDP)			75.1	76.6	84.9	76.1	80.8	74.9	67.2
Exports of goods and services (% of GDP)			35.4	69.1	76.6	73.5	69.6	69.7	73.5
Imports of goods and services (% of GDP)			24.8	65.9	74.9	62.2	63.1	53.7	48.3
Foreign direct investment, net inflows (% of GDP)			1.7	10.5	24.0	14.6	25.1	7.3	-4.0
Foreign direct investment, net outflows (% of GDP)			0.0	0.0	0.0	0.3	0.2	0.2	0.7
Gross domestic savings (% of GDP)			24.9	23.4	15.1	23.9	19.2	25.1	32.8
Gross capital formation (% of GDP)			14.3	20.2	13.4	12.6	12.7	9.1	7.5
Food exports (% of merchandise exports)	53.3	28.9	2.7	0.3	..	..	..	..	..
Food imports (% of merchandise imports)	16.7	13.2	32.5		..	..	..	..	..
Agricultural raw materials exports (% of merchandise exports)	10.4	4.7	0.1		..	..	..	..	..
Agricultural raw materials imports (% of merchandise imports)	1.2	1.3	0.8		..	..	..	..	..
Ores and metals exports (% of merchandise exports)	9.4	4.1	3.2	4.9	..	..	..	..	..
Ores and metals imports (% of merchandise imports)	1.0	1.6	1.4		..	..	..	..	..
Fuel exports (% of merchandise exports)	7.9	49.3	87.8	94.8	..	..	..	..	..
Fuel imports (% of merchandise imports)	3.7	4.4	0.2		..	..	..	..	..
Manufactures exports (% of merchandise exports)	19.0	12.7	6.0	0.0	..	..	..	..	..
Manufactures imports (% of merchandise imports)	77.4	79.5	65.1		..	..	..	..	..
Aid per capita (Current US$)	1.1	2.9	12.8	29.2	19.9	28.3	32.8	73.9	27.7
Poverty gap at $1 a day (PPP) (%)					..	..	..	..	..
Total debt service (% of exports of goods, services and income)			8.3	16.9	33.0	16.9	15.3	13.6	9.2
Total reserves in months of imports				0.9	1.1	0.5	0.7	1.3	2.0

Source: The World Bank. 2007. World Development Indicators: 2007

(2) Botswana

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.2 Map of Botswana

Botswana is a landlocked country. Formerly the British protectorate of Bechuanaland, it became independent in September 1966. Majority of land is gentle tableland. It used to be one of the poorest nations in the world; however, it achieved one of the most significant economic growth rates among Sub-Saharan African nations after the mid-1960s when diamond mines were discovered and production of beef cattle grew, which was accompanied by an aggressive social policy and capital investment led by civilian President Seretse Khama. The presidency was passed to Quett Masire in 1980 and then to Festus Mogae in 1998 and the political condition has been relatively stable under their leadership[2]. The headquarters of the South African Development Community (SADC) are located in the capital of Gaborone.

Since its independence in 1966, Botswana has been recognized as a nation that has had one of the highest economic growth rates (average) in the world—an average of 15.2 percent in the 1970s and an average of 10.9 percent in the 1980s. According to the IMF's WEO, the

[2] President Mogae was reelected in 2004. The presidential term is five years.

real GDP growth rate is estimated to be 5.0 percent in 2007 and 5.2 percent in 2008, although that in 2006 was relatively low at 2.6 percent. Accordingly, per capita GDP in 2004 exceeded 10,000 US dollars (PPP international dollar price in 2000). The investment climate is also favorable, ranked the highest among Sub-Sahara African nations.

Diamond industry, the nation's major industry, accounts for almost one third of GDP and two thirds of exports. On the other hand, 20 percent of working population is engaged in farming, which produces two percent of GDP. Unemployment is also high. That being the case, the nation is expected to diversify its industrial structure to manage its economy. Although the official unemployment rate in 2004 was announced as 23.8 percent, it exceeded 40 percent according to an unofficial estimate. The nation's fiscal policy and system are good and privatization is in progress.

Other major industrial sectors are tourism and financial services. Tourism has grown in particular thanks to its environmental protection and extensive natural conservation programs conducted by the national government. Meanwhile, although Botswana is also known as a country with the highest HIV/AIDS infection rate in the world, it is also carrying out a most advanced comprehensive program to combat the epidemic. The high HIV/AIDS infection rate is threatening its remarkable economic growth, and the flat productivity of the major industry of diamond mining also affects sustainable economic growth.

Table 2.1.2 Major Social and Economic Indicators (Botswana)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	0.7	0.9	1.3	1.6	1.8	1.8	1.8	1.8	1.8
Population growth (Annual %)	2.7	3.4	3.1	2.1	0.7	0.3	0.0	-0.1	-0.2
Population ages 0-14 (% of total)	49.1	48.9	47.3	41.7	38.7	38.4	38.2	37.9	37.6
Population ages 15-64 (% of total)	47.2	48.3	50.2	55.7	58.4	58.6	58.7	58.9	59.0
Population ages 65 and above (% of total)	3.6	2.8	2.5	2.6	2.9	3.0	3.1	3.2	3.3
Urban population (% of total)	4.9	12.4	29.2	48.8	54.0	54.9	55.7	56.6	57.4
Urban population growth (Annual %)	11.9	10.8	12.4	4.4	2.2	1.9	1.6	1.4	1.2
Population density (People per square kilometer)	1.2	1.6	2.2	2.9	3.1	3.1	3.1	3.1	3.1
GDP growth (Annual %)	8.7	15.2	10.9	6.2	5.2	5.6	6.3	5.9	6.2
GDP per capita (Constant 2000 US$)	291.3	818.2	1,725.1	2,796.0	3,680.0	3,873.8	4,117.4	4,367.4	4,648.5
GDP per capita, PPP (Constant 2000 international $)	-	2,242.5	4,089.7	6,628.6	8,724.4	9,183.8	9,761.4	10,354.0	11,021.0
Agriculture, value added (% of GDP)	38.9	22.2	7.7	4.0	2.3	2.4	2.4	2.4	2.3
Industry, value added (% of GDP)	13.5	40.9	58.5	54.7	58.5	55.2	52.5	52.3	53.3
Manufacturing, value added (% of GDP)	9.7	6.5	6.0	5.1	4.2	4.3	4.3	4.1	3.9
Food, beverages and tobacco (% of value added in manufacturing)	-	-	51.7	40.1	20.4	19.3	20.4	..	..
Textiles and clothing (% of value added in manufacturing)	-	-	10.1	9.4	4.7	4.2	4.5	..	..
Chemicals (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	-	-	45.0	57.6	74.9	76.5	75.1	..	..
Services, etc., value added (% of GDP)	48.7	36.9	33.8	41.3	39.1	42.4	45.1	45.3	44.4
Employment in agriculture (% of total employment)	-	-	57.9	20.1	12.3	..	21.2	22.6	..
Employment in industry (% of total employment)	-	-	10.6	21.4	25.5	..	22.6	22.0	..
Employment in services (% of total employment)	-	-	31.4	57.0	61.3	..	56.1	49.7	..
Official exchange rate (Local currency per US$, period average)	0.7	0.8	1.5	3.3	5.8	6.3	4.9	4.7	5.1
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	-	11.9	10.6	10.5	6.6	8.0	-7.9	1.4	8.6
Money and quasi money (M2) as % of GDP	-	17.9	23.1	22.0	24.5	26.7	26.5	27.3	26.5
Money and quasi money growth (Annual %)	-	55.5	23.0	18.0	35.8	-0.5	17.6	13.9	10.6
Lending interest rate (%)	-	8.5	11.5	14.1	15.8	16.2	16.3	15.8	15.7
Real interest rate (%)	-	-1.6	0.1	4.4	8.9	16.3	13.2	9.1	6.4
General government final consumption expenditure (% of GDP)	22.7	18.7	24.6	26.6	19.7	21.9	22.3	22.2	24.6
Household final consumption expenditure, etc. (% of GDP)	79.5	58.4	38.5	32.9	23.7	25.8	26.8	27.7	27.8
Final consumption expenditure, etc. (% of GDP)	102.5	77.1	63.1	59.5	43.4	47.7	49.1	49.9	52.4
Exports of goods and services (% of GDP)	26.9	45.4	62.2	50.9	48.6	47.8	45.6	46.1	50.7
Imports of goods and services (% of GDP)	51.2	64.8	55.0	39.9	32.4	36.2	36.3	34.7	34.6
Foreign direct investment, net inflows (% of GDP)	-	4.0	3.8	0.1	0.4	6.9	5.1	4.0	2.7
Foreign direct investment, net outflows (% of GDP)	-	0.1	0.0	0.2	6.1	0.7	2.5	..	-0.5
Gross domestic savings (% of GDP)	-2.5	22.9	36.9	40.5	56.6	52.3	50.9	50.1	47.6
Gross capital formation (% of GDP)	21.3	42.3	29.7	29.5	40.4	40.7	41.7	38.7	31.5
Food exports (% of merchandise exports)	-	-	-	2.8	3.1	3.5	2.4	..	..
Food imports (% of merchandise imports)	-	-	-	14.2	13.9	16.0	13.9	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	0.3	0.5	0.3	0.1	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	0.9	0.8	0.8	0.8	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	7.0	5.5	4.9	10.7	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	2.2	2.0	1.6	1.1	..	..
Fuel exports (% of merchandise exports)	-	-	-	0.1	0.1	0.0	0.0	..	..
Fuel imports (% of merchandise imports)	-	-	-	4.7	6.5	5.9	4.4	..	..
Manufactures exports (% of merchandise exports)	-	-	-	89.6	90.6	90.9	86.4	..	..
Manufactures imports (% of merchandise imports)	-	-	-	74.6	71.8	71.1	75.1	..	..
Aid per capita (Current US$)	17.0	57.6	95.3	58.8	16.3	21.0	15.7	26.5	40.2
Poverty gap at $1 a day (PPP) (%)	-	-	12.5	9.9	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	2.1	3.6	3.3	1.7	2.0	1.2	1.0	0.9
Total reserves in months of imports	-	3.7	10.8	22.7	27.1	20.9	16.5	13.8	15.3

Source：The World Bank. 2007. World Development Indicators: 2007

⑶ Lesotho

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.3 Map of Lesotho

Formerly the British protectorate of Basutoland, Lesotho won independence as the Kingdom of Lesotho in October 1966. It is a landlocked upland nation with over 80 percent of the surface area lying above 1,800 meters from the sea level. Because it had criticized South Africa's apartheid since before its independence, South Africa continued to impose economic sanctions. A coup in 1986 led Justin Metsing Lekhanya to become Chairman of the Military Council and King Letsie III took over the throne. As a result, King Moshoeshoe was ousted in 1990. However, he returned to Lesotho in 1992 and was restored to the throne in 1995. After seven years of military ruling, the nation returned to a constitutional monarchy in 1993. In response to violent protests against lower house election results in 1998, the Mosisili government requested South Africa and Botswana to advance into the country. Later, the constitution was amended, which is said to have led the nation to regain relatively stable political situations. In 2002, national assembly elections were held peacefully. However, in national assembly elections in 2007, anti-governmental forces staged protests frequently.

Lesotho is an inland nation covering only slightly over 30,000 square kilometers with a population of 1.8 million. Its economy depends mainly on money sent from migrant mine workers in South Africa and revenues whose majority is SACU customs duties. According to the IMF's WEO, Lesotho's real GDP growth rate in 2006 was relatively high at 7.2 percent and the rates in 2007 and 2008 are 4.9 percent and 5.2 percent, respectively. Such migrant workers usually stay in South African for three to nine months. The government has begun to strengthen the taxation system in order to reduce the dependence on customs duties. Because the country is mountainous, arable land is small and there is a small amount of valuable natural resources except for a small volume of diamonds. However, the Lesotho Highlands Water Project that was completed in January 1998 enabled export of power and water to South Africa, creating a source of income from South Africa. The nation's power self-supply rate is about 90 percent. The number of migrant mine workers has decreased gradually for the last seven years. Although 50 percent of GDP depended on money sent from overseas in the 1990s, the dependence is now about 20 percent. Laborers are employed at small agriculture-related manufacturers (such as milling, canning, leather and jute) and the apparel industry is also growing rapidly. The rapid growth of the apparel industry is mainly because the industry fits well to obtain trade profits under the African Growth and Opportunity Act (AGOA). Still, imports of goods and services account for 88.0 percent of GDP although it reduced slightly in 2005, and the major trading partner is South Africa. Furthermore, there remains a serious problem of extreme imbalance of income distribution. Lesotho is also supported by the Poverty Reduction and Growth Facility (PRGF) and qualified for the Millennium Challenge Account program.

Table 2.1.3 Major Social and Economic Indicators (Lesotho)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	0.9	1.2	1.5	1.7	1.8	1.8	1.8	1.8	1.8
Population growth (Annual %)	1.9	2.3	2.1	1.2	0.5	0.2	0.0	-0.1	-0.2
Population ages 0-14 (% of total)	43.6	44.3	44.9	43.2	40.2	39.8	39.3	39.0	38.6
Population ages 15-64 (% of total)	52.2	51.5	50.9	52.2	54.8	55.2	55.5	55.8	56.2
Population ages 65 and above (% of total)	4.2	4.2	4.1	4.6	5.0	5.1	5.1	5.2	5.3
Urban population (% of total)	6.4	11.1	16.1	17.5	18.0	18.2	18.3	18.5	18.7
Urban population growth (Annual %)	11.2	6.7	4.6	1.5	1.5	1.2	1.0	0.9	0.8
Population density (People per square kilometer)	31.1	38.3	48.5	56.1	59.2	59.3	59.3	59.2	59.1
GDP growth (Annual %)	5.2	8.0	4.5	3.5	3.2	3.5	3.1	3.1	1.2
GDP per capita (Constant 2000 US$)	178.8	258.2	324.1	452.2	493.9	510.0	525.7	542.9	550.4
GDP per capita, PPP (Constant 2000 international $)	-	1,526.1	1,747.1	2,438.0	2,662.5	2,749.7	2,834.3	2,926.8	2,967.2
Agriculture, value added (% of GDP)	69.9	40.1	23.9	17.8	18.2	17.6	17.9	17.1	17.3
Industry, value added (% of GDP)	8.2	18.6	27.5	39.8	41.6	42.3	41.4	43.1	41.4
Manufacturing, value added (% of GDP)	2.9	5.9	12.8	16.2	17.7	20.4	19.7	20.3	18.5
Food, beverages and tobacco (% of value added in manufacturing)	-	72.7	65.2	-	..	..	..	..	..
Textiles and clothing (% of value added in manufacturing)	-	7.3	12.6	-	..	..	..	..	..
Chemicals (% of value added in manufacturing)	-	4.5	5.0	-	..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	-	15.5	17.2	-	..	..	..	..	..
Services, etc., value added (% of GDP)	28.7	41.3	48.6	42.4	40.1	40.1	40.7	39.8	41.3
Employment in agriculture (% of total employment)	-	-	-	56.5	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	15.2	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	23.2	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.8	1.9	4.4	8.6	10.5	7.6	6.5	6.4
Real effective exchange rate index (Year 2000 = 100)	-	113.3	121.1	127.9	86.2	77.9	112.2	132.2	132.8
Consumer prices inflation (Annual %)	-	14.5	13.4	11.6	-9.6	33.8	6.7	5.0	3.4
Money and quasi money (M2) as % of GDP	-	17.8	41.2	31.7	28.1	28.2	27.7	26.5	26.9
Money and quasi money growth (Annual %)	-	39.9	18.3	10.8	17.2	8.8	6.0	3.4	9.1
Lending interest rate (%)	-	11.0	16.2	17.7	16.6	17.1	16.0	12.4	11.7
Real interest rate (%)	-	-21.5	3.9	6.7	9.3	8.0	9.5	5.7	8.3
General government final consumption expenditure (% of GDP)	15.4	13.8	18.4	17.2	17.8	15.6	15.4	14.2	15.2
Household final consumption expenditure, etc. (% of GDP)	113.2	143.0	147.2	117.7	98.6	102.5	96.9	93.5	84.0
Final consumption expenditure, etc. (% of GDP)	128.6	156.8	165.6	134.9	116.3	118.0	112.2	107.7	115.7
Exports of goods and services (% of GDP)	13.4	16.1	16.3	22.9	41.8	55.8	48.8	55.8	47.9
Imports of goods and services (% of GDP)	51.6	94.8	123.3	113.0	98.4	116.1	105.9	104.6	88.0
Foreign direct investment, net inflows (% of GDP)	-	0.3	1.5	15.3	15.3	12.0	10.9	9.0	6.3
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	..	0.0	0.0	0.0	0.0
Gross domestic savings (% of GDP)	-28.6	-56.8	-65.6	-34.9	-16.3	-18.0	-12.2	-7.7	-15.7
Gross capital formation (% of GDP)	9.7	21.8	41.4	55.2	40.2	42.3	44.8	41.1	40.7
Food exports (% of merchandise exports)	-	-	-	-	..	..	..	..	..
Food imports (% of merchandise imports)	-	-	-	-	..	..	..	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	-	..	..	..	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	-	..	..	..	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	-	..	..	..	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	-	..	..	..	..	..
Fuel exports (% of merchandise exports)	-	-	-	-	..	..	..	..	..
Fuel imports (% of merchandise imports)	-	-	-	-	..	..	..	..	..
Manufactures exports (% of merchandise exports)	-	-	-	-	..	..	..	..	..
Manufactures imports (% of merchandise imports)	-	-	-	-	..	..	..	..	..
Aid per capita (Current US$)	9.6	30.3	72.2	57.2	31.3	42.4	44.1	58.9	38.3
Poverty gap at $1 a day (PPP) (%)	-	-	12.7	19.6	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	0.7	4.1	6.9	12.4	11.2	8.0	4.6	5.0
Total reserves in months of imports	-	1.3	1.3	4.6	5.9	5.7	4.9	4.1	4.4

Source: The World Bank. 2007. World Development Indicators: 2007.

(4) Malawi

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.4 Map of Malawi

Formerly established as the British protectorate of Nyasaland in 1891, Malawi became independent in 1964. It is a landlocked nation stretching approximately 900 kilometers from north to south. The country is mostly highlands, and water systems, including Lake Malawi, make up 20 percent of the nation's surface area. The first President Hastings Banda held office as President for Life and led the country as a one-party state for 30 years, establishing a dictatorship. However, the people of Malawi voted in favor of the multi-party system by referendum in 1993 and the presidency for life system was abandoned. Multi-party elections were held in 1994 and Bakili Muluzi assumed presidency. Incumbent President Bingu wa Mutharika took office in 2004. He left the United Democratic Front (UDF) to which he had belonged since 1994 and withdrew from the coalition government, which led him to a political standoff in the national assembly. Bills on issues they have worked on cannot be passed and there is no progress in anti-corruption measures. The country faces such challenges as a rapid population increase, adverse effects on farmland,

devastation and HIV/AIDS problems.

The population growth rate of the landlocked nation of Malawi is one of the highest in the world and the nation is densely populated. Its economy depends heavily on agriculture, with 85 percent of the people living in rural communities, although it makes up only one third of added values. About 80 percent of exports are food and agricultural raw materials, while main exports are broadleaf, tea and sugar. Because these crops are heavily influenced by weather conditions and international markets, the stabilization of macro economy has been an issue. There are such natural resources as limestone and coal, though scarce. Despite its efforts to develop them, it is not easy just to conduct test excavations due to underdeveloped infrastructure. According to the IMF's WEO, the real GDP growth rate is estimated to be 5.5 percent in 2007 and 5.2 percent in 2008, although that in 2006 was relatively high at 7.9 percent. Per capita GDP is 593.5 US dollars (PPP international dollar price in 2000), which is one of the lowest in the world, thus the national finance depends heavily on foreign aids. In December 2007, it became qualified for the U.S. Millennium Challenge Corporation (MCC) initiative established by the US government. The Government of Malawi faces various challenges and problems, which include the development of market economy, improvement of educational facilities, environmental measures, control of rapidly-spreading HIV/AIDS infection, and satisfying requests of foreign donors that demand it comply with fiscal discipline. Although President Mutharika promoted a campaign to eliminate corruption in 2005, there was no significant achievement because of political disorder. Fiscal discipline is improved based on recommendations by Finance Minister Goodall Gondwe and it was approved by the PRGF for three years from 2000. It also reached the Completion Point of the HIPCs initiative in August 2006.

Table 2.1.4 Major Social and Economic Indicators (Malawi)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	4.0	5.4	7.7	10.4	11.8	12.1	12.3	12.6	12.9
Population growth (Annual %)	2.5	3.1	4.3	2.0	2.4	2.3	2.2	2.2	2.2
Population ages 0-14 (% of total)	46.0	47.2	47.4	45.3	46.5	46.8	47.1	47.3	47.3
Population ages 15-64 (% of total)	51.6	50.6	50.2	51.7	50.5	50.2	49.9	49.7	49.6
Population ages 65 and above (% of total)	2.4	2.2	2.4	3.0	3.0	3.0	3.0	3.0	3.0
Urban population (% of total)	5.1	7.8	10.5	13.5	15.5	15.9	16.4	16.8	17.2
Urban population growth (Annual %)	5.6	7.3	6.7	4.6	5.2	5.0	4.8	4.7	4.6
Population density (People per square kilometer)	42.9	57.1	81.6	110.6	125.4	128.3	131.2	134.0	137.0
GDP growth (Annual %)	4.8	6.2	2.2	3.7	-5.0	2.9	6.1	7.1	2.6
GDP per capita (Constant 2000 US$)	112.4	151.7	143.1	143.0	140.5	141.2	146.5	153.6	154.1
GDP per capita, PPP (Constant 2000 international $)	-	610.0	551.2	550.8	540.8	543.6	564.1	591.3	593.5
Agriculture, value added (% of GDP)	47.8	43.0	44.3	36.7	38.8	39.0	39.8	38.9	34.7
Industry, value added (% of GDP)	13.7	19.3	23.3	21.6	16.7	16.1	16.4	17.2	19.4
Manufacturing, value added (% of GDP)	-	13.0	15.6	15.6	11.5	11.3	11.2	11.4	12.5
Food, beverages and tobacco (% of value added in manufacturing)	57.9	47.6	38.3	43.0	..	..	..	261.9	..
Textiles and clothing (% of value added in manufacturing)	13.2	16.5	16.3	13.6	..	..	..	9.2	..
Chemicals (% of value added in manufacturing)	9.5	9.8	19.3	17.0	..	..	..	49.7	..
Machinery and transport equipment (% of value added in manufacturing)	1.2	4.2	3.3	2.6	..	..	..	6.2	..
Other manufacturing (% of value added in manufacturing)	18.1	21.8	22.8	23.8	..	..	..	-227.1	..
Services, etc., value added (% of GDP)	38.5	37.8	32.4	41.7	44.5	44.9	43.9	44.0	45.9
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.8	0.8	1.8	20.1	72.2	76.7	97.4	108.9	118.4
Real effective exchange rate index (Year 2000 = 100)	-	156.2	149.5	115.5	104.7	109.3	80.4	73.3	75.2
Consumer prices inflation (Annual %)	-	-	16.3	32.8	22.7	14.7	9.6	11.4	15.4
Money and quasi money (M2) as % of GDP	16.6	19.8	20.0	16.6	16.7	17.2	18.6	19.9	20.5
Money and quasi money growth (Annual %)	13.3	15.9	18.1	35.7	23.7	22.6	27.5	29.7	16.2
Lending interest rate (%)	-	16.7	19.5	36.8	56.2	50.5	48.9	36.8	33.1
Real interest rate (%)	-	0.8	3.8	4.8	24.3	29.3	36.3	21.6	15.3
General government final consumption expenditure (% of GDP)	17.0	15.3	17.1	16.6	15.8	14.7	16.3	16.9	16.7
Household final consumption expenditure, etc. (% of GDP)	82.6	70.2	69.9	81.0	80.4	95.4	94.4	92.2	94.9
Final consumption expenditure, etc. (% of GDP)	99.7	85.6	87.1	97.5	96.2	110.1	110.7	109.1	111.6
Exports of goods and services (% of GDP)	22.0	26.3	23.6	25.3	28.0	24.3	27.2	26.8	26.8
Imports of goods and services (% of GDP)	36.0	39.0	29.8	39.6	39.1	45.8	49.7	51.2	53.0
Foreign direct investment, net inflows (% of GDP)	3.0	1.3	0.6	0.8	1.1	0.3	0.2	0.0	0.1
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	..	..	..	..	..
Gross domestic savings (% of GDP)	0.3	14.4	12.9	2.5	3.8	-10.1	-10.7	-9.1	-11.6
Gross capital formation (% of GDP)	14.4	27.1	19.2	16.7	14.9	11.4	11.8	15.3	14.5
Food exports (% of merchandise exports)	84.7	88.0	91.4	86.6	85.1	85.1	86.3	78.3	79.5
Food imports (% of merchandise imports)	16.1	9.8	8.2	12.2	11.6	23.5	17.3	17.4	18.2
Agricultural raw materials exports (% of merchandise exports)	5.2	2.6	1.3	2.7	2.4	2.8	2.0	5.6	3.8
Agricultural raw materials imports (% of merchandise imports)	1.1	0.9	1.1	0.9	1.7	1.1	1.3	1.1	1.0
Ores and metals exports (% of merchandise exports)	0.2	0.1	0.1	0.1	0.3	0.3	0.1	0.3	0.2
Ores and metals imports (% of merchandise imports)	1.3	1.5	1.4	1.0	0.5	0.9	0.9	1.1	0.8
Fuel exports (% of merchandise exports)	2.7	0.8	0.0	0.2	0.1	0.0	0.1	0.3	0.0
Fuel imports (% of merchandise imports)	5.4	11.6	14.8	11.4	16.7	11.1	11.5	11.8	10.5
Manufactures exports (% of merchandise exports)	5.7	7.6	6.9	10.4	12.1	11.8	11.5	15.4	16.3
Manufactures imports (% of merchandise imports)	73.7	75.6	73.9	74.4	69.3	63.4	68.6	68.4	68.3
Aid per capita (Current US$)	6.7	12.9	30.0	45.4	34.2	31.2	41.9	39.8	44.7
Poverty gap at $1 a day (PPP) (%)	-	-	-	-	..	..	..	4.7	..
Total debt service (% of exports of goods, services and income)	-	18.8	35.3	19.2	9.4	7.6	..	..	..
Total reserves in months of imports	-	2.2	1.7	2.4	3.6	2.4	..	..	..

Source: The World Bank. 2007. World Development Indicators: 2007.

(5) Mozambique

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.5Map of Mozambique

Vasco da Gama reached Mozambique in 1498 and it was colonized by Portugal in 1629. The Zambezi River runs from east to west in central Mozambique. In 1962, the Front for the Liberation of Mozambique (FRELIMO) began fighting for independence. The country won independence in September 1975 and President Samora Machel established a socialist regime. Later in the early 1980s, the Rebel Mozambique National Resistance (RENAMO) conducted rebel activities, supported by South Africa, and the conflict intensified. Although the policies and systems of the former regime were maintained after President Joaquim Chissano assumed presidency in 1986, the FRELOMO abandoned the socialist regime and introduced a multiparty political system in July 1989. It signed a comprehensive peace agreement with the RENOMO after peace negotiations led by the U.N. and the civil war ended in 1992. During those years, its economy was stagnant for a long time, because the situation was combined with exodus of white immigrants, economic immigration to South Africa and severe droughts. In 1994 after the conclusion of the peace agreement, President Chissano won the presidential election. (He was reelected in 1999.) In February 2004, Luisa Diogo was named Prime Minister, a female prime minister. In February 2005, the FRELIMO Chairman Armando Guebuza was inaugurated as the President of Mozambique and he has since held the office.

Although Mozambique had already been one of the poorest nations in the world since its independence in 1975, failure of the socialist regime and the civil war from 1977 to 1992

worsened the situation. However, after 1987, the government tried to stabilize the economy and implemented a series of macroeconomic reforms. After 1994, political and economic reforms advanced thanks to the support from donor countries and stabilization of the government. The real GDP growth rate exceeded ten percent in 2001, since which time it has been over seven percent. According to the IMF's WEO, the real GDP growth rate in 2006 was 8.5 percent and 7.0 percent in 2007 and 2008. The inflation rate, which has been a concern, has been below 10 percent since 2005. Fiscal reforms are also in progress, mainly through the introduction of added-value tax and reform of customs duty services. State-run enterprises have been privatized and the finance is well-balanced[3]. However, the country still depends heavily on foreign aids for its revenues and a large portion of the population is still under the poverty line. The majority of labor force is engaged in subsistence agriculture, while on the other hand the aluminum refining project and such traffic infrastructure construction projects as the Maputo Corridor project and the Beira Corridor project have been in progress. Mozambique has such natural resources as coal, tantalite, nickel, bauxite, natural gas and black lead. In July 2006, the currency was denominated at the rate of one to one thousand with a transition period of until the end of the year. At the end of 2007, the government purchased the majority of shares of Cahora Bassa Hydroelectricity (HCB) that had been held by Portugal. Because of the lasting civil war and unpaid debts, the dam was not transferred to Mozambique when it became independent. Investment projects for titanium extraction and processing and apparel manufacturing are needed in order to offset the trade imbalance. Mozambique is working aggressively to attract further foreign investment as it benefits from the AGOA, Cotonou agreement and the SADC. The country reached the Completion Point under the HIPCs initiative.

[3] A total of some 12,000 state-run enterprises, including banks, have been privatized.

Table 2.1.5 Major Social and Economic Indicators (Mozambique)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	8.5	10.8	13.1	16.0	18.3	18.7	19.1	19.4	19.8
Population growth (Annual %)	2.1	2.5	1.1	2.9	2.1	2.1	2.0	1.9	1.9
Population ages 0-14 (% of total)	42.6	43.7	45.0	44.8	44.2	44.2	44.1	44.1	44.0
Population ages 15-64 (% of total)	54.5	53.3	51.9	52.1	52.6	52.6	52.6	52.6	52.7
Population ages 65 and above (% of total)	2.9	3.0	3.1	3.2	3.2	3.3	3.3	3.3	3.3
Urban population (% of total)	4.8	9.4	17.4	26.5	31.5	32.2	33.0	33.7	34.5
Urban population growth (Annual %)	6.6	10.6	5.9	6.6	4.6	4.4	4.3	4.2	4.1
Population density (People per square kilometer)	10.9	13.7	16.6	20.4	23.3	23.8	24.3	24.8	25.2
GDP growth (Annual %)	-	-	0.5	5.3	13.1	8.2	7.9	7.5	7.7
GDP per capita (Constant 2000 US$)	-	186.4	155.0	178.6	233.5	247.4	261.7	276.0	291.7
GDP per capita, PPP (Constant 2000 international $)	-	706.1	587.2	676.6	884.9	937.6	991.7	1,045.6	1,105.2
Agriculture, value added (% of GDP)	-	37.1	39.7	35.5	24.3	24.4	24.4	23.3	22.3
Industry, value added (% of GDP)	-	34.4	23.2	18.9	27.8	26.3	28.0	29.2	29.8
Manufacturing, value added (% of GDP)	-	-	10.2	10.8	15.0	13.2	13.9	14.8	14.2
Food, beverages and tobacco (% of value added in manufacturing)	49.1	47.3	-	-	..	..	75.3	51.6	..
Textiles and clothing (% of value added in manufacturing)	14.9	12.9	-	-	..	..	18.9	10.4	..
Chemicals (% of value added in manufacturing)	2.8	4.9	-	-	..	..	4.2	4.3	..
Machinery and transport equipment (% of value added in manufacturing)	6.8	5.5	-	-	..	..	7.6	6.1	..
Other manufacturing (% of value added in manufacturing)	26.5	29.4	-	-	..	..	-6.0	27.6	..
Services, etc., value added (% of GDP)	-	28.5	37.2	45.5	47.9	49.2	47.6	47.5	47.9
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	28.8	12.3	0.3	8.6	20.7	23.7	23.8	22.6	23.1
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	-	-	45.8	31.1	9.1	16.8	13.4	12.7	7.2
Money and quasi money (M2) as % of GDP	-	-	1,033.2	22.1	25.8	25.7	26.3	24.7	25.9
Money and quasi money growth (Annual %)	-	-	18.3	41.1	20.2	31.5	11.4	8.8	31.0
Lending interest rate (%)	-	-	-	21.0	22.7	26.7	24.7	22.1	19.5
Real interest rate (%)	-	-	-	14.4	5.8	8.3	14.4	12.0	12.2
General government final consumption expenditure (% of GDP)	-	12.2	14.0	10.6	10.0	9.7	10.3	10.4	10.3
Household final consumption expenditure, etc. (% of GDP)	-	96.7	91.9	86.6	82.0	79.3	78.0	75.3	79.1
Final consumption expenditure, etc. (% of GDP)	-	108.9	105.9	97.3	92.0	89.0	88.3	85.7	89.3
Exports of goods and services (% of GDP)	-	10.9	6.5	14.5	27.2	29.0	28.2	30.9	32.6
Imports of goods and services (% of GDP)	-	27.4	26.0	38.1	45.0	47.8	44.0	39.2	42.3
Foreign direct investment, net inflows (% of GDP)	-	0.1	0.1	3.1	6.9	8.5	7.0	4.1	1.6
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross domestic savings (% of GDP)	-	-8.9	-5.9	2.7	8.0	11.0	11.7	14.3	10.7
Gross capital formation (% of GDP)	-	7.6	13.6	26.4	25.9	29.8	27.4	22.6	20.4
Food exports (% of merchandise exports)	-	-	-	61.4	22.9	19.1	..	..	11.7
Food imports (% of merchandise imports)	-	-	-	20.0	13.4	10.6	..	..	14.4
Agricultural raw materials exports (% of merchandise exports)	-	-	-	12.0	4.3	5.6	..	..	3.8
Agricultural raw materials imports (% of merchandise imports)	-	-	-	1.8	0.7	0.7	..	..	1.0
Ores and metals exports (% of merchandise exports)	-	-	-	4.9	54.9	54.8	..	..	58.1
Ores and metals imports (% of merchandise imports)	-	-	-	0.9	0.2	0.2	..	..	0.4
Fuel exports (% of merchandise exports)	-	-	-	9.9	9.5	16.4	..	..	15.0
Fuel imports (% of merchandise imports)	-	-	-	12.1	12.1	11.7	..	..	1.6
Manufactures exports (% of merchandise exports)	-	-	-	11.7	7.0	3.1	..	..	7.0
Manufactures imports (% of merchandise imports)	-	-	-	63.7	39.2	43.3	..	..	49.4
Aid per capita (Current US$)	0.4	5.1	37.2	67.1	50.9	117.8	54.4	64.1	65.0
Poverty gap at $1 a day (PPP) (%)	-	-	-	12.0	..	11.6	..	..	..
Total debt service (% of exports of goods, services and income)	-	-	29.0	23.7	8.4	6.3	5.9	4.5	4.2
Total reserves in months of imports	-	-	1.6	3.4	4.6	3.7	4.7	5.0	4.0

Source: The World Bank. 2007. World Development Indicators: 2007.

(6) Namibia

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.6 Map of Namibia

Namibia was colonized by the Netherlands in 1652. It became a German protectorate as South-West Africa in 1884. South Africa advanced into the country in 1914 during World War I, it became a South Africa's mandated territory of the League of Nations in 1920, and it was annexed by South Africa in 1949. Although the termination of mandatory ruling by South Africa was resolved at a UN General Assembly session in 1966, there was no progress. In 1978, South Africa held elections, ruling out the Marxist South-West Africa People's Organization (SWAPO). In 1988, South Africa agreed to end its rule under the condition that the Cuban military withdraw from Angola, and Namibia won independence in March 1990. Since its independence, the SWAPO has ruled the country. Hifikepunye Pohamba won a presidential election in November 2004 to succeed Sam Nujoma who led the country as president for three terms.

The economy depends heavily on mining, fisheries and tourism. According to the WEO, the real GDP growth rate in 2006 was 4.6 percent and is estimated to be 4.8 percent in 2007 and

4.6 percent in 2008. Per capita GDP in 2005 is 6,745 US dollars (PPP in international dollar price in 2000). Trade surplus has been posted since 2004. The current account has grown significantly. According to the WEO, the growth rates in 2006, 2007 and 2008 are 15.0 percent, 18.5 percent and 12.8 percent of the GDP, respectively.

Of major industries, three percent of working population is employed in mining, which generates about eight percent of GDP. More than 50 percent of foreign currency earnings depend on mining, of which diamonds with a big prospect is especially important. The country is the fifth biggest producer of uranium. It also produces copper, zinc, tin, silver and tungsten. About 50 percent of the population depends on subsistence agriculture to make a living. Namibia imports about 50% of its cereal demand and food shortage becomes a serious problem in rural areas in drought years. Imbalance of income between urban and rural areas is one of the biggest in the world.

The economy is closely linked to the South African economy as the Namibian dollar is pegged to the South African rand. Increased payments from the SACU turned Namibia's budget into surplus in 2007 for the first time since its independence. However, the payments began to decline in 2008 because of a new revenue sharing formula. Although increased fish meat production, mining of zinc and production of copper, uranium, and silver brought economic growth from 2003 to 2007, the sustainability of macroeconomic performance has been questioned because of decreasing fish catches, a major industry, and high costs of mineral mining.

Table 2.1.6 Major Social and Economic Indicators (Namibia)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	0.7	0.9	1.2	1.7	1.9	2.0	2.0	2.0	2.0
Population growth (Annual %)	2.5	2.5	3.5	3.0	1.9	1.6	1.3	1.2	1.1
Population ages 0-14 (% of total)	42.1	44.1	45.5	44.0	43.3	43.0	42.6	42.1	41.5
Population ages 15-64 (% of total)	54.3	52.4	51.0	52.6	53.4	53.6	54.0	54.4	55.0
Population ages 65 and above (% of total)	3.6	3.5	3.5	3.3	3.4	3.4	3.4	3.4	3.5
Urban population (% of total)	20.3	23.8	26.5	30.2	32.9	33.5	34.0	34.6	35.1
Urban population growth (Annual %)	4.7	3.6	4.5	4.6	3.5	3.2	2.9	2.7	2.6
Population density (People per square kilometer)	0.8	1.1	1.4	2.0	2.3	2.4	2.4	2.4	2.5
GDP growth (Annual %)	-	-	1.2	4.2	2.4	6.7	3.5	6.0	3.5
GDP per capita (Constant 2000 US$)	-	2,028.9	1,794.8	1,739.8	1,811.1	1,902.3	1,942.9	2,034.6	2,083.1
GDP per capita, PPP (Constant 2000 international $)	-	6,573.4	5,814.8	5,636.9	5,867.9	6,163.3	6,294.7	6,592.1	6,748.9
Agriculture, value added (% of GDP)	-	11.2	11.2	11.2	10.4	11.1	11.5	9.9	9.9
Industry, value added (% of GDP)	-	55.8	42.5	29.7	30.8	31.8	28.5	31.7	31.7
Manufacturing, value added (% of GDP)	-	9.2	12.0	12.3	10.5	11.1	12.4	13.5	13.5
Food, beverages and tobacco (% of value added in manufacturing)	-	-	-	76.6	..	..	..	..	..
Textiles and clothing (% of value added in manufacturing)	-	-	-	1.2	..	..	..	..	..
Chemicals (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	-	-	0.5	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	-	-	-	21.6	..	..	..	..	..
Services, etc., value added (% of GDP)	-	33.0	46.3	59.1	58.8	57.2	60.1	58.4	58.4
Employment in agriculture (% of total employment)	-	-	-	39.2	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	13.8	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	42.1	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.8	1.9	4.4	8.6	10.5	7.6	6.5	6.4
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	-	-	-	-	..	..	7.2	4.1	2.3
Money and quasi money (M2) as % of GDP	-	-	-	36.8	40.4	36.4	38.5	39.9	42.6
Money and quasi money growth (Annual %)	-	-	-	22.5	6.2	8.0	9.6	16.1	9.8
Lending interest rate (%)	-	-	-	19.1	14.5	13.8	14.7	11.4	10.6
Real interest rate (%)	-	-	-	8.4	0.4	2.2	15.4	8.2	8.4
General government final consumption expenditure (% of GDP)	-	17.4	29.2	30.8	28.4	26.4	26.5	24.5	23.4
Household final consumption expenditure, etc. (% of GDP)	-	44.2	62.0	56.9	54.6	55.8	47.3	48.7	49.8
Final consumption expenditure, etc. (% of GDP)	-	61.6	91.2	87.7	83.0	82.2	73.8	73.3	73.3
Exports of goods and services (% of GDP)	-	78.9	58.5	49.1	45.0	49.6	51.4	46.3	46.3
Imports of goods and services (% of GDP)	-	71.1	68.4	58.1	51.4	51.6	55.0	45.0	45.0
Foreign direct investment, net inflows (% of GDP)	-	-	-	-	..	..	..	..	..
Foreign direct investment, net outflows (% of GDP)	-	-	0.1	0.0	-0.4	-0.2	-0.2	-0.4	..
Gross domestic savings (% of GDP)	-	38.4	8.8	12.3	17.0	17.8	26.2	26.7	26.7
Gross capital formation (% of GDP)	-	30.6	18.7	21.2	23.4	19.7	29.8	25.5	25.5
Food exports (% of merchandise exports)	-	-	-	29.1	36.3	37.5	48.3	..	..
Food imports (% of merchandise imports)	-	-	-	16.8	13.1	12.5	14.9	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	1.0	0.9	1.0	1.3	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	0.7	0.6	1.3	0.7	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	11.1	9.4	10.9	7.3	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	0.9	1.8	2.3	3.6	..	..
Fuel exports (% of merchandise exports)	-	-	-	2.1	0.7	0.7	1.0	..	..
Fuel imports (% of merchandise imports)	-	-	-	3.1	10.3	12.1	10.4	..	..
Manufactures exports (% of merchandise exports)	-	-	-	55.8	51.7	49.2	40.9	..	..
Manufactures imports (% of merchandise imports)	-	-	-	78.0	73.8	71.4	69.4	..	..
Aid per capita (Current US$)	-	0.0	25.3	99.8	56.7	68.5	73.6	86.3	60.7
Poverty gap at $1 a day (PPP) (%)	-	-	-	14.0	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	-	-	-	..	..	..	..	..
Total reserves in months of imports	-	-	-	1.2	1.5	2.4	1.9	1.5	..

Source: The World Bank. 2007. World Development Indicators: 2007.

(7) South African Republic

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.7 Map of South African Republic

Jan van Riebeeck of the Dutch East India Company landed at the southern tip of present South Africa in 1652 and founded Cape Town to establish a stopover point for the spice trade between the Netherlands and the East, which was the beginning of white rule. After the U.K. occupied the Cape of Good Hope in 1806, many Dutch settlers (Afrikaners) trekked off to the north to establish their own republic. The discoveries of diamonds in 1867 and gold in 1886 increased wealth and immigration and intensified conquer of the indigenous people. Although Afrikaners resisted the British invasion, they were defeated in the 1st Boer War (1880-1881) and second Boer War (1899-1902). In 1910, the Union of South Africa was established as British Dominion. White rule with the major policy of apartheid (racial segregation) that justifies racial discrimination further advanced. In 1948, an Afrikaner party of the National Party took power and the Afrikaners and indigenous people established the apartheid policy for the separate development of the races under the Union of South Africa. The apartheid-centered regime that lasted over 40 years intensified black riots and anti-government movements. President F.W. de Klerk who took office in September 1989 released the ANC leader, Nelson Mandela, who had been in captivity for 27 years, and implemented reform to legalize the ANC. Democratization accelerated and the

establishment of a new constitution continued after December 1991. The first multi-racial elections were held in April 1994 and Nelson Mandela was inaugurated as president in May. In May 1996, the Parliament adopted a new constitution that focuses on the equality of all races and President Mandela signed it in following December.

South Africa is a middle income nation. Per capita GDP in 2005 was 9,885 US dollars (PPP international dollar price in 2000). The economy continues to grow. According to the WEO, the real GDP growth rates in 2006, 2007 and 2008 are 5.0 percent, 4.7 percent and 4.2 percent, respectively. It has abundant natural resources including gold, diamonds, chromium, nickel and vanadium. Its financial, legal, communications, energy, and transport sectors are well-developed, with the securities dealing ranked in the top 10 in the world. Combined with the preferential policy, the auto industry has grown to be one of the major industries of the country. Important infrastructure has been built to create a good investment climate, enabling an efficient distribution of goods and people to major urban cities from every region. However, economic growth is not significant enough to lower the high unemployment and the poor yet to acquire economic opportunities. The government promotes the Black Economic Empowerment (BEE) policy to create economic opportunities for the black people. Strains resulting from economic growth have emerged in various phases. Especially the power shortage in January 2008 significantly deteriorated macroeconomic performance and adversely affected the major industry of mining severely, which casts a shadow on sustainable economic growth and World Cup to be held in 2010 in the country.

Table 2.1.7 Major Social and Economic Indicators (South African Republic)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	20.0	25.0	31.7	39.7	44.8	45.3	45.8	46.4	46.9
Population growth (Annual %)	2.4	2.2	2.4	2.2	1.8	1.1	1.1	1.1	1.1
Population ages 0-14 (% of total)	42.1	42.1	40.2	35.6	33.3	33.1	32.9	32.8	32.6
Population ages 15-64 (% of total)	54.2	54.7	56.7	61.1	63.0	63.1	63.1	63.1	63.2
Population ages 65 and above (% of total)	3.8	3.2	3.1	3.3	3.7	3.9	4.0	4.1	4.2
Urban population (% of total)	47.3	48.1	50.0	54.7	57.4	57.9	58.3	58.8	59.3
Urban population growth (Annual %)	2.6	2.3	3.2	3.1	2.7	2.0	2.0	2.0	1.9
Population density (People per square kilometer)	16.5	20.6	26.1	32.7	36.9	37.3	37.7	38.2	38.6
GDP growth (Annual %)	6.0	3.4	1.5	1.8	2.7	3.7	3.0	4.5	4.9
GDP per capita (Constant 2000 US$)	2,682.8	3,279.6	3,293.3	2,979.9	3,046.3	3,123.1	3,179.9	3,284.6	3,405.9
GDP per capita, PPP (Constant 2000 international $)	-	9,646.9	9,557.7	8,648.3	8,841.0	9,064.0	9,228.6	9,532.6	9,884.5
Agriculture, value added (% of GDP)	9.6	7.2	5.3	4.0	3.5	4.2	3.6	3.1	2.5
Industry, value added (% of GDP)	38.4	41.4	42.9	34.1	32.3	33.1	31.7	30.8	30.3
Manufacturing, value added (% of GDP)	22.0	21.7	23.0	20.5	19.1	19.7	19.4	19.1	18.6
Food, beverages and tobacco (% of value added in manufacturing)	16.1	14.1	13.7	15.0	17.2	..	15.6	..	..
Textiles and clothing (% of value added in manufacturing)	13.2	10.5	8.1	6.7	13.3	..	13.1	..	..
Chemicals (% of value added in manufacturing)	9.3	9.1	11.3	9.9	9.2	..	8.8	..	..
Machinery and transport equipment (% of value added in manufacturing)	16.3	19.5	18.7	17.4	14.5	..	17.2	..	..
Other manufacturing (% of value added in manufacturing)	45.0	46.8	48.2	51.0	45.8	..	45.3	..	..
Services, etc., value added (% of GDP)	52.0	51.4	51.8	61.9	64.2	62.8	64.8	66.1	67.1
Employment in agriculture (% of total employment)	-	-	-	12.7	9.7	12.2	10.3	..	..
Employment in industry (% of total employment)	-	-	-	24.6	25.7	25.2	24.5	..	..
Employment in services (% of total employment)	-	-	-	60.9	64.4	62.4	65.1	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.8	1.9	4.4	8.6	10.5	7.6	6.5	6.4
Real effective exchange rate index (Year 2000 = 100)	-	136.0	137.6	118.9	87.7	73.9	97.3	107.6	108.5
Consumer prices inflation (Annual %)	2.8	10.6	14.7	9.0	5.7	9.2	5.9	1.4	3.4
Money and quasi money (M2) as % of GDP	57.5	55.2	50.2	49.5	53.0	51.6	53.5	54.1	56.4
Money and quasi money growth (Annual %)	10.2	16.0	16.7	12.4	16.6	7.6	14.8	8.8	19.9
Lending interest rate (%)	7.2	10.4	17.7	18.3	13.8	15.8	15.0	11.3	10.6
Real interest rate (%)	3.9	-2.6	2.5	7.3	5.7	4.7	10.1	5.4	5.6
General government final consumption expenditure (% of GDP)	11.5	14.3	17.9	19.2	18.3	18.4	19.3	19.7	20.2
Household final consumption expenditure, etc. (% of GDP)	62.6	55.2	55.1	61.8	62.6	61.3	59.0	63.4	63.1
Final consumption expenditure, etc. (% of GDP)	74.1	69.5	73.0	81.0	80.8	79.8	78.3	83.1	83.2
Exports of goods and services (% of GDP)	26.8	28.9	27.7	23.9	30.0	32.7	27.9	26.6	27.1
Imports of goods and services (% of GDP)	24.1	26.3	22.9	21.3	26.1	28.5	23.2	27.3	28.6
Foreign direct investment, net inflows (% of GDP)	1.9	0.3	0.0	0.7	6.1	0.7	0.5	0.3	2.6
Foreign direct investment, net outflows (% of GDP)	0.0	0.0	0.0	0.9	-3.0	-0.4	0.3	0.7	0.4
Gross domestic savings (% of GDP)	25.9	30.5	27.0	19.0	19.2	20.3	21.7	16.9	16.8
Gross capital formation (% of GDP)	23.4	27.9	22.2	16.5	15.3	16.1	16.9	17.6	18.2
Food exports (% of merchandise exports)	-	19.8	7.8	9.2	8.4	10.6	9.9	8.7	8.5
Food imports (% of merchandise imports)	-	4.9	5.5	6.1	4.6	5.0	5.0	5.0	4.4
Agricultural raw materials exports (% of merchandise exports)	-	6.4	3.4	3.5	2.4	3.1	2.8	2.2	2.0
Agricultural raw materials imports (% of merchandise imports)	-	3.5	2.3	1.9	1.4	1.5	1.4	1.3	1.1
Ores and metals exports (% of merchandise exports)	-	14.7	7.9	10.2	9.3	11.3	19.2	22.0	22.4
Ores and metals imports (% of merchandise imports)	-	2.6	1.9	1.5	1.1	1.7	2.0	2.0	1.8
Fuel exports (% of merchandise exports)	-	3.5	6.5	8.1	8.2	12.3	9.8	9.0	10.3
Fuel imports (% of merchandise imports)	-	0.4	0.4	7.1	15.5	12.5	11.9	14.5	14.3
Manufactures exports (% of merchandise exports)	-	31.6	18.5	46.6	59.4	62.6	58.2	57.1	56.7
Manufactures imports (% of merchandise imports)	-	83.5	69.4	75.3	68.4	70.4	70.3	68.8	69.6
Aid per capita (Current US$)	-	-	-	10.2	9.5	11.1	14.0	13.6	14.9
Poverty gap at $1 a day (PPP) (%)	-	-	-	1.2	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	-	-	11.7	11.4	12.1	8.7	6.3	6.9
Total reserves in months of imports	3.3	3.0	1.5	1.6	2.5	2.5	1.9	2.7	3.2

Source: The World Bank. 2007. World Development Indicators: 2007.

(8) Swaziland

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.8 Map of Swaziland

The U.K. guaranteed autonomy for the Swazis of southern Africa in the late 19th century. Swaziland became a British protectorate in 1903 and became independent as a kingdom within the Commonwealth of Nations in September 1968. The country was ruled by King Mswati III (who took over the throne in April 1986) in the 1990s, being the world's last absolute monarch[4]. As resistance against such tyranny, the People's United Democratic Movement (PUDEMO) criticized the monarchy and demanded a constitutional amendment in the early 1990s. General elections were held in 1993 for the first time in 20 years. The constitution committee (15 members) appointed by the King began drafting a new constitution in March 2002, general elections were held in October 2003, the Parliament passed the draft unanimously in June 2005, and a new constitution was established in 2006. However, formation of political parties is still prohibited; the African United Democratic Party tried unsuccessfully to register itself as an official political party in mid 2006. The

[4] The king, head of the state, is succeeded by heredity under the current constitution. The Swazi National Council (Libangla) comprising the king and his relatives has executive and legislative power and provides advice on the decisions of traditional and custom-related issues.

HIV/AIDS infection rate of Swaziland has exceeded the world's highest rate of Botswana.

Swaziland is a small landlocked country covering an area of 17,000 square kilometers with a population of slightly over one million. Per capita GDP is 4,292 US dollars (PPP international dollar price in 2000). According to the WEO, the real GDP growth rates are 2.1 percent in 2006 and 1.0 percent in 2007 and 2008. Over 80 percent of working population depends reportedly on subsistence agriculture. Although manufacturing has been diversified since the mid-1980s, sugar and wood pulp remain to be important exports for foreign currency earnings. Mining has been on a decline trend recently, but coal and quarry stone mines still remain active. Surrounded by South Africa, except for part of the border with Mozambique, Swaziland, the country depends heavily on South Africa from which it receives over 90 percent of its imports and to which it sends 60% of its exports. The Swazi currency is pegged to the South African rand. Customs duties from the SACU, which account for 70% of the government's revenues, and money sent from migrant worker in South Africa are the main sources of foreign currency earnings. However, the ratio of foreign currency reserves to monthly import was 1.3 in 2005. Although Swaziland is not poor enough to be qualified for IMF programs, the country is trying to cut the number of government workers and reduce the costs of public enterprises, while working to improve the environment for foreign investment. The nation has to tackle the problems of overgrazing, soil depletion, drought, and floods. More than a quarter of the population needed emergency food aid in 2004 and 2005 because of drought. About 40 percent of adult population are said to be infected with HIV/AIDS.

Table 2.1.8 Major Social and Economic Indicators (Swaziland)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	0.4	0.5	0.7	0.9	1.1	1.1	1.1	1.1	1.1
Population growth (Annual %)	2.5	3.0	3.1	3.1	2.2	1.9	1.6	1.3	1.0
Population ages 0-14 (% of total)	47.1	48.4	48.3	45.8	43.3	42.7	42.2	41.6	41.0
Population ages 15-64 (% of total)	50.3	48.9	49.0	51.4	53.6	54.0	54.5	55.0	55.5
Population ages 65 and above (% of total)	2.7	2.6	2.7	2.8	3.1	3.2	3.3	3.4	3.5
Urban population (% of total)	6.9	14.3	21.3	23.1	23.5	23.6	23.8	23.9	24.1
Urban population growth (Annual %)	11.6	9.1	5.6	3.2	2.9	2.6	2.3	2.0	1.7
Population density (People per square kilometer)	21.8	28.7	39.1	53.3	62.1	63.3	64.3	65.1	65.8
GDP growth (Annual %)	-	6.4	6.4	3.1	1.8	2.9	2.4	2.1	1.8
GDP per capita (Constant 2000 US$)	723.0	901.8	1,069.4	1,317.3	1,323.7	1,336.7	1,347.3	1,358.0	1,368.9
GDP per capita, PPP (Constant 2000 international $)	-	2,940.9	3,353.1	4,130.3	4,150.2	4,191.2	4,224.4	4,258.0	4,291.9
Agriculture, value added (% of GDP)	33.5	33.1	18.6	15.6	13.7	13.7	12.3	11.5	11.5
Industry, value added (% of GDP)	32.3	32.1	33.5	42.8	46.4	46.5	46.9	47.6	47.6
Manufacturing, value added (% of GDP)	12.1	22.2	25.1	35.2	38.0	37.9	38.4	36.9	36.9
Food, beverages and tobacco (% of value added in manufacturing)	45.9	42.9	57.1	54.8	45.5	..	37.4	42.1	..
Textiles and clothing (% of value added in manufacturing)	2.1	2.3	4.4	3.7	1.8	..	2.2	2.3	..
Chemicals (% of value added in manufacturing)	-	-	-	0.0	..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	1.9	1.2	-	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	52.0	54.6	37.3	87.1	52.8	..	60.3	55.6	..
Services, etc., value added (% of GDP)	35.9	34.8	47.9	41.6	39.9	39.8	40.8	40.9	40.9
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.8	1.9	4.4	8.6	10.5	7.6	6.5	6.4
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	2.7	11.9	14.4	9.5	5.9	12.0	7.3	3.4	4.8
Money and quasi money (M2) as % of GDP	-	23.7	29.3	25.8	20.1	19.4	19.2	18.8	19.1
Money and quasi money growth (Annual %)	-	30.9	17.5	12.7	9.7	13.2	14.4	7.0	9.7
Lending interest rate (%)	-	9.8	15.4	16.7	13.3	15.3	14.6	11.3	10.6
Real interest rate (%)	-	-1.1	3.9	4.2	2.4	2.4	2.2	0.8	5.5
General government final consumption expenditure (% of GDP)	19.3	18.9	19.7	23.2	17.7	18.6	18.6	21.0	27.6
Household final consumption expenditure, etc. (% of GDP)	49.4	54.8	76.0	75.0	79.2	61.9	63.8	64.9	61.1
Final consumption expenditure, etc. (% of GDP)	68.3	73.7	95.7	98.2	96.9	80.5	82.4	85.9	88.6
Exports of goods and services (% of GDP)	62.6	70.1	70.2	75.5	91.8	94.9	86.1	93.6	88.3
Imports of goods and services (% of GDP)	57.8	72.2	91.0	94.9	107.1	95.2	86.4	97.0	95.4
Foreign direct investment, net inflows (% of GDP)	-	4.5	4.4	6.0	2.3	7.5	-3.2	2.8	-0.6
Foreign direct investment, net outflows (% of GDP)	-	0.2	0.9	1.8	-1.4	0.0	0.5	0.1	-0.9
Gross domestic savings (% of GDP)	31.7	26.3	4.3	1.8	3.1	19.5	17.6	14.1	11.4
Gross capital formation (% of GDP)	26.6	28.4	25.0	21.2	18.4	19.8	18.0	17.4	18.5
Food exports (% of merchandise exports)	-	-	-	33.6	39.3	14.6	..	..	..
Food imports (% of merchandise imports)	-	-	-	18.7	19.4	18.2	..	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	10.7	12.2	7.8	..	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	2.3	2.9	2.2	..	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	0.4	0.5	0.2	..	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	0.8	1.2	1.0	..	..	..
Fuel exports (% of merchandise exports)	-	-	-	0.7	0.9	0.7	..	..	..
Fuel imports (% of merchandise imports)	-	-	-	12.6	11.4	12.6	..	..	..
Manufactures exports (% of merchandise exports)	-	-	-	54.4	46.8	76.4	..	..	..
Manufactures imports (% of merchandise imports)	-	-	-	64.3	64.4	64.4	..	..	..
Aid per capita (Current US$)	25.6	44.4	51.1	47.1	27.3	20.3	31.0	19.6	40.7
Poverty gap at $1 a day (PPP) (%)	-	-	-	2.5	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	2.1	6.6	2.6	1.9	1.5	1.3	2.0	1.9
Total reserves in months of imports	-	3.2	2.4	2.8	2.3	2.6	1.7	1.6	1.3

Source: The World Bank. 2007. World Development Indicators: 2007.

(9) Tanzania

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.9 Map of Tanzania

The United Republic of Tanzania comprises Tanganyika in the mainland Africa and Zanzibar off the coast in the Indian Ocean. Situated in the northwest near the border of Kenya is Mt. Kilimanjaro, the highest mountain in Africa (5,895 meters above the sea level). Although the mainland area became a German colony in 1884, it became a British mandate and a trust territory after World War I. It became independent as Tanganyika in December 1961 and became a republic in January 1962. The offshore archipelago became a British protectorate in 1890, until which it had been under Oman ruling. It became independent as Zanzibar in December 1963 and became a people's republic in January 1964. In April, the United Republic of Tanzania was formed under the agreement between the presidents of the two nations[5]. One-party rule by Chama Cha Mapinduzi (CCM, revolutionary state party in English) ended in 1995 and democratic elections were held for the first time since the 1970s. The ruling party CCM won in the presidential election and Benjamin William Mkapa was sworn in as president. He was reelected in 2000. CMM's Jakaya Kikwete won the presidential election in 2005 and he has since stayed in office. Although Dodoma is the legal capital, Dar es Salaam functions as capital.

Tanzania is one of the poorest nations in the world. Per capita GDP in 2005 is 662 US dollars (PPP international dollar price in 2000). According to the WEO, the real GDP growth rate

[5] The two areas are independent from each other economically. The discovery of oil deposits in commercial exploration in water off Pemba activated arguments on whether they should be controlled by Zanzibar or the united republic.

has been over 5.0 percent, at 6.2 percent in 2006, 7.1 percent in 2007 and 7.5 percent in 2008. The economy depends heavily on agriculture, which accounts for more than 40% of GDP, 85% of exports, and 80% of employment, although its topography and climatic conditions limit the cultivated area to only 4% of the surface area. Major industries are processing of agricultural products and manufacturing of light consumer goods traditionally. It yields such natural resources as tin, iron and gold. The national government intends to increase the added value of mining to 10 percent of GDP by 2025. It is the third biggest gold producer in Africa. Tourism is growing rapidly, accounting for about 15 percent of GDP. Productivity of Dar es Salaam Port has drawn attention recently. Some argue that the productivity has exceeded that of Mombaa Port in Kenya after it was privatized. It has a potential of being in charge of distribution of goods of the six inland countries (Burundi, DRC, Malawi, Rwanda, Uganda and Zambia).

The Tanzanian government has been implementing economic reform (liberalization of agricultural policy, privatization of state-owned enterprises, liberalization of exchange rate policy, etc.) since 1986. The macroeconomic performance has grown rapidly since 2000, as explained above. Recent banking reform has helped the growth of the private sector and investment. It's not an exaggeration to say that donor assistance and stable macroeconomic policies enabled the recent favorable macroeconomic performance. Rehabilitation of decrepit economic infrastructure and utilization of funds for the alleviation of poverty not only by such multilateral donors as the IMF and the World Bank but bilateral donors are the key to sustainable growth in the future. Tanzania reached the Completion Point of the HIPCs initiative.

Table 2.1.9 Major Social and Economic Indicators (Tanzania)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	11.9	16.4	22.7	31.2	35.5	36.2	36.9	37.6	38.3
Population growth (Annual %)	3.1	3.3	3.3	2.8	2.1	2.0	2.0	1.9	1.8
Population ages 0-14 (% of total)	45.7	46.1	45.9	44.8	43.8	43.5	43.2	42.9	42.6
Population ages 15-64 (% of total)	51.9	51.3	51.4	52.3	53.1	53.4	53.6	53.9	54.2
Population ages 65 and above (% of total)	2.4	2.5	2.7	2.9	3.1	3.1	3.2	3.2	3.2
Urban population (% of total)	6.4	11.5	17.0	20.7	22.7	23.1	23.4	23.8	24.2
Urban population growth (Annual %)	7.2	9.4	5.9	4.5	3.7	3.7	3.6	3.5	3.4
Population density (People per square kilometer)	13.4	18.5	25.7	35.3	40.2	41.0	41.8	42.6	43.4
GDP growth (Annual %)	-	-	5.4	2.9	6.2	7.2	7.1	6.7	7.0
GDP per capita (Constant 2000 US$)	-	-	253.1	248.4	271.8	285.7	300.1	314.2	329.9
GDP per capita, PPP (Constant 2000 international $)	-	-	507.9	498.5	545.6	573.5	602.4	630.6	662.2
Agriculture, value added (% of GDP)	-	-	46.0	46.6	44.7	44.7	45.0	46.2	44.5
Industry, value added (% of GDP)	-	-	17.7	15.3	15.9	16.2	16.6	16.7	17.8
Manufacturing, value added (% of GDP)	-	-	9.3	7.6	7.4	7.3	7.2	7.0	7.5
Food, beverages and tobacco (% of value added in manufacturing)	39.3	30.4	31.7	44.1	..	41.9	39.3	34.4	..
Textiles and clothing (% of value added in manufacturing)	24.3	27.2	19.6	-3.0	..	26.8	23.4	24.7	..
Chemicals (% of value added in manufacturing)	4.5	5.3	9.2	7.1	..	2.9	4.9	5.3	..
Machinery and transport equipment (% of value added in manufacturing)	3.5	7.5	8.3	6.5	..	2.6	3.3	2.7	..
Other manufacturing (% of value added in manufacturing)	28.3	29.5	31.2	45.4	..	25.8	29.1	32.9	..
Services, etc., value added (% of GDP)	-	-	36.4	38.0	39.4	39.2	38.4	37.1	37.6
Employment in agriculture (% of total employment)	-	-	-	84.2	82.1	..	..	..	..
Employment in industry (% of total employment)	-	-	-	4.1	2.6	..	..	..	..
Employment in services (% of total employment)	-	-	-	11.7	15.3	..	..	..	..
Official exchange rate (Local currency per US$, period average)	7.1	7.7	59.6	540.8	876.4	966.6	1,038.4	1,089.3	1,128.9
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	11.5	13.7	30.6	20.1	5.1	1.0	3.5	0.0	8.6
Money and quasi money (M2) as % of GDP	-	-	16.1	19.3	18.3	19.5	20.8	21.2	24.8
Money and quasi money growth (Annual %)	65.9	23.2	25.6	24.4	17.1	25.1	16.6	19.2	38.2
Lending interest rate (%)	-	9.8	18.8	29.9	20.3	16.4	14.5	13.9	15.1
Real interest rate (%)	-	-	8.6	8.9	12.2	9.4	8.4	5.4	11.0
General government final consumption expenditure (% of GDP)	-	-	17.8	13.1	9.3	9.6	11.4	12.8	13.6
Household final consumption expenditure, etc. (% of GDP)	-	-	80.9	84.7	82.1	78.8	79.0	78.7	76.8
Final consumption expenditure, etc. (% of GDP)	-	-	98.7	97.8	91.4	88.4	90.5	91.5	90.3
Exports of goods and services (% of GDP)	-	-	12.6	15.8	16.3	17.1	18.3	17.8	17.1
Imports of goods and services (% of GDP)	-	-	37.5	33.7	24.7	24.6	27.4	27.7	26.3
Foreign direct investment, net inflows (% of GDP)	-	-	0.1	2.2	4.9	4.4	5.1	4.2	3.9
Foreign direct investment, net outflows (% of GDP)	-	-	0.0	0.0	0.0	0.0	..	..	0.0
Gross domestic savings (% of GDP)	-	-	1.3	2.2	8.6	11.6	9.5	8.5	9.7
Gross capital formation (% of GDP)	-	-	26.1	20.2	17.0	19.1	18.6	18.4	18.9
Food exports (% of merchandise exports)	-	61.8	65.1	66.6	61.1	61.3	59.0	52.7	56.7
Food imports (% of merchandise imports)	-	9.7	10.7	15.5	15.2	13.8	13.2	15.0	11.9
Agricultural raw materials exports (% of merchandise exports)	-	19.6	21.7	15.3	13.2	11.1	11.6	12.9	16.7
Agricultural raw materials imports (% of merchandise imports)	-	1.2	2.5	2.3	2.2	2.5	1.8	1.6	1.3
Ores and metals exports (% of merchandise exports)	-	1.6	2.5	0.7	8.8	12.5	9.2	12.0	11.7
Ores and metals imports (% of merchandise imports)	-	1.9	1.9	1.6	1.1	1.3	0.9	1.1	1.1
Fuel exports (% of merchandise exports)	-	3.6	0.2	0.6	0.2	0.1	2.0	2.2	0.2
Fuel imports (% of merchandise imports)	-	15.6	37.5	9.5	12.9	11.7	18.5	16.5	9.9
Manufactures exports (% of merchandise exports)	-	13.4	10.1	16.6	16.6	14.9	18.1	20.2	14.4
Manufactures imports (% of merchandise imports)	-	71.6	47.3	71.0	68.5	70.7	65.5	65.8	75.7
Aid per capita (Current US$)	3.3	17.2	33.2	32.4	35.7	34.0	46.2	46.8	39.3
Poverty gap at $1 a day (PPP) (%)	-	-	-	21.7	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	13.4	32.2	22.8	8.4	5.5	4.1	4.5	4.3
Total reserves in months of imports	-	1.5	0.4	2.6	5.7	7.8	8.4	7.7	6.0

Source: The World Bank. 2007. World Development Indicators: 2007

(10) Democratic Republic of the Congo (DRC)

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.10 Map of DRC

The Democratic Republic of the Congo that enjoyed prosperity from the 14th to 19th centuries as the Kingdom of Kongo became private property of the Belgian Kingdom that named it Congo Free State in 1885. It became a Belgian colony in 1908. After independence movements, it became independent in June 1960 as the Republic of the Congo. However, its political and social conditions were unstable from its independence. The country went through the Congo Crisis over three administrations backed by superpowers, 32-year-long dictatorship by President Joseph Mobutu, the change of the name of the country to Zaire, and frequent ethnic strives triggered by a massive inflow of refugees from fighting in Rwanda and Burundi in 1994. In May 1997, a riot led by Laurent Kabila and backed by Rwanda and Uganda began to make an attack to topple the Mobutu administration. In response, he renamed the country the Democratic Republic of the Congo (DRC). However, the attack continued and a second riot broke out backed by Rwanda and Uganda in August 1998. Troops from Angola, Chad, Namibia, Sudan, and Zimbabwe intervened to support the Kabila administration. In response, a ceasefire was agreed upon in July 1999 by the DRC, Congolese armed rebel groups, Angola, Namibia, Rwanda, Uganda, and Zimbabwe. However, fighting continued sporadically. Kabila was assassinated in January 2001 and his son, Joseph Kabila, became President. In October 2002, the new president successfully negotiated the withdrawal of the Rwandan army that was occupying eastern Congo. Two months later, the Pretoria Accord was signed by all warring parties to end the conflict and realize national unity. A transitional government was set up in 2003. Joseph Kabila became

President and four vice presidents represented the former government, former rebel groups, the political opposition forces and civilian society. The transitional government held a constitutional referendum in December 2005. It also held a presidential election and established the National Assembly and local assemblies in 2006. Kabila was inaugurated as president in December 2006. The National Assembly was introduced in September 2006 and Vital Kamerhe was chosen as its chairman in December. Local assemblies were set up in early 2007, and governors and senators were elected in January. Conflicts and starvation and illnesses caused by the conflicts after 1998 claimed more than three million lives.

The DRC is endowed with vast and potential resources. Its economy is on a slow recovery trend from the past decline. The country has excellent water systems with abundant tropical rainforests extending around the river basin. The land faces the Atlantic and shares the border with the Republic of the Congo, Central African Republic, Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia and Angola. According to the WEO, the real GDP growth rates in 2006, 2007 and 2008 are 5.1 percent, 6.5 percent and 8.4 percent, respectively. The nation has the largest amount of resources in Africa. It has rich production of copper, cobalt, diamonds, zinc and oil, with mining yielding about 20 percent of GDP. Minerals such as copper, cobalt and diamonds (for industrial use) account for 90 percent of exports. As the Equator runs through the nation, the north and south of the Equator have the dry and wet seasons in the opposite season. The distribution system was destroyed by the long-lasted conflicts and the barter trade is widespread. However, about 50 percent of GDP is dependent on agricultural production. No one disagrees that the country has a big potential in mining and agriculture.

The transitional government resumed dealings with international financial institutions and donors. President Kabila began implementing reforms, although progress is slow and the IMF downsized their program for the DRC at the end of March 2006 because of fiscal overruns. Although economic activities began in the informal sector, they are not reflected in statistics. Unclear legal systems and corruption still remain, and thus improvement in governance and security are called for. The country reached the Decision Point of the HIPCs initiative.

Table 2.1.10 Major Social and Economic Indicators (DRC)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	18.0	24.4	33.0	45.1	51.3	52.7	54.2	55.9	57.5
Population growth (Annual %)	2.8	3.1	3.0	2.8	2.5	2.7	2.9	2.9	3.0
Population ages 0-14 (% of total)	44.5	45.7	46.7	47.1	47.1	47.1	47.2	47.2	47.3
Population ages 15-64 (% of total)	52.6	51.5	50.5	50.2	50.2	50.2	50.2	50.1	50.1
Population ages 65 and above (% of total)	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7
Urban population (% of total)	26.6	29.4	28.1	28.7	30.3	30.7	31.2	31.6	32.1
Urban population growth (Annual %)	5.9	2.6	2.7	3.5	4.0	4.2	4.3	4.4	4.4
Population density (People per square kilometer)	8.0	10.8	14.6	19.9	22.6	23.2	23.9	24.6	25.4
GDP growth (Annual %)	3.3	0.5	0.9	-5.5	-2.1	3.5	5.7	6.6	6.5
GDP per capita (Constant 2000 US$)	322.5	300.9	235.6	119.8	82.2	82.8	85.0	88.0	91.0
GDP per capita, PPP (Constant 2000 international $)	-	1,927.2	1,645.7	836.7	573.8	578.1	593.9	614.7	635.4
Agriculture, value added (% of GDP)	19.9	20.8	30.8	48.9	59.8	51.0	51.0	48.4	46.0
Industry, value added (% of GDP)	35.2	34.7	29.5	19.8	20.2	21.5	21.5	23.4	25.3
Manufacturing, value added (% of GDP)	-	15.2	11.9	6.3	4.9	5.4	5.4	5.3	5.5
Food, beverages and tobacco (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Textiles and clothing (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Chemicals (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	-	-	-	-	..	..	..	..	..
Services, etc., value added (% of GDP)	44.9	44.5	39.8	31.4	20.1	27.5	27.5	28.2	28.7
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.0	0.0	0.0	2.9	206.6	346.5	405.2	395.9	473.9
Real effective exchange rate index (Year 2000 = 100)	-	211.2	117.1	64.6	77.7	36.6	31.7	28.4	27.8
Consumer prices inflation (Annual %)	21.8	44.1	60.4	3,414.0	313.7	38.1	12.9	4.0	21.3
Money and quasi money (M2) as % of GDP	8.4	8.7	11.9	8.1	..	4.2	4.8	6.5	7.2
Money and quasi money growth (Annual %)	25.0	32.9	173.6	3,272.5	..	40.0	32.3	72.9	25.5
Lending interest rate (%)	-	-	-	198.9	167.9	66.8	..	..	..
Real interest rate (%)	-	-	-	-45.1	-44.6	26.4	..	..	..
General government final consumption expenditure (% of GDP)	10.9	10.5	9.3	9.5	6.0	5.5	6.3	8.2	8.3
Household final consumption expenditure, etc. (% of GDP)	78.8	76.9	79.8	82.2	90.6	90.4	88.7	87.9	85.2
Final consumption expenditure, etc. (% of GDP)	89.6	87.3	89.1	91.7	96.6	96.0	95.0	96.1	93.5
Exports of goods and services (% of GDP)	19.9	12.7	22.7	22.4	18.6	21.2	26.1	30.4	31.6
Imports of goods and services (% of GDP)	21.5	15.9	23.5	21.2	20.7	26.1	33.3	39.2	39.3
Foreign direct investment, net inflows (% of GDP)	0.1	0.4	0.3	2.3	1.6	2.5	5.7	10.2	5.7
Foreign direct investment, net outflows (% of GDP)	-	-	-	-	..	..	..	..	..
Gross domestic savings (% of GDP)	10.4	12.7	10.9	8.3	3.4	4.0	5.0	3.9	6.5
Gross capital formation (% of GDP)	12.4	15.9	11.6	7.1	5.4	8.9	12.2	12.7	14.2
Food exports (% of merchandise exports)	40.9	20.5	-	-	..	..	..	..	..
Food imports (% of merchandise imports)	20.2	18.7	20.6	-	..	..	..	..	..
Agricultural raw materials exports (% of merchandise exports)	17.3	4.5	-	-	..	..	..	..	..
Agricultural raw materials imports (% of merchandise imports)	2.0	1.4	1.8	-	..	..	..	..	..
Ores and metals exports (% of merchandise exports)	60.1	66.4	-	-	..	..	..	..	..
Ores and metals imports (% of merchandise imports)	1.2	1.3	1.2	-	..	..	..	..	..
Fuel exports (% of merchandise exports)	0.2	2.5	-	-	..	..	..	..	..
Fuel imports (% of merchandise imports)	7.3	8.4	13.4	-	..	..	..	..	..
Manufactures exports (% of merchandise exports)	11.1	5.2	-	-	..	..	..	..	..
Manufactures imports (% of merchandise imports)	69.0	69.3	62.2	-	..	..	..	..	..
Aid per capita (Current US$)	5.4	9.4	14.6	4.9	4.7	22.3	99.9	32.7	31.8
Poverty gap at $1 a day (PPP) (%)	-	-	-	-	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	-	-	-	..	..	..	..	..
Total reserves in months of imports	-	-	-	-	..	..	..	..	..

Source: The World Bank. 2007. World Development Indicators: 2007

(11) Zambia

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.11 Map of Zambia

British explorer David Livingstone made explorations into present-day Zambia in 1850. It was ruled by the U.K.-based South Africa Company as Northern Rhodesia in the 1880s and became a British protectorate in 1891. Mining developed through exploitation and immigration in the 1920s and 1930s. It became independent in October 1964 after active independence movements. The leader of the United National Independence Party (UNIP), Kenneth Kaunda, was inaugurated as president. A constitution that legalized the one-party rule by the UNIP was proclaimed in 1972. A multi-party system was approved in May 1990. The leader of the Movement for Multiparty Democracy (MMD), Frederick Chilub, won the presidential election in October 1991 and he was reelected in November 1996. Levy Mwanawasa of MMD was elected in the presidential election in December 2001. He was inaugurated in January 2002 and he condemned corruption of the previous regime. A full-scale investigation was carried out and former president Chiluba was arrested and indicted. President Mwanawasa was reelected in the presidential election in September 2006, which was regarded free and fair internationally. During the election campaign, one of his opponents said that he would establish diplomatic relations with Taiwan, while

Mwanawasa emphasized One China.

Zambia is a landlocked country in southeastern Africa sharing its borders with Angola, DRC, Malawi, Mozambique, Namibia, Tanzania and Zimbabwe. It is endowed with minerals such as copper, coal and cobalt. These minerals and metals account for 60 to 70 percent of exports. The copper prospect and output (capacity) are ranked in the top five in the world. It produces about 20 percent of emerald of the world output and jewelry (finished and semi-finished products) is one of major exports. About 80 percent of working population is employed in agriculture which generates 20 percent of GDP. Although it is mainly subsistence farming, exports of more profitable crops, tobacco and coffee, in particular, have been active in recent years. Many farmers have shifted to horticultural crops. The country promotes tourism actively and it exports electricity generated by hydropower.

Zambia's economy is growing. Its real GDP growth rate has been above five percent since 2003. According to the IMF's WEO, the growth rates in 2006, 2007 and 2008 are 5.9 percent, 6.0 percent and 6.2 percent, respectively. However, per capita GDP was 910 US dollars in 2005 (PPP international dollar price in 2000). It also has massive public debts. However, the sustained economic growth is a result of economic reforms since 1991, particularly, liberalization of domestic economy, export promotion and privatization of state-run enterprises. The privatization of state-run copper mines offset an immense fiscal deficit and led copper mining to be a profitable industry to promote economic growth. This is well evaluated internationally. Zambia reached the Completion Point of the HIPCs initiative in April 2005.

Table 2.1.11 Major Social and Economic Indicators (Zambia)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	3.7	5.2	7.3	9.7	10.9	11.1	11.3	11.5	11.7
Population growth (Annual %)	3.1	3.4	3.2	2.4	1.9	1.8	1.7	1.6	1.6
Population ages 0-14 (% of total)	46.3	47.8	47.1	46.7	46.4	46.3	46.1	46.0	45.8
Population ages 15-64 (% of total)	51.3	49.7	50.3	50.6	50.7	50.8	50.9	51.0	51.2
Population ages 65 and above (% of total)	2.4	2.5	2.6	2.7	2.9	2.9	3.0	3.0	3.0
Urban population (% of total)	24.4	35.5	39.6	36.9	34.8	34.9	34.9	35.0	35.0
Urban population growth (Annual %)	8.3	6.1	3.1	1.2	2.0	1.9	1.8	1.8	1.8
Population density (People per square kilometer)	5.0	7.1	9.8	13.0	14.7	14.9	15.2	15.4	15.7
GDP growth (Annual %)	3.9	1.5	1.1	0.8	4.9	3.3	5.1	5.4	5.2
GDP per capita (Constant 2000 US$)	544.3	511.7	398.5	316.0	311.4	316.0	326.6	338.7	350.5
GDP per capita, PPP (Constant 2000 international $)	-	1,268.3	1,034.5	820.3	808.4	820.4	847.9	879.2	909.9
Agriculture, value added (% of GDP)	13.2	15.0	16.5	21.3	22.1	22.2	22.8	20.8	18.5
Industry, value added (% of GDP)	61.3	48.5	46.4	36.6	25.6	26.1	27.1	26.8	25.1
Manufacturing, value added (% of GDP)	9.3	16.9	26.9	18.7	11.1	11.6	12.1	12.0	11.7
Food, beverages and tobacco (% of value added in manufacturing)	43.5	45.1	43.6	61.9	84.8	69.2	63.4	73.2	..
Textiles and clothing (% of value added in manufacturing)	7.7	9.5	11.3	6.9	12.8	8.2	7.6	8.6	..
Chemicals (% of value added in manufacturing)	4.7	9.5	10.3	8.1	11.2	12.7	12.0	11.9	..
Machinery and transport equipment (% of value added in manufacturing)	5.9	8.3	8.5	3.9	6.5	4.9	5.5	8.3	..
Other manufacturing (% of value added in manufacturing)	38.2	27.6	26.3	19.2	-15.3	5.0	11.5	-1.9	..
Services, etc., value added (% of GDP)	25.6	36.5	37.1	42.1	52.3	51.7	50.1	52.4	56.3
Employment in agriculture (% of total employment)	-	-	-	68.5	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	7.5	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	23.5	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.7	7.8	1,210.6	3,610.9	4,398.6	4,733.3	4,778.9	4,463.5
Real effective exchange rate index (Year 2000 = 100)	-	111.4	99.1	91.6	112.0	110.9	101.7	107.8	134.8
Consumer prices inflation (Annual %)	-	-	76.9	68.1	21.4	22.2	21.4	18.0	18.3
Money and quasi money (M2) as % of GDP	18.2	27.7	26.8	15.7	19.1	18.3	18.6	18.9	17.4
Money and quasi money growth (Annual %)	27.2	10.5	41.5	49.9	6.3	31.0	25.0	32.0	1.9
Lending interest rate (%)	-	8.0	18.6	55.1	46.2	45.2	40.6	30.7	28.2
Real interest rate (%)	-	0.8	-15.5	3.2	17.6	21.1	17.3	8.9	7.7
General government final consumption expenditure (% of GDP)	14.3	23.6	22.4	16.8	12.8	13.0	13.5	12.7	13.4
Household final consumption expenditure, etc. (% of GDP)	45.6	45.7	63.8	77.0	69.9	69.4	67.7	69.1	69.6
Final consumption expenditure, etc. (% of GDP)	59.9	69.4	86.2	93.8	82.7	82.3	81.3	81.8	83.0
Exports of goods and services (% of GDP)	53.5	42.5	33.8	30.8	26.9	23.7	20.6	19.5	16.4
Imports of goods and services (% of GDP)	38.4	41.6	35.6	38.8	29.7	29.0	28.0	27.3	25.2
Foreign direct investment, net inflows (% of GDP)	0.5	1.3	2.1	4.0	2.0	2.2	4.0	4.4	3.6
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	..	..	..	..	..
Gross domestic savings (% of GDP)	40.1	30.6	13.8	6.2	17.3	17.7	18.7	18.2	17.0
Gross capital formation (% of GDP)	25.0	29.7	15.5	14.2	20.0	23.0	26.1	26.0	25.8
Food exports (% of merchandise exports)	1.7	1.2	-	6.2	9.6	9.5	10.5	15.5	13.1
Food imports (% of merchandise imports)	9.8	9.2	-	9.7	7.7	13.9	12.8	6.5	6.3
Agricultural raw materials exports (% of merchandise exports)	0.3	0.1	-	3.9	2.7	2.9	5.2	10.3	5.4
Agricultural raw materials imports (% of merchandise imports)	1.1	1.1	-	2.6	1.8	1.6	1.2	1.1	1.3
Ores and metals exports (% of merchandise exports)	97.3	97.1	-	75.4	73.5	71.1	67.5	62.4	71.9
Ores and metals imports (% of merchandise imports)	0.9	1.2	-	2.2	1.5	1.6	3.1	2.6	2.7
Fuel exports (% of merchandise exports)	0.0	0.5	-	1.9	1.2	2.1	1.4	1.7	0.7
Fuel imports (% of merchandise imports)	9.5	12.9	-	12.3	8.9	7.1	8.3	11.2	11.6
Manufactures exports (% of merchandise exports)	0.8	1.1	-	12.2	12.7	13.8	15.3	10.0	8.8
Manufactures imports (% of merchandise imports)	78.1	75.2	-	72.9	79.7	75.1	74.6	78.5	77.9
Aid per capita (Current US$)	5.1	21.0	47.5	89.3	32.0	57.6	52.2	98.0	81.0
Poverty gap at $1 a day (PPP) (%)	-	-	-	38.3	..	..	36.3	32.6	..
Total debt service (% of exports of goods, services and income)	-	26.2	25.1	24.7	..	..	..	..	..
Total reserves in months of imports	-	1.3	1.1	1.2	..	..	..	..	..

Source: The World Bank. 2007. World Development Indicators: 2007

(12) Zimbabwe

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.12 Map of Zimbabwe

British explorer David Livingstone made explorations into modern-day Zimbabwe in the 1850s, which led to rule by the Britain-based South Africa Company as Southern Rhodesia in 1898 and it became a British colony in 1923. The white-majority Rhodesian Front (RF) declared independence as Rhodeaia in 1965. However, the United Kingdom did not recognize it and demanded voting rights including those for black Africans, meanwhile the Zimbabwe African National Union (ZANU) and the Zimbabwe African People's Union (ZAPU) began a conflict. In 1979, the United Kingdom mediated the conclusion of the Lancaster House Agreement. ZANU's victory in the general elections in February 1980 led to the independence as Zimbabwe in April and Robert Mugabe became President. The ZANU and the ZAPU were unified to form the Zimbabwe African National Union – Patriotic Front (ZANU-PF) in 1989 and the agrarian system made the confrontation against the white obvious. The land condemnation bill to take over farm land owned by white people was passed in 1992. Victory of the ZANU-PF in general elections in 2000 led to the full-scale implementation of land reform to take over the farmland of white farmers forcibly. The U.N. estimates that the series of such policies destroyed houses of 700,000 people of antigovernment forces and business activities. The country continues to be ruled with an iron

fist, with mass media being controlled and acceptance of aids from NGOs being prohibited.

Against the backdrop, Zimbabwe's economy continues to shrink, with the real GDP growth rate remaining in negative in the 21st century. According to the WEO, the real GDP growth rates in 2006, 2007 and 2008 are negative 4.8 percent, negative 6.2 percent, and negative 4.5 percent, respectively. Accordingly, per capita GDP is on a declining trend, being 1,813 US dollars (PPP international dollar price in 2000) in 2005. The country suffers serious inflation. Although the government controls the prices of major commodities, such as gasoline and sugar, in the name of dealing with continuing shortages of goods, such commodities are sold out as soon as they are put on the store shelves, causing a panic. Its involvement in the conflicts in the DRC from 1998 to 2002 drained dollars. Although the official exchange rate is 30,000 Zimbabwe dollars for one US dollar, the real rate is 280,000 Zimbabwe dollars for a US dollar. The central bank routinely issues money to fund the chronic fiscal deficit, which has resulted in the official annual inflation rate to rise from 32 percent in 1998 to 133 percent in 2004, 585 percent in 2005, and 1,000 percent in 2006, and it is estimated to have reached 8,000 percent in September 2007. The government announced that the unemployment rate was 80 percent in 2007. Confusion caused by the land policy led to a gradual increase in imports of mainly farm products. The IMF has suspended assistance because of (i) the government's arrears on past loans (although it began repayment in 2005) and (ii) the government's unwillingness to establish reforms to stabilize the economy. Due to the deterioration of relations with Europe and North America, the government is promoting the "Look East" foreign policy to strengthen ties with China and Iran. According to the World Competitiveness Report (WCR), Zimbabwe is ranked 129th among 131 countries.

Table 2.1.12 Major Social and Economic Indicators (Zimbabwe)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	4.5	6.3	9.1	11.8	12.7	12.8	12.9	12.9	13.0
Population growth (Annual %)	3.3	3.4	3.7	1.8	0.8	0.7	0.6	0.6	0.6
Population ages 0-14 (% of total)	47.4	49.0	47.7	44.4	42.1	41.5	41.0	40.5	40.0
Population ages 15-64 (% of total)	49.3	48.0	49.4	52.5	54.5	55.0	55.5	55.9	56.4
Population ages 65 and above (% of total)	3.2	3.0	2.9	3.1	3.4	3.5	3.5	3.6	3.6
Urban population (% of total)	15.0	20.2	25.9	31.8	34.2	34.6	35.1	35.5	35.9
Urban population growth (Annual %)	6.5	5.9	6.3	3.3	2.0	1.9	1.8	1.8	1.7
Population density (People per square kilometer)	11.6	16.4	23.4	30.6	32.8	33.1	33.3	33.4	33.6
GDP growth (Annual %)	6.5	3.3	4.5	1.1	-2.7	-4.4	-10.4	-3.8	-6.5
GDP per capita (Constant 2000 US$)	493.9	623.5	614.0	625.8	567.0	538.3	479.4	458.6	426.4
GDP per capita, PPP (Constant 2000 international $)	-	2,515.6	2,610.9	2,660.8	2,410.9	2,288.9	2,038.5	1,950.0	1,813.0
Agriculture, value added (% of GDP)	20.0	17.5	16.3	17.2	17.4	14.1	15.7	16.8	18.1
Industry, value added (% of GDP)	29.6	31.7	30.7	29.7	22.4	21.0	20.1	21.5	22.6
Manufacturing, value added (% of GDP)	16.7	20.1	22.2	20.8	14.6	13.4	12.9	12.9	12.8
Food, beverages and tobacco (% of value added in manufacturing)	28.5	22.7	30.0	32.3	27.9	27.5	25.9	23.9	..
Textiles and clothing (% of value added in manufacturing)	16.2	16.3	16.8	14.2	17.7	17.5	16.1	15.7	..
Chemicals (% of value added in manufacturing)	9.9	9.7	8.1	6.8	9.6	10.5	10.6	10.9	..
Machinery and transport equipment (% of value added in manufacturing)	8.5	9.7	8.8	10.3	8.5	8.7	10.0	9.4	..
Other manufacturing (% of value added in manufacturing)	36.8	41.6	36.3	36.4	36.4	35.9	37.4	40.1	..
Services, etc., value added (% of GDP)	50.3	50.8	53.1	53.0	60.2	64.8	64.2	61.7	59.3
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	0.7	0.5	0.0	0.0	0.1	0.1	0.7	5.1	22.4
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	2.0	7.6	14.0	32.4	76.7	140.1	..	..	..
Money and quasi money (M2) as % of GDP	-	7,251.9	3,967.5	20.4	23.1	29.5	30.2	25.2	44.9
Money and quasi money growth (Annual %)	-	-3.5	10,737.2	33.7	128.5	191.7	430.1	229.3	532.7
Lending interest rate (%)	-	17.5	17.0	37.4	38.0	36.5	97.3	278.9	235.7
Real interest rate (%)	-	6.1	4.1	5.5	-21.8	-38.9	-61.4	-15.8	-0.6
General government final consumption expenditure (% of GDP)	11.8	14.0	20.2	16.6	17.7	17.9	16.7	23.1	26.6
Household final consumption expenditure, etc. (% of GDP)	71.4	67.3	62.9	66.9	70.7	75.0	76.2	71.0	69.6
Final consumption expenditure, etc. (% of GDP)	82.9	81.3	83.1	83.5	88.4	92.9	93.0	94.1	96.3
Exports of goods and services (% of GDP)	-	22.2	21.4	35.4	23.1	9.2	23.4	42.6	42.8
Imports of goods and services (% of GDP)	-	22.2	21.8	38.0	21.8	10.1	27.1	50.8	52.9
Foreign direct investment, net inflows (% of GDP)	1.0	0.5	-0.1	1.4	0.0	0.1	0.0	0.2	3.0
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	..	..	..	..	..
Gross domestic savings (% of GDP)	17.1	18.7	16.9	16.5	11.6	7.1	7.0	5.9	3.7
Gross capital formation (% of GDP)	16.1	18.7	17.3	19.1	10.3	8.0	10.6	14.2	13.9
Food exports (% of merchandise exports)	-	-	40.5	47.4	56.7	27.6	..	30.9	..
Food imports (% of merchandise imports)	-	-	5.0	8.5	3.9	11.1	..	18.7	..
Agricultural raw materials exports (% of merchandise exports)	-	-	9.4	7.9	9.8	11.7	..	15.7	..
Agricultural raw materials imports (% of merchandise imports)	-	-	2.7	2.1	1.5	1.9	..	1.8	..
Ores and metals exports (% of merchandise exports)	-	-	16.2	11.7	17.9	21.0	..	23.2	..
Ores and metals imports (% of merchandise imports)	-	-	2.7	2.1	2.6	2.3	..	9.8	..
Fuel exports (% of merchandise exports)	-	-	2.0	1.0	0.7	1.2	..	1.6	..
Fuel imports (% of merchandise imports)	-	-	19.0	11.3	42.5	8.3	..	13.7	..
Manufactures exports (% of merchandise exports)	-	-	30.0	31.7	14.9	38.5	..	28.5	..
Manufactures imports (% of merchandise imports)	-	-	68.0	73.8	48.3	75.9	..	54.2	..
Aid per capita (Current US$)	0.6	2.8	27.5	35.3	12.7	15.5	14.5	14.4	28.3
Poverty gap at $1 a day (PPP) (%)	-	-	-	24.0	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	1.6	24.9	27.9	..	..	..	..	..
Total reserves in months of imports	-	2.5	2.1	2.2	..	..	..	..	..

Source: The World Bank. 2007. World Development Indicators: 2007

(13) Kenya

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.13 Map of Kenya

The Portuguese began and have its presence in the area of modern-day Kenya in the 15th century. British began a full-scale advancement in the 19th century and the land became a British protectorate in 1895. Although it is traditionally an agrarian country, arable land is below 20 percent of the surface areas. It won independence in December 1963 and shifted to a republic in 1964. Jomo Kenyatta of the Kenya African National Union (KANU) was inaugurated as the founding president, succeeded by then vice president Daniel arap Moi in 1978. All political parties expect for the KANU were illegalized in 1982. Although President Moi received internal and external pressure for liberalization after mid 1991 and six opposition factions formed the Forum of Restoring Democracy (FORD), President Moi was reelected in the election in December 1992 partly because of the internal split of the FORD. Former vice president Mwai Kibaki of the opposition group, the National Rainbow Coalition (NARC), won the presidential election in December 2002 and he focused on the eradication of corruption and economic development. However, the NARC split in the process of constitutional amendment in 2005 and defectors joined the KANU to form a new opposition coalition, the Orange Democratic Movement (ODM), which defeated the government's draft constitution by referendum in November 2005. Although Kibaki declared victory in the presidential election in December 2007, the opposition camp led by Raila Odinga denounced the election results as fraud, causing a political disorder.

Although Kenya is a center of trade and finance in East Africa, its industrial structure remains fragile. It is originally an agrarian country and about 60 percent of the working force

is employed in agriculture, but the sector accounts only for 25 to 30 percent of GDP. Coffee, tea and soda ash have been major exports. Horticultural crops have grown significantly and their exports to Europe and the Middle East have grown rapidly via Jomo Kenyatta Airport that has become a hub in East Africa. In 1997, the IMF suspended Kenya's Enhanced Structural Adjustment Program because the government failed to maintain reforms and control. A drought from 1999 to 2000 resulted in water and energy restrictions, lowered agricultural productivity, and damaged the country seriously. As a result, GDP dropped to the zero level in 2000. Although the IMF resumed loans in 2000 to assist Kenya through the drought, it suspended the loans again in 2001 because of the government's failure to formulate several anticorruption measures. Agricultural production recovered thanks to a good amount of rain in 2001; however, weak farm product prices, economic collapse and low investment limited Kenya's economic growth to 1.2 percent. The growth rate fell to 0.6 percent in 2002, because of an extraordinary amount of rain, low investment, scarce donor support, and internal political strife until the elections. Key elections in December 2002 ended the Moi administration and a new government succeeded the economic problems. Although corruption was eradicated and donor support resumed, the Kibaki government failed to avoid confusion resulting from the corruption scandals in 2005 and 2006, which led the IMF and the World Bank to delay corruption-related loans in pending. These international financial institutions and major donors have resumed the provision of loans, despite little action taken by the government to deal with corruption. These scandals did not have adverse effects on economic growth. According to the WEO, the real economic growth in 2006, 2007 and 2008 are estimated as 6.1 percent, 6.4 percent and 6.5 percent in 2008, respectively. However, the confusion triggered by the presidential election in late 2007 described earlier will likely lower the growth rate in 2008 significantly. Per capita GDP in 2005 was 1,103 US dollars (PPP international dollar price in 2000).

Table 2.1.13 Major Social and Economic Indicators (Kenya)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	9.7	13.9	20.1	27.5	31.4	32.0	32.7	33.5	34.3
Population growth (Annual %)	3.3	3.7	3.6	2.7	2.2	2.1	2.1	2.2	2.3
Population ages 0-14 (% of total)	48.4	49.7	49.7	46.1	43.7	43.4	43.1	42.9	42.8
Population ages 15-64 (% of total)	48.0	47.1	47.5	51.1	53.4	53.8	54.0	54.2	54.4
Population ages 65 and above (% of total)	3.5	3.2	2.8	2.7	2.8	2.9	2.8	2.8	2.8
Urban population (% of total)	8.9	13.2	17.1	19.1	19.9	20.1	20.3	20.5	20.7
Urban population growth (Annual %)	6.6	7.9	5.1	3.5	3.2	3.1	3.1	3.2	3.3
Population density (People per square kilometer)	17.1	24.3	35.3	48.4	55.1	56.3	57.5	58.8	60.2
GDP growth (Annual %)	4.7	8.2	4.1	1.9	3.8	0.6	3.0	4.9	5.8
GDP per capita (Constant 2000 US$)	275.7	396.7	428.0	421.4	420.5	413.9	417.2	427.9	442.3
GDP per capita, PPP (Constant 2000 international $)	-	1,015.7	1,067.4	1,050.9	1,048.7	1,032.3	1,040.5	1,067.1	1,103.1
Agriculture, value added (% of GDP)	37.0	35.6	32.1	31.0	31.3	29.7	29.7	27.9	27.0
Industry, value added (% of GDP)	18.1	20.0	19.2	17.6	17.2	17.6	17.2	18.0	18.5
Manufacturing, value added (% of GDP)	10.8	12.0	11.9	11.5	11.0	11.3	11.2	11.2	11.5
Food, beverages and tobacco (% of value added in manufacturing)	35.4	35.6	38.7	44.1	37.7	36.5	39.2	38.2	..
Textiles and clothing (% of value added in manufacturing)	8.2	10.1	10.7	8.7	14.9	18.5	6.5	6.0	..
Chemicals (% of value added in manufacturing)	8.3	8.5	9.1	8.6	10.4	9.8	8.3	7.4	..
Machinery and transport equipment (% of value added in manufacturing)	16.7	12.2	12.1	9.0	7.6	7.1	16.8	19.3	..
Other manufacturing (% of value added in manufacturing)	31.4	33.5	29.4	29.6	29.3	28.2	29.2	29.1	..
Services, etc., value added (% of GDP)	44.9	44.5	48.7	51.4	51.4	52.7	53.0	54.2	54.4
Employment in agriculture (% of total employment)	-	23.0	19.1	18.7	..	..	..	..	..
Employment in industry (% of total employment)	-	21.6	20.4	19.7	..	..	..	..	..
Employment in services (% of total employment)	-	55.4	60.5	61.6	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	7.1	7.5	15.8	54.8	78.6	78.7	75.9	79.2	75.6
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	1.9	12.1	12.2	16.6	5.7	2.0	9.8	11.6	10.3
Money and quasi money (M2) as % of GDP	14.2	28.1	27.3	33.6	33.8	36.4	37.3	36.4	36.9
Money and quasi money growth (Annual %)	57.8	17.2	13.9	19.9	2.8	11.7	11.9	13.7	10.0
Lending interest rate (%)	-	9.7	15.0	27.3	19.7	18.5	16.6	12.5	12.9
Real interest rate (%)	-	1.8	5.2	10.8	17.8	19.5	9.8	2.2	8.2
General government final consumption expenditure (% of GDP)	14.0	18.1	18.2	15.5	16.0	17.4	18.5	17.6	17.1
Household final consumption expenditure, etc. (% of GDP)	67.5	62.3	63.8	69.8	72.7	69.5	68.2	70.0	73.6
Final consumption expenditure, etc. (% of GDP)	81.4	80.3	82.1	85.3	88.7	86.9	86.7	87.7	90.7
Exports of goods and services (% of GDP)	31.1	29.8	25.3	27.2	22.9	25.4	24.5	26.0	27.4
Imports of goods and services (% of GDP)	29.8	33.8	30.1	30.2	30.8	29.0	29.1	31.8	34.9
Foreign direct investment, net inflows (% of GDP)	0.9	0.8	0.4	0.2	0.0	0.2	0.6	0.3	0.1
Foreign direct investment, net outflows (% of GDP)	-	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Gross domestic savings (% of GDP)	18.6	19.7	17.9	14.7	11.3	13.1	13.3	12.3	9.3
Gross capital formation (% of GDP)	17.3	23.2	22.7	17.6	19.3	16.7	17.9	18.2	16.8
Food exports (% of merchandise exports)	-	54.1	58.2	55.0	60.0	32.1	42.7	39.7	..
Food imports (% of merchandise imports)	-	6.9	8.6	13.9	13.4	12.2	12.2	10.4	..
Agricultural raw materials exports (% of merchandise exports)	-	7.4	6.4	6.9	13.0	10.8	10.9	12.0	..
Agricultural raw materials imports (% of merchandise imports)	-	1.9	2.2	2.2	2.1	2.2	2.1	2.1	..
Ores and metals exports (% of merchandise exports)	-	1.2	2.6	2.8	3.5	2.2	3.0	4.2	..
Ores and metals imports (% of merchandise imports)	-	1.4	1.5	1.8	1.4	1.4	1.4	1.6	..
Fuel exports (% of merchandise exports)	-	21.6	18.1	8.9	0.1	30.9	19.3	23.0	..
Fuel imports (% of merchandise imports)	-	24.8	27.3	17.4	20.9	16.7	23.1	24.3	..
Manufactures exports (% of merchandise exports)	-	15.7	14.7	26.2	23.3	24.0	24.2	21.1	..
Manufactures imports (% of merchandise imports)	-	64.9	60.3	64.5	62.0	67.0	61.0	61.3	..
Aid per capita (Current US$)	5.7	12.2	30.2	23.9	14.7	12.2	15.9	19.9	22.4
Poverty gap at $1 a day (PPP) (%)	-	-	-	9.4	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	17.3	35.1	27.3	15.6	16.0	15.5	7.6	4.4
Total reserves in months of imports	-	2.6	1.8	2.0	3.0	3.2	4.0	3.3	3.2

Source：The World Bank. 2007. World Development Indicators: 2007

(14) Uganda

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.14 Map of Uganda

Current Uganda used to comprise four kingdoms. It became a British protectorate in 1984. Borders drawn later because of colonization united ethnic groups with different political systems and cultures. These differences hindered a formation of a community, politically in particular, after its independence in October 1962. Idi Aminb's dictatorial government from 1971 to 1979 and Milton Obote's regime from 1980 to 1985 claimed 300,000 lives and 100,000 lives, respectively. Since the inauguration of Yoweri Museveni as president in 1986, the country is relatively stable. After direct elections in 1996, Museveni was reelected president in 2001. A multi-party system was recognized in July 2005 and he was elected again in February 2006 for the third term. He remains in power up to today.

Uganda is endowed with abundant natural resources, including fertile soil, a stable volume of rainfall, and sizable deposits of copper and cobalt. According to the WEO, the real GDP growth rates in 2006, 2007 and 2008 are 5.4 percent, 6.2 percent and 6.5 percent, respectively. Per capita GDP in 2005 was 1,293 US dollars (PPP international dollar price in

2000). Agriculture is the most important sector of the economy, employing more than 80 percent of its work force, and generates one third of GDP. Although exports revenues used to depend heavily on coffee and tea, the country was successful in diversifying export crops since 2000 despite a landlocked country. Production of freshwater fish from Lake Victoria, vanilla and waragi (distilled liquor) has been active. Utilizing the beautiful natural environment, which was once called African Pearl, tourism is also growing. Since 1986, with the assistance based on bilateral and multilateral relations, the government has worked to rehabilitate and stabilize the economy by undertaking currency reform, raising producer prices on export goods, increasing oil product prices and improving civil service wages. Policy changes are aimed to curb inflation and increase productivity and export revenues. During 1990 to 2001, solid economic performance was brought about by investment in the restoration of infrastructure, improvement in incentives for productivity and exports, curbed inflation, gradually restored domestic security, and the return of exiled Indian-Ugandan entrepreneurs. Despite fluctuation of coffee prices, which is a major export crop, growth continues to be stable and the export market is improving consistently. Uganda received a debt relief worth 1.3 billion US dollars of enhanced HIPCs and a debt relief worth 145 million US dollars of Paris Club in 2000. When these are combined with the original HIPC debt relief, their total reaches two billion US dollars. Uganda also reached the Completion Point of the HIPCs initiative.

(15) Rwanda

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.15 Map of Rwanda

Since the 15th century, the minority ethnic group of the Tutsi, mainly engaged in cattle raising, had established a kingdom, ruling the majority agricultural ethnic group of the Hutus. It was colonized by Germany in 1899 and became a Belgium mandate in 1919 and a trust territory afterward. It won independence in July 1962 and Hutu Defense Minister Juvenal Habyarimana set up a military regime in 1973. He became President after a new constitution was adopted and power was shifted to civilian rule in 1978. In 1959, three years before the independence from Belgium, the majority ethnic group of the Hutus overthrew the ruling Tutsi king. For the next several years, a great number of Tutsis were killed and about 150,000 were forced into exile in neighboring countries. Later, children of these exiles formed a rebel group, the Rwandan Patriotic Front (RPF), and began a civil war in 1990. The conflict, combined with several political and economic disorders, further heightened ethnic tensions, resulting in a worst scenario of the genocide of about 800,000 Tutsis by moderate Hutus in April 1994[6]. Although the Tutsi rebel forces defeated the Hutu regime and ended the killing in July 1994, about two million Hutu refugees fled to neighboring countries of Burundi, Tanzania, Uganda, and the DRC, many of whom fearing Tutsi retaliation. Since then, most of the refugees have returned to Rwanda, with several thousands remaining in the DRC and forming an extremist force determined to retake Rwanda, as the RPF did in 1990. Rwanda received a great deal of international assistance and political reforms were carried out, which included Rwanda's first local elections in March 1999 and its first presidential

[6] President Kagame announced in February 2002 that the civil war from 1990 to 1994 claimed about 1.07 million lives (93% are Tutsis.)

and assembly elections in August and September 2003 after the genocide. However, the country continues to struggle to acquire investment and improve agricultural productivity and ethnic reconciliation is extremely difficult because of the Tutsi political rule. Centralization of power in the capital of Kigali, intolerance of rebels, the Hutu extremist rebel forces outside the country and involvement in wars in the DRC continue to hinder Rwanda's efforts to depart from its dark past.

Rwanda is an agrarian country with about 90% of the working force engaged in (mainly subsistence) agriculture. Agriculture accounts for 40 percent of GDP and coffee and tea are major export crops. Tin, tungsten, natural gas and tantalite are major natural resources. It is one of the most densely populated countries in Africa. The genocide in 1994 destroyed Rwanda's fragile economic foundation, decreased the population, particularly the female population, and deprived its ability to attract internal and external investment. Although the poverty level is still high, the country has made substantial progress in rehabilitating and stabilizing its economy to the pre-1994 level. The real GDP growth rate is on a recovery trend. According to the WEO, the real GDP growth rates in 2006, 2007 and 2008 are 5.3 percent, 4.5 percent and 4.6 percent, respectively. Per capita GDP in 2005 was 1,073 US dollars (PPP international US dollar price in 2000). Inflation has been mostly curbed. Food production does not keep pace with the population increase and the country needs to import food. Rwanda is receiving substantial aid money. It received HIPCs initiative debt relief of the IMF and the World Bank in 2005 and 2006. It reached the Completion Point of the HIPCs initiative. Although energy shortages, instable relations with neighboring countries and lack of adequate transportation infrastructure with other countries hinder economic growth, the government has adopted an expansionary fiscal policy to improve education, infrastructure and foreign and domestic investment and pursue market-oriented reforms.

Table 2.1.15 Major Social and Economic Indicators (Rwanda)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	3.3	4.5	6.3	6.4	8.4	8.6	8.8	8.9	9.0
Population growth (Annual %)	2.7	3.2	3.1	1.2	4.4	2.7	1.7	1.4	1.7
Population ages 0-14 (% of total)	47.7	48.4	49.3	49.3	46.5	45.7	44.9	44.1	43.5
Population ages 15-64 (% of total)	50.1	49.3	48.5	48.5	51.2	51.9	52.7	53.5	54.0
Population ages 65 and above (% of total)	2.3	2.3	2.2	2.2	2.3	2.4	2.4	2.4	2.5
Urban population (% of total)	2.8	4.1	5.1	9.4	14.9	16.0	17.1	18.2	19.3
Urban population growth (Annual %)	5.6	7.0	4.5	10.6	12.0	9.8	8.3	7.6	7.6
Population density (People per square kilometer)	133.8	182.8	253.7	260.7	339.8	349.2	355.0	360.1	366.3
GDP growth (Annual %)	3.0	5.6	2.1	2.9	6.7	9.4	0.9	4.0	6.0
GDP per capita (Constant 2000 US$)	208.0	233.8	271.7	233.7	230.5	245.4	243.7	249.7	260.1
GDP per capita, PPP (Constant 2000 international $)		-	1,006.2	1,120.8	964.0	950.9	1,012.3	1,005.1	1,030.2	1,073.1
Agriculture, value added (% of GDP)	68.0	52.3	38.9	41.5	40.5	41.4	41.3	41.2	42.3
Industry, value added (% of GDP)	8.5	15.8	21.3	19.0	21.6	21.3	21.3	20.7	20.5
Manufacturing, value added (% of GDP)	3.1	9.9	13.8	12.4	11.7	11.2	8.9	8.0	8.2
Food, beverages and tobacco (% of value added in manufacturing)	76.0	73.5	70.4	110.1	..	..	..	92.8	..
Textiles and clothing (% of value added in manufacturing)	-	3.4	1.7	-	..	..	..	..	..
Chemicals (% of value added in manufacturing)	4.3	9.8	7.7	16.2	17.5	..	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	6.9	7.3	-	8.4	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	12.8	11.6	20.2	5.0	82.5	..	..	7.2	..
Services, etc., value added (% of GDP)	23.5	31.9	39.9	39.5	37.9	37.3	37.4	38.1	37.3
Employment in agriculture (% of total employment)	-	-	90.1	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	2.9	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	6.7	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	73.8	91.6	88.5	245.1	443.0	475.4	537.7	577.5	557.8
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	1.4	13.1	4.4	8.6	3.0	2.3	7.1	12.0	9.1
Money and quasi money (M2) as % of GDP	11.6	13.1	13.9	15.2	16.0	16.4	17.0	18.0	19.5
Money and quasi money growth (Annual %)	16.9	20.0	7.8	15.1	11.2	12.6	15.4	30.0	18.0
Lending interest rate (%)	-	13.0	13.2	16.9	..	..	..	..	..
Real interest rate (%)	-	8.4	8.1	4.4	..	..	..	..	..
General government final consumption expenditure (% of GDP)	10.8	13.6	12.8	11.5	11.7	11.8	15.1	12.9	13.3
Household final consumption expenditure, etc. (% of GDP)	85.7	80.3	82.0	94.5	85.8	88.1	85.7	84.7	84.6
Final consumption expenditure, etc. (% of GDP)	96.5	93.9	94.8	106.0	97.4	100.0	100.8	97.6	98.0
Exports of goods and services (% of GDP)	10.1	13.1	9.5	6.3	9.2	7.7	8.3	10.3	10.6
Imports of goods and services (% of GDP)	14.5	19.6	19.4	27.0	25.1	24.5	27.5	28.4	31.0
Foreign direct investment, net inflows (% of GDP)	0.0	0.8	0.9	0.2	0.3	0.2	0.3	0.4	0.4
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross domestic savings (% of GDP)	3.5	6.1	5.2	-6.0	2.6	0.0	-0.8	2.4	2.0
Gross capital formation (% of GDP)	7.9	12.6	15.2	14.8	18.4	16.9	18.4	20.5	22.4
Food exports (% of merchandise exports)	-	-	-	66.4	57.0	56.4	52.3	..	..
Food imports (% of merchandise imports)	-	-	-	20.9	20.8	16.3	11.7	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	10.0	3.2	5.4	7.3	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	3.1	2.9	3.6	4.0	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	9.9	37.7	35.5	23.3	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	2.7	1.9	1.9	2.0	..	..
Fuel exports (% of merchandise exports)	-	-	-	0.1	0.0	..	6.8	..	..
Fuel imports (% of merchandise imports)	-	-	-	13.0	14.4	16.2	15.6	..	..
Manufactures exports (% of merchandise exports)	-	-	-	5.8	2.1	2.7	10.3	..	..
Manufactures imports (% of merchandise imports)	-	-	-	60.2	59.9	62.0	66.7	..	..
Aid per capita (Current US$)	3.5	17.7	31.5	68.4	35.7	41.1	38.2	55.0	63.7
Poverty gap at $1 a day (PPP) (%)	-	-	7.7	25.6	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	2.2	9.9	18.7	10.3	11.5	13.7	11.2	8.1
Total reserves in months of imports	-	5.4	3.7	3.3	5.4	6.3	5.5	6.8	6.9

Source: The World Bank. 2007. World Development Indicators: 2007

(16) Burundi

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.16 Map of Burundi

Burundi became a German colony as part of German East Africa together with Rwanda in 1899 and it became a Belgium mandate in 1919. In July 1962, it separated from Rwanda and won independence and Mwami Mwambutsa IV took over the throne, meaning that Tutsi rule continued. It became a republic in 1966 and a Tutsi moderate, Pierre Buyoya, became President in a coup in 1987. President Domitien Ndayizeye who won the election in June 1993 was assassinated in October, which resulted in an ethnic conflict after a failed coup. More than 300,000 Burundian lives were lost in the fight that lasted almost for 13 years. A great number of Burundians were displaced and became refugees at home and overseas. A power-sharing agreement between the Tutsi government and the Hutu rebels through international mediation in 2003 cleared the way for a transition process to an integrated defense force. A new constitution was established in 2005 and a Hutu-majority government was established in the 2005 election. The new government led by President Pierre Nkurunziza agreed on a permanent ceasefire and signed a ceasefire agreement with the country's last rebel group, mediated by South Africa, in September 2006 in Dar es Salaam in Tanzania. However, many challenges and problems are left unsolved.

Burundi is a landlocked country with infant manufacturing. Although there are such resources as oil, nickel and copper, their deposits are small. The economy depends heavily on agriculture with more than 90 percent of the population engaged in subsistence agriculture. Coffee and tea exports generate about 90% of foreign currency earnings. Thus, the ability to pay for imports depends on weather conditions and international coffee and tea prices. The country faces a structural challenge—transportation costs account for 40 percent of CIF prices due to inadequate infrastructure, despite a landlocked country.

The Tutsi minority that accounts for 14% of the population dominates the government and the coffee trade of the Hutu majority that accounts for 85% of the population. The nearly 13-year-long ethnic conflict claimed more than 300,000 lives and created about 50,000 refugees who fled to Tanzania and 140,000 displaced persons at home. Only one in every two children goes to school and one in every 15 persons is infected with HIV/AIDS. Food, medicine and electricity remain in short supply. However, the real GDP growth rate has improved significantly. According to the WEO, the growth rates in 2006, 2007 and 2008 are 5.1 percent, 3.5 percent and 5.8 percent, respectively. Per capita GDP in 2005 was 622 US dollars (PPP international dollar price in 2000). Although aids are getting to flow in steadily and the economic activities are becoming active as a result of the end of the conflict, a high poverty rate, a low education rate, a weak legal system, and lack of managerial capacity are jeopardizing planned economic reforms. Burundi depends heavily on aid based on bilateral and multilateral frameworks. The delay of funds after a corruption scandal reduced bilateral aid in 2007, which resulted in cutting of the state budget and weakening of its ability to pay salaries. The country reached the Decision Point of the HIPCs initiative.

Table 2.1.16 Major Social and Economic Indicators (Burundi)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	3.3	3.8	5.0	6.2	6.6	6.8	7.0	7.3	7.5
Population growth (Annual %)	1.8	1.6	3.2	1.3	2.2	2.7	3.2	3.4	3.6
Population ages 0-14 (% of total)	44.7	45.1	44.6	47.3	47.5	46.9	46.2	45.5	45.0
Population ages 15-64 (% of total)	52.1	51.4	52.2	49.8	49.6	50.3	51.0	51.7	52.3
Population ages 65 and above (% of total)	3.2	3.4	3.3	2.9	2.8	2.8	2.8	2.8	2.7
Urban population (% of total)	2.2	3.4	5.4	7.5	8.9	9.2	9.4	9.7	10.0
Urban population growth (Annual %)	3.6	7.4	7.0	4.5	5.4	5.9	6.2	6.3	6.4
Population density (People per square kilometer)	126.6	146.6	193.5	239.9	258.3	265.5	274.0	283.6	293.9
GDP growth (Annual %)	4.8	2.4	4.5	-1.9	2.1	4.4	-1.2	4.8	0.9
GDP per capita (Constant 2000 US$)	101.1	131.3	146.8	127.4	109.1	110.9	106.1	107.5	104.6
GDP per capita, PPP (Constant 2000 international $)	-	805.2	872.5	756.9	648.2	658.7	630.4	638.6	621.8
Agriculture, value added (% of GDP)	70.6	64.6	57.5	49.2	39.5	40.5	40.1	40.1	34.8
Industry, value added (% of GDP)	10.2	13.3	15.7	18.7	19.0	18.6	18.9	18.9	20.0
Manufacturing, value added (% of GDP)	7.3	9.1	10.0	9.2	8.8	8.4	8.5	8.5	8.8
Food, beverages and tobacco (% of value added in manufacturing)	-	63.3	81.0	48.4	14.0	15.4	15.5	14.0	..
Textiles and clothing (% of value added in manufacturing)	-	14.3	8.8	7.6	5.6	5.1	4.9	3.9	..
Chemicals (% of value added in manufacturing)	-	6.2	2.7	3.8	7.1	5.7	6.3	9.2	..
Machinery and transport equipment (% of value added in manufacturing)	-	0.3	0.2	-	..	..	..	..	..
Other manufacturing (% of value added in manufacturing)	-	16.0	7.5	40.2	73.4	73.8	73.2	72.9	..
Services, etc., value added (% of GDP)	19.2	22.1	26.8	32.1	41.4	40.9	41.0	41.0	45.1
Employment in agriculture (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	-	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	-	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	72.2	85.9	122.1	352.2	830.4	930.8	1,082.6	1,100.9	1,081.6
Real effective exchange rate index (Year 2000 = 100)	-	122.1	143.8	103.0	95.8	81.9	63.6	64.2	71.1
Consumer prices inflation (Annual %)	2.6	12.2	7.6	15.2	9.2	-1.3	10.7	8.3	13.0
Money and quasi money (M2) as % of GDP	9.9	12.3	14.1	18.4	19.5	22.6	25.0	25.8	25.9
Money and quasi money growth (Annual %)	9.6	17.2	12.6	13.5	15.7	29.5	15.9	17.8	19.0
Lending interest rate (%)	-	12.0	12.0	14.4	16.8	19.5	18.2	18.3	19.1
Real interest rate (%)	-	-5.1	7.7	4.4	10.8	17.4	6.0	9.2	2.1
General government final consumption expenditure (% of GDP)	6.3	11.5	9.5	17.7	19.9	19.1	22.7	25.8	28.4
Household final consumption expenditure, etc. (% of GDP)	89.3	85.6	87.8	87.8	89.2	92.3	85.5	82.6	87.3
Final consumption expenditure, etc. (% of GDP)	95.6	97.1	97.3	105.4	109.0	111.4	108.2	108.4	115.8
Exports of goods and services (% of GDP)	11.0	11.5	10.3	9.0	6.9	6.2	9.3	8.9	8.5
Imports of goods and services (% of GDP)	13.2	17.7	24.3	22.8	22.1	24.0	28.8	30.9	36.3
Foreign direct investment, net inflows (% of GDP)	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1
Foreign direct investment, net outflows (% of GDP)	-	-	0.0	0.0	0.0	0.0	0.0	..	0.0
Gross domestic savings (% of GDP)	4.4	2.9	2.7	-5.4	-9.0	-11.4	-8.2	-8.4	-15.8
Gross capital formation (% of GDP)	6.6	9.1	16.7	8.3	6.2	6.4	11.3	13.7	12.1
Food exports (% of merchandise exports)	75.3	91.1	-	92.7	87.8	93.1	91.0	92.2	86.8
Food imports (% of merchandise imports)	17.5	18.9	-	18.3	13.1	11.2	15.6	9.0	6.5
Agricultural raw materials exports (% of merchandise exports)	18.4	6.0	-	4.1	0.8	1.5	0.6	1.2	4.2
Agricultural raw materials imports (% of merchandise imports)	4.0	4.8	-	2.0	2.5	2.5	1.3	1.1	1.4
Ores and metals exports (% of merchandise exports)	0.4	1.0	-	1.0	10.3	3.4	1.3	1.5	2.5
Ores and metals imports (% of merchandise imports)	2.9	2.1	-	2.0	1.7	1.8	1.5	1.1	0.8
Fuel exports (% of merchandise exports)	0.0	-	-	0.0	..	..	0.6	0.0	0.1
Fuel imports (% of merchandise imports)	5.6	7.4	-	13.0	12.5	12.9	18.5	16.5	8.5
Manufactures exports (% of merchandise exports)	5.9	1.9	-	2.2	0.8	1.9	6.4	5.1	6.2
Manufactures imports (% of merchandise imports)	69.6	64.5	-	64.3	69.7	71.0	63.1	72.2	82.3
Aid per capita (Current US$)	3.0	13.9	34.1	29.4	20.7	25.2	32.3	49.7	48.4
Poverty gap at $1 a day (PPP) (%)	-	-	-	18.3	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	-	33.2	38.3	49.7	59.2	63.5	135.3	41.4
Total reserves in months of imports	-	-	3.2	6.9	1.3	4.4	4.2	3.1	3.2

Source: The World Bank. 2007. World Development Indicators: 2007

(17) Ethiopia

Source: Central Intelligence Agency. 2008. The World Factbook: 2008.

Figure 2.1.17 Map of Ethiopia

Ethiopia is unique among African nations, maintaining its independence except for the Italian occupation period from 1936 to 1941. Emperor Haile Selassie who took over the throne in 1930 was deposed in September 1974 in a military riot. The rebel group established the Provisional Military Administrative Council (PMAC) and declared a socialist state. In 1977, PMAC Chairman Mengistu Haile Mariam took leadership and murdered hundreds of thousands of rebel forces. Mengistu abandoned the PMAC regime after the 1987 national elections and became President. However, cruel coups, widespread drought and huge refugee problems forced him to flee to Zimbabwe in 1991. Meles Zenawi, Chairman of the Ethiopian People's Revolutionary Democratic Front (EPRDF), rebel forces, became interim president. A new constitution was adopted in 1994 and Negasso Gidada won the Ethiopia's first multi-party election to assume presidential post in the following year. The parliament elected Girma Wolde-Giorgis as president in 2001. During these years, a border war with Eritrea in the late 1990s ended with the conclusion of a peace treaty in December 2000. The Eritrea-Ethiopia Border Commission drew the border, remote from the original plan in November 2007. However, Ethiopia did not approve it and it objected to the international commission's result, leaving the final demarcation of the boundary on hold. There are conflicts sporadically on the border of Kenya and Somalia.

Ethiopia's economy depends heavily on agriculture, accounting for 40 percent of GDP, 60%

of exports, and 80% of working population. Agriculture suffers frequent drought and poor harvest. Coffee and animal products have been major agricultural products. However, low prices led many farmers to shifting to a side business. Horticultural exports have grown recently. The war with Eritrea from 1998 to 2000 and frequent drought have severely hit the economy, coffee production in particular. Ethiopia received a debt relief from the HIPCs initiative in November 2001 and, in December 2005, the IMF announced that it would write off Ethiopia's debt. It has also reached the Completion Point of the HIPCs initiative. In Ethiopia's land ownership system, the state government owns all land and provides long-term leases to tenants. This system does not allow entrepreneurs to use land as collateral for loans, hindering growth in the industrial sector. Furthermore, drought directly hit the country in late 2002, leading to a decline in real GDP in 2003. Since then, however, GDP is growing at a relatively high rate. According to the WEO, the growth rates in 2006, 2007 and 2008 are 9.0 percent, 10.5 percent and 9.6 percent, respectively. Per capita GDP is 939 US dollars (PPP international dollar price in 2000). It has been posting a significant trade deficit. Exportation of hydraulically generated electricity is a promising industry in the future. There is a plan of exporting electricity not only to neighboring countries but to Yemen in the Arabian Peninsula. The country is mostly uplands and the capital of Addis Ababa is situated 2,400 meters above the sea level.

Table 2.1.17 Major Social and Economic Indicators (Ethiopia)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	25.9	33.5	44.4	57.9	65.8	67.2	68.6	70	71.3
Population growth (Annual %)	2.4	2.6	3.1	2.3	2.3	2.2	2.1	1.9	1.8
Population ages 0-14 (% of total)	44.9	45.4	45.6	45.8	45.4	45.2	45	44.8	44.5
Population ages 15-64 (% of total)	52.6	51.9	51.7	51.4	51.8	51.9	52.1	52.3	52.5
Population ages 65 and above (% of total)	2.5	2.7	2.7	2.8	2.9	2.9	2.9	2.9	2.9
Urban population (% of total)	7.7	9.6	11.6	13.9	15.1	15.3	15.6	15.8	16
Urban population growth (Annual %)	5.4	4.6	5	4	3.7	3.6	3.5	3.3	3.2
Population density (People per square kilometer)	23.5	30.4	40.3	56.9	65.8	67.2	68.6	70	71.3
GDP growth (Annual %)	-	-	2.1	2.6	7.9	0	-3.1	12.3	8.7
GDP per capita (Constant 2000 US$)	-	-	128.8	112.6	128.7	126	119.6	131.7	140.6
GDP per capita, PPP (Constant 2000 international $)	-	-	859.7	751.4	859.1	840.6	798	878.9	938.3
Agriculture, value added (% of GDP)	-	-	54.2	56.7	45.8	42	43.9	46.3	47.7
Industry, value added (% of GDP)	-	-	12.7	10.4	13.3	14.5	14.1	13.5	13.3
Manufacturing, value added (% of GDP)	-	-	5.6	4.5	6	6	5.6	5.3	5.1
Food, beverages and tobacco (% of value added in manufacturing)	-	-	12.1	7.6	4	4.1	..	..	..
Textiles and clothing (% of value added in manufacturing)	-	-	5.4	3.3	2.5	2.7	..	..	..
Chemicals (% of value added in manufacturing)	-	-	0.2	0.3	0.7	0.7	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	-	-	0.1	0	0	0	..	..	..
Other manufacturing (% of value added in manufacturing)	-	-	82.3	88.8	92.9	92.6	..	..	..
Services, etc., value added (% of GDP)	-	-	33.1	32.9	40.9	43.4	42.1	40.2	39
Employment in agriculture (% of total employment)	-	-	-	85.5	..	..	..	..	..
Employment in industry (% of total employment)	-	-	-	4.4	..	..	..	..	..
Employment in services (% of total employment)	-	-	-	10.3	..	..	..	..	..
Official exchange rate (Local currency per US$, period average)	2.5	2.1	2.1	5.8	8.5	8.6	8.6	8.6	8.7
Real effective exchange rate index (Year 2000 = 100)	-	-	-	-	..	..	..	..	..
Consumer prices inflation (Annual %)	2.2	9.9	4.7	7.6	-8.2	1.7	17.8	3.3	11.6
Money and quasi money (M2) as % of GDP	-	-	20	30.2	37.1	43.9	46	43.4	44.8
Money and quasi money growth (Annual %)	9.8	13.4	12.6	12.7	9.7	15.9	12.4	19.3	18.6
Lending interest rate (%)	-	-	6.6	11.4	10.9	8.7	7	7	7
Real interest rate (%)	-	-	2	4.1	16.4	13.9	-4.6	-2.4	1
General government final consumption expenditure (% of GDP)	-	-	11.4	10.7	13.9	16	16	14	14.2
Household final consumption expenditure, etc. (% of GDP)	-	-	78.2	79.9	77.3	75.3	76.4	81.9	82.2

Final consumption expenditure, etc. (% of GDP)	-	-	89.6	90.6	91.2	91.3	92.5	95.9	96.4
Exports of goods and services (% of GDP)	-	-	6.5	8.9	12.4	13.4	14.3	15.4	16.4
Imports of goods and services (% of GDP)	-	-	11.6	16.7	24.6	28.3	29.5	32.6	39.1
Foreign direct investment, net inflows (% of GDP)	-	-	0	1	4.4	3.5	5.9	5.6	2.4
Foreign direct investment, net outflows (% of GDP)	-	-	0	0	..	..	..	..	0
Gross domestic savings (% of GDP)	-	-	10.4	9.4	8.8	8.7	7.5	4.1	3.6
Gross capital formation (% of GDP)	-	-	15.4	17.2	21	23.6	22.7	21.3	26.3
Food exports (% of merchandise exports)	-	-	-	74.3	60.7	69.3	62	..	..
Food imports (% of merchandise imports)	-	-	-	9.1	14.5	11.3	21.5	..	..
Agricultural raw materials exports (% of merchandise exports)	-	-	-	16.3	23.2	15	25.9	..	..
Agricultural raw materials imports (% of merchandise imports)	-	-	-	1.5	1	0.9	0.7	..	..
Ores and metals exports (% of merchandise exports)	-	-	-	0.6	2.7	1.3	0.7	..	..
Ores and metals imports (% of merchandise imports)	-	-	-	0.9	1.5	1.2	1.5	..	..
Fuel exports (% of merchandise exports)	-	-	-	2.5	0	0	0	..	..
Fuel imports (% of merchandise imports)	-	-	-	16.5	17.5	12.4	12	..	..
Manufactures exports (% of merchandise exports)	-	-	-	7.5	13.4	14.3	11.4	..	..
Manufactures imports (% of merchandise imports)	-	-	-	72	65.2	73.9	64	..	..
Aid per capita (Current US$)	1	3.5	12.7	15.2	16.8	19.3	23.2	26	27.2
Poverty gap at $1 a day (PPP) (%)	-	-	7.7	6.4	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	6.4	27.9	19.9	18	7.6	7	5.4	4.1
Total reserves in months of imports	-	4.7	2.3	4.3	2.7	5.6	4.3	4.7	2.7

Source：The World Bank．2007．World Development Indicators: 2007

2.2 Current Situations of Regional Cooperation Agreements

2.2.1 Regional Cooperation Organizations and Agreements

The 17 countries surveyed in this study are member states of at least one of the following eight regional cooperation organizations or agreements.

a) African Union (AU)
b) New Partnership for African Development (NEPAD)
c) Common Market for Eastern and Southern Africa (COMESA)
d) East African Community (EAC)
e) Intergovernmental Authority on Development (IGAD)
f) Economic Community of Central African States (ECCAS/CEEAC)
g) Southern African Development Community (SADC)
h) Southern African Customs Union (SACU)

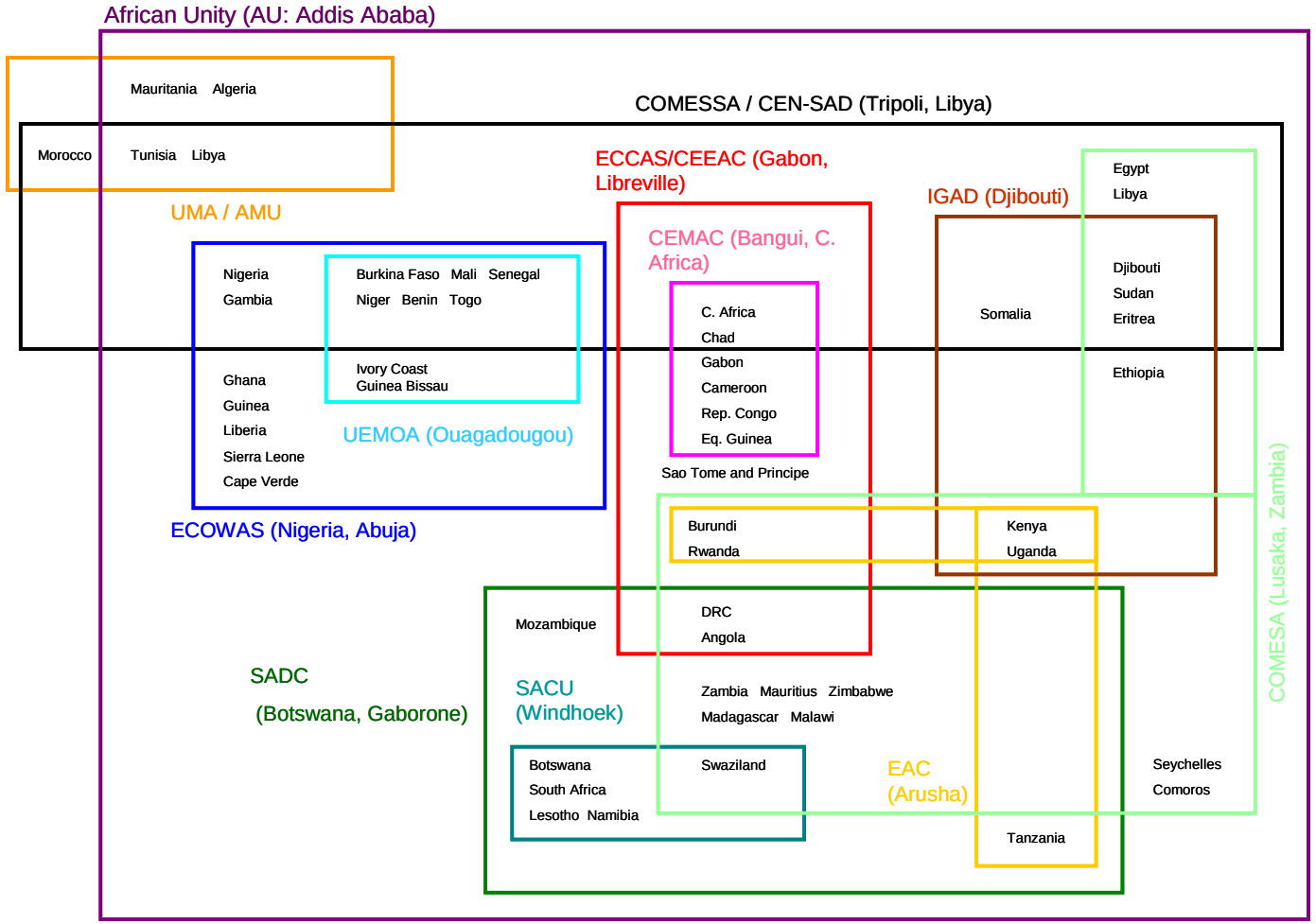
The table in the following page summarizes the characteristics, structure, size (total population, total GDP, etc.), current framework and activities of the above regional cooperation agreements. The formation process, specific missions, activities of committees and subcommittees and their efforts related to the power sector are also analyzed briefly.

Table 2.2.1 Summary of Regional Cooperation Agreement

Name	Structure	Membership/region (letters in bold are surveyed nations.)	Population	GDP(nominal)	Establishment	Process of Establishment, Characteristics and Recent Activities
AU (African Union)	Regional union	53 nations and regions in Africa (excluding Morocco)	850 mil	$514 bil	OAU in 1963 AU in 2002	Established in 1963 as the Organization of African Unity (OUA), which was developed into the African Union on 9th July, 2002. It promotes integration of African nations through security and economic cooperation. It aims at improving their status and eradicating regional conflicts and dictatorship in the era of globalization. It envisions the establishment of court, assembly and central bank and the introduction of single currency, modeled after the EU. It has proposed the establishment of the African Economic Community (AEC) by 2025 in Abuja Treaty, a legal foundation of the union.
NEPAD (New Partnership for African Development)	Regional development initiative	-	-	-	Officially approved in October 2001	The New African Initiative (NAI), a new strategic framework for African development, was adopted at the OAU Summit in Lusaka, Zambia, in July 2001. It was then renamed as the NEPAD when it was submitted to OAU's Heads of State Implementation Committee for its approval in Abuja, Nigeria, in October 2001. It aims at the eradication of poverty, sustainable growth and development, prevention of economic isolation and integration into the global politics and economy, and promotion of empowerment of women on the African continent. In 2002, it was discussed at an OECD ministerial meeting. In the same year, G8 leaders discussed massive aid and foreign debt relief for Africa at the Kananaskis Summit, in response to the NEPAD. They adopted the G8 African joint plan that contains such measures.
COMESA (Common Market for East and Southern African States)	Economic community	20 countries (Eritrea, Djibouti, Ethiopia, Kenya, Uganda, Rwanda, Burundi, Mauritius, Malawi, Zambia, Zimbabwe, Swaziland, Libya, Angola, Sudan, Seychelles, Comoros, Madagascar, Egypt, and DRC)	404.9 mil.	$261.3 bil	December 1994	The Preferential Trade Area (PTA) for Eastern and Southern Africa was reorganized into the COMESA in 1981. In October 2000, nine member states in the region (Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe) formed a free trade zone, to which Burundi and Rwanda acceded in January 2004, and Comoros and Libya in 2006. It aims at the establishment of common external customs to create a framework for a customs union by 2008. Its final goal is to liberalize intraregional trade and movement of capital and labor to create a common market. Lesotho, Mozambique, Tanzania and Namibia withdrew in order to cancel double membership with the SADC. Angola's membership is suspended.
EAC (East African Community)	Economic community	Kenya, Uganda, Tanzania (Burundi and Rwanda acceded in July 2007)	101.4 mil.	$38.8 bil	November 1999 (Treaty entered into effect in July 2000.)	A community that was once resolved in 1977 was reorganized after 1996. It has succeeded in the prevention of double taxation, simultaneous announcement of budget, currency exchange between member states without dollar intervention and issuance of common passports. The introduction of common external tariffs led to the foundation of a customs union in January 2005. It aims at establishing a political union by 2013 and there has been cooperation in diplomatic policies. It also aims at the currency unification. Official participation of Burundi and Rwanda was decided in July 2007.

Name	Structure	Membership/region (letters in bold are surveyed nations.)	Population	GDP(nominal)	Establishment	Process of Establishment, Characteristics and Recent Activities
IGAD (Intergovernmental Authority on Development)	Sub regional organization	7 countries (Kenya, Uganda, Ethiopia, Eritrea, Djibouti, Sudan, and Somalia)	187.9 mil.	-	1996	The Intergovernmental Authority on Drought and Development (IGADD) founded in 1986 was reorganized into the IGAD in 1996. Its major missions are the settlement of regional conflicts, food security and environmental protection. In addition, it aims at interregional economic cooperation and economic integration in the future. It agreed on the establishment of the Conflict Early Warning and Response Mechanism (CEWARN) to discover the risk of conflict outbreak for its prevention at the 9th summit meeting in January 2002. One of its achievements is the national reconciliation congress led by the IGAD in Somalia with long-lasting conflicts between armed forces. In January 2004, Somali leaders agreed to establish an interim government.
ECCAS/CEEAC (Economic Community of Central African States)	Economic community	11 countries (Burundi, Rwanda, DRC, Angola, Central African Republic, Chad, Gabon, Cameroon, Republic of Congo, Equatorial Guinea, and Sao Tomé and Principe)	-	-	October 1983	The establishment of more extensive economic cooperation community in Central Africa was agreed on at the UDEAC (Customs and Economic Union of Central Africa) summit meeting in December, 1981. It was officially founded on 18th October, 1983 with the participation of UDEAC member nations, Sao Tomé and Principe, and member countries of the CEPGL (Economic Community of the Great Lakes States). (Angola became an official member in 1999.) Based on the agreement with the EU in 2003, integration with the Economic and Monetary Community of Central Africa (CEMAC) was decided in 2003.
SADC (Southern African Development Community)	Economic community	14 countries (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa, Mauritius, DRC, and Madagascar	240.9 mil.	$337.7 bil.	December 1969 (Treaty entered into effect in March 1970.)	The Southern African Development Coordination Conference (SADCC) founded in, 1980, for the departure of Southern African countries from economic dependence on South Africa, was developed into the SADC. South Africa acceded in 1994. They agreed to establish a free trade zone in the future in 1996. It aims at the establishment of a free trade zone by 2008, a customs union by 2010 and a common market by 2015 and the introduction of single currency by 2016. Seychelles withdrew in 2003 to cancel double membership with the COMESA. Madagascar became a member state in 2005.
SACU (The Southern African Customs Union)	Customs union	South Africa, Botswana, Lesotho, Namibia, Swaziland	51.9 mil.	$259.8 bil	August 199	It has carried out the distribution of South African rand, tax-free distribution of intraregional products, free distribution of goods with no quota restrictions and imposition of common external tariffs. When a democratic government was established in South Africa in 1994, negotiations for a new SACU treaty began and it was signed in 2002 and entered into effect in July 2004. A free trade agreement between the European Free Trade Association (EFTA) and the SACU was put into effect on 1st January, 2008.

Source: Compiled by the study team based on such materials as the World Economic Zones issued by the Japan Center for International Finance (2006)



Source: MOFA Japan website http://www.mofa.go.jp/mofaj/area/af_data/pdfs/sokan.pdf

Figure 2.2.1 Relations among Major African Regional Organizations

2.2.2 Formation Process and Framework of Regional Cooperation Agreements

(1) AU[7]

The predecessor of the AU is the Organization of African Unity (OAU). A total of 32 African states signed the OAU Charter to found the organization in May 1963 and later additional 21 nations including South Africa acceded to the organization, summing up to the membership of 53 countries. (Morocco withdrew in 1984 because of West African issues.) The need for reorganization, in order to improve its efficiency and validity, was more recognized than ever. (Review of the OAU Charter began in the 1970s.) Although Charter Review Committee meetings held intermittently, no substantial revision was made.

The remote cause of OAU reorganization was the Abuja Treaty that was adopted in 1991 and entered into effect in 1994. The treaty points out the need to integrate political and developmental problems in the region with the OAU's political activities. It also declares the establishment of the African Economic Community (AEC) in 2025. The direct cause was the Sirte Extraordinary Summit hosted by Colonel Qaddafi of Libya in September 1999, where attendees adopted the Sirte Declaration that states the path of transition from the OAU to the AU.

Later at the Lome Summit in July 2000, the Constitutive Act of the African Union was adopted, the act took effect officially on 26th May, 2001, and the Durban Summit was held in July 2002, before the official establishment of the AU.

The Constitutive Act of the African Union states the objectives and principles of the AU as follows[8]:

1) Objectives (Article 3):

a) Unity and solidarity between the African countries and the peoples of Africa

[7] Source: JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region

[8] The OAU and the AU differ in the following three points:

- Improvement of validity in peace and security: Learning from the failure to settle many regional conflicts in the OAU era, the AU approved the right to intervene member states under its name and granted the right to the newly established AU Peace and Security Committee based on an AU Summit decision in order to enhance its capacity to deal with conflicts in Africa.
- Transition from a political organization to an organization for political integration and social development: The OAU was basically a political organization that discusses both political and social issues, whereas the AU is a technical organization for economic integration and social development. The regional economic community (REC) is considered of particular importance for economic integration and its enhancement and coordination are a major challenge.
- Emphasis on citizen participation: Although the OAU was excessively a state-centered organization, the AU places importance on citizen participation and considers that participation of NGOs, citizens' groups, labor unions and business organizations are essential for the establishment of the AEC. Thus it has established the Economic, Social, and Cultural Council (ECOSOCC) participated by the above-mentioned actors, etc., as an AU organ.

(Source: JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region)

b) Protection of sovereignty, territorial integrity and independence of its member states
c) Acceleration of political and socio-economic integration of the African continent
d) Defense of African common positions on issues of interest to the African continent and its peoples
e) Promotion of international cooperation in accordance with the Charter of the United Nations and the Universal Declaration of Human Rights
f) Promotion of peace, security, and stability on the African continent
g) Promotion of democratic principles and institutions, popular participation and good governance
h) Promotion and protection of human and peoples' rights in accordance with the African Charter on Human and Peoples' Rights and other important human rights instruments
i) Establishment of necessary conditions which enable the African continent to play its rightful role in the global economy and in international negotiations
j) Promotion of sustainable development at the economic, social and cultural levels as well as the integration of African economies
k) Promotion of cooperation in all fields of human activity to raise the living standards of African peoples
l) Coordination and harmonization of policies between the existing and future Regional Economic Communities (REC) for the gradual attainment of the objectives of the Union
m) Promotion of research in all fields, in particular, science and technology
n) Cooperation with important international partners in eradication of preventable diseases and promotion of good health

2) Principles (Article 4):
a) Sovereign equality and interdependence among Member States of the Union
b) Respect of existing borders
c) Participation of the African peoples in the activities of the Union
d) Establishment of a common defense policy for the African Continent
e) Peaceful resolution of conflicts among Member States of the Union
f) Prohibition of use of force or threat to use force
g) Non-interference by any Member State in the internal affairs of another
h) Right of the Union to intervene in a Member State pursuant to a decision of the Assembly in respect of grave circumstances, namely: war crimes, genocide and crimes against humanity

i) Peaceful co-existence of Member States and their right to live in peace and security
j) Right of Member States to request intervention from the Union in order to restore peace and security
k) Promotion of self-reliance within the framework of the Union
l) Promotion of gender equality
m) Respect for democratic principles, human rights, the rule of law and good governance
n) Promotion of social justice to ensure balanced economic development
o) Respect for the sanctity of human life, condemnation and rejection of impunity and political assassination, acts of terrorism and subversive activities
p) Condemnation and rejection of unconstitutional changes of governments

The AU has the following organs: a) the supreme decision-making body of the Assembly, b) the Executive Council that coordinates policies of member states (It mainly consists of foreign ministers of member states.), c) the Permanent Representatives Committee that prepares the work of the Executive Council (It is composed of ambassador-level permanent representatives from member states.), and d) the African Union Commission that virtually serves as the secretariat. There are the following specialized technical committees responsible for formulating projects and submitting them to the Executive Council. (Ministers or senior government officials responsible for their respective areas attend the meetings.)[9].

a) Committee on Rural Economy and Agricultural Matters
b) Committee on Monetary and Financial Affairs
c) Committee on Trade, Customs and Immigration Matters
d) Committee on Transport, Communications and Tourism
e) Committee on Industry, Science and Technology, Energy, Natural Resources and Environment
f) Committee on Health, Labor and Social Affairs
g) Committee on Education, Culture and Human Resources

(2) NEPAD[10]

The establishment of the NEPAD was triggered by a) the OAU Extraordinary Summit (so-called Sirte Extraordinary Summit) hosted by Colonel Qaddafi in September 1999 (This also triggered the establishment of the AU.), b) the South Summit of the Non-Aligned Movement and the G-77 held in Havana, Cuba, in April 2000, and c) the Togo OAU Summit in July 2000. At a) and b), the attendees passed the resolution to appeal challenges African

[9] AU website http://www.africa-union.org/root/au/AboutAu/au_in_a_nutshell_en.htm#organs
[10] JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region

nations (and developing countries) face, which include the issue of debt relief to developed countries (G8, World Bank-IMF and all creditors) through President Mbeki of South Africa, President Bouteflika of Algeria and President Obasanjo of Nigeria. At c), the attendees recognized as a common view among African nations that debt relief is just one aspect of the overall development agenda for Africa although it is a critical aspect and the three presidents above were requested to build a constructive partnership with developed countries for the regeneration of the African continent.

Against the backdrop, the following three plans and visions were formulated and announced: a) The Millennium Partnership for African Recovery Programme (MAP) based on the Millennium Africa Renaissance Programme proposed by President Mbeki of South Africa was announced by President Obasanjo and President Bouteflika at the World Economic Forum (Davos Forum) in January 2001. Two months later in March 2001, b) the OMEGA Plan that focuses on the development of infrastructure and introduction of market principle was announced by President Wade of Senegal at the 5th OAU Extraordinary Summit. The OAU Summit decided to integrate a) and b) as well as c) the New Global Compact with Africa (COMPACT) formulated by the UN Economic Commission for Africa (UNECA) in November 2000 in response to the UN Millennium Declaration.

The New African Initiative (NAI) is the integrated initiative of the three initiatives. The NAI was adopted at the OAU Summit in July 2001 at Lusaka, Zambia, and revised and renamed as the NEPAD at the OAU Heads of State Implementation Committee meeting in Abuja in October 2001.

The utmost objective of the NEPAD is the eradication of poverty in Africa and sustainable growth and development to integrate itself with the global economy on its own responsibility, independent from aid from the international community. It calls for support (partnership) from the international community to complement Africa's self-supporting efforts (ownership) [11].

The NEPAD's primary objectives are as follows[12]:

1) Establishment of conditions for sustainable development by ensuring:

[11] There is a view on the background of the NEPAD establishment that "it cannot be denied that independence of African nations with borders demarcated artificially by European countries has had adverse effects on the formation of nation-states to some degree. However, Africa does not realize substantial development without its independence or partnership within the region, even if it can successfully obtain aid by claiming that it is a tragic continent sacrificed behind the development of advanced nations and condemning them, giving such historic examples. African nations that came to such a conclusion almost 40 years after their independence presented the NEPAD as a pledge of African leaders." (Source: Masaki (2003) Transition of Economic Development Strategies and Deepening of Regional Economy in Africa: Rethinking the Meaning of NEPAD (New Partnership for African Development), Kushiro Public University of Economics Regional Study 12.

[12] Excerpt from p. 18 in a Survey on the Evaluation of the TICAD Process in African Region by JICA/Mitsubishi UFJ Research & Consulting (2007)

a) peace and security
b) democracy and good, political, economic and corporate governance
c) regional cooperation and integration
d) capacity building

2) Policy reforms and increased investment in the following priority sectors
a) agriculture
b) human development and skills development in the fields of health, education, science and technology
c) building and improving infrastructure, including energy, transport, water and sanitation
d) promotion of diversification of production and exports, with respect to agro-industries, manufacturing, mining, mineral resources development and tourism
e) promotion of intra-African trade and improvement of access to markets of developed countries
f) environment

3) Mobilizing resources by:
a) increasing domestic savings and investments
b) improving management of public revenue and expenditure
c) increasing Africa's share in global trade
d) attracting foreign direct investment
e) increasing capital flows through further debt reduction and increase in ODA flows

(3) COMESA

As the successor of the Preferential Trade Area for Eastern and Southern African States (PTA) established in 1981 as the framework of OAU's Lagos Plan of Action, the foundation treaty was signed in November 1993 before its establishment in December 1994. It currently consists of 20 member states (excluding Angola under suspension). It was once the largest economic community in Africa, exceeding the SADC.

In October 2000, nine member states in the region (Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe) formed a free trade zone, to which Burundi and Rwanda acceded in January 2004, and Comoros and Libya in 2006. It aims at the establishment of common external customs to create a framework for a customs union. Its final goal is to liberalize intraregional trade and movement of capital and labor to create a common market. Lesotho, Mozambique, Tanzania and Namibia withdrew in order to cancel double membership with the SADC.

The priority objectives of the COMESA are as follows[13]:

a) Establishment of a full free zone that guarantees the free movement of goods and services within the COMESA and removal of all customs
c) Introduction of uniform customs on goods and services imported from non-COMESA countries
c) Free movement of capital and investment to further improve the investment climate in the COMESA region
d) Gradual establishment of a payment union based on the COMESA Clearing House, introduction a common currency and eventual establishment of a common monetary union
e) Adoption of common visa arrangements within the COMESA region

(4) EAC[14]

The predecessor of the EAC was a customs union agreed upon by Kenya and Uganda in 1917, to which Tanzania acceded in 1927 to form a trilateral union. The EAC was founded by President Kenyatta of Kenya, President Nyerere of Tanzania and President Obote of Uganda as a trilateral economic community. The three presidents are the "founding fathers of three East African countries." With the recognition that they "share a common history, culture and customs as well as future destiny," the economic community was founded, taking advantage of the common currency of East Africa Schilling.

However, in 1977, the first EAC fell apart in reality because of the leadership struggle of Kenya and Tanzania and domestic affairs of each country. In 1978, Uganda invaded Tanzania and entered a war. It was officially dissolved in 1984.

The East African Cooperation in 1993 led to the establishment of its organization in Arusha in 1996 and member states worked together loosely for the environmental conservation of Lake Victoria, establishment of telecommunications networks and road systems, and inter-university cooperation. Tanzania had already become a member state of the SADU and Kenya and Uganda had joined the COMESA. There was no progress partly because Tanzania and Uganda were concerned that a common market only benefits the Kenyan manufacturing sector, which had already been in a favorable trade position. However, the second EAC was established in January 2001 after agreement by their leaders in November 1999.

It has succeeded in the prevention of double taxation, simultaneous announcement of budget, currency exchange between member states without dollar intervention and issuance of

[13] COMESA, COMESA in Brief, 3rd Edition (2007).
[14] EAC website http://www.eac.int/history.htm and other sources

common passports. The introduction of common external tariffs led to the foundation of a customs union in January 2005. It aims at establishing a political union by 2013 and there has been cooperation in diplomatic policies. It also aims at the currency unification.

Official participation of Burundi and Rwanda was decided in July 2007. An economic partnership agreement (EAP) was concluded with the EU in December 2007, in which they agreed on complete removal of tariffs on agricultural products exported from the EAC and gradual removal of tariffs on industrial products imported from Europe[15].

The EAC organs are a) the supreme institution of the Summit, b) decision-making mechanism of the Council of Ministers (mainly composed of ministers in relevant fields), c) the Co-coordinating Committee that serves as the secretariat of the Council of Ministers and coordinates sectoral committees, d) sectoral committees and e) the secretariat. There are following three offices under the secretariat:

a) Project and Program Office
b) Finance and Management Office
c) Tariff and Trade Office

(5) IGAD

The Intergovernmental Authority on Drought and Development (IGADD) founded in 1986 was reorganized into the IGAD in 1996. It is composed of seven member states: Djibouti, Eritrea, Somalia, Ethiopia, Sudan, Kenya and Uganda. The IGADD was founded in 1986 out of the need for regional cooperation to tackle such problems as drought, starvation, refugees, ethnic conflicts and civil wars that had frequently occurred in the northeastern Africa region since the 1970s. However, drastic changes in the region after the end of Cold War (collapse of socialist regime in Ethiopia, independence of Eritrea, anarchy in Somalia and introduction of multi-party political system in Kenya) increased the need for re-establishing and revitalizing interregional cooperation schemes and the IGAD was established in 1996 with the IGADD as its basis[16].

IGAD member states have such domestic problems as civil conflicts and disputes and diplomatic relations among them are also complicated. (The relationship between Sudan, where Islamic fundamentalism prevails, and its neighboring Eritrea, Ethiopia and Uganda has cooled off, with temporary breakdown of diplomatic relations. A border dispute between Ethiopia and Eritrea developed into a full-scale bilateral war in 1998, which lasted

[15] http://www.eac.int/news_2007_dec_clarification_on_EAC-EU_interim_EPA.htm
[16] IGAD website http://www.igad.org/

until 2000.) Against the backdrop, although interregional economic cooperation and economic integration is one of the missions, the IGAD has long focused on peacemaking in the member states (especially Sudan and Somalia). The IGAD is "merely a loose alliance among member states, in comparison with such sub-regional organizations as the ECOWAS and the SADC. Although its name has "development" in it, it does not have international or interstate economic cooperation or formulate any development plan"[17].

The following are the specific missions and activities of the IGAD[18]:

1) Mission

a) Food security and environmental protection within the region
b) Peacebuilding and security within the region
c) Economic cooperation and integration within the region

2) Objectives and contents of activities

a) Promotion of joint development strategies and harmonization of macro-economic policies and programs within the region
b) Harmonization of policies on trade, customs, transport, communications, agriculture and natural resources and promotion of free movement of goods, services and people within the region
c) Creation of an environment to promote foreign and interregional trade and investment
d) Achievement of interregional food security and assistance for efforts of member states to combat drought and other natural disasters
e) Development and improvement of efficient infrastructure, in the areas of transport, communications and energy, within the region
f) Promotion of peace and stability in the region and creation of mechanisms for the prevention, oversight and settlement of conflicts within the region and between regions (including dialogues)
g) Mobilization of various resources for the implementation of emergency, short-, medium- and long-term programs within the framework of regional cooperation
h) Promotion of collaboration with the COMESA
i) Promotion and enhancement of regional cooperation in research and development in science and technology

[17] Japan Institute of International Affairs (2004) Potential and Trend of Interregional Cooperation in Sub-Saharan Africa
[18] IGAD website http://www.igad.org/

(6) ECCAS/CEEAC[19]

The establishment of a more extensive economic cooperation community in Central Africa was agreed on at the UDEAC (Customs and Economic Union of Central Africa) summit meeting in December 1981. It was officially founded on 18th October, 1983 with the participation of UDEAC member nations, Sao Tomé and Principe, and the CEPGL (Economic Community of the Great Lakes States, established in 1976 with the member states being DRC, Burundi and Rwanda). Although it began functioning in 1985, it failed to function soon after its establishment because of financial difficulties of member states, not being able to pay the membership fees, and cross- border conflicts between the Great Lakes States.

Rebirth of the organization was declared at the second Extraordinary Summit in 1998. In 1999, Angola became an official member and there are 11 member states currently. Based on the agreement with the EU in 2003, integration with the Economic and Monetary Community of Central Africa (CEMAC) was decided in 2003.

It aims at the achievement of peace, security and stability, integration of economic currency, cultural and human integration and establishment of autonomous financial systems, with the eventual objective to "establish a common market for Central Africa". The following is the strategies to achieve the objectives, agreed on at the 1999 Summit:

a) Capacity development to maintain peace, security and stability, which are essential prerequisites for economic and social development
b) Environmental creation for physical, economic and monetary integration
c) Creation of culture of human integration
d) Establishment of an autonomous financing mechanism

(7) SADC[20]

The predecessor of the SADC is the Southern African Development Coordination Conference (SADCC) founded on 1st April, 1980. Its "objective is the departure of Southern African countries from economic dominance by former African government that was practicing apartheid." The SADCC later renamed itself the Southern African Development Community (SADC) when South Africa was democratized in 1992. South African acceded to the SADC in 1994. They agreed to establish a free trade zone in the future in 1996. It aims at the establishment of a free trade zone by 2008, a customs union by 2010 and a common

[19] http://www.iss.co.za/af/regorg/unity_to_union/eccasprof.htm
[20] MOFA website (http://www.mofa.go.jp/mofaj/area/africa/sadc.html) and the Report on Plant Market in South Africa (2007) released by the Japan Machinery Center for Trade and Investment

market by 2015 and the introduction of single currency by 2016.

Seychelles withdrew in 2003 to cancel double membership with the COMESA. Madagascar became a member state in 2005. There are 14 member states as of today.

The objectives stated in the SADC Treaty are as follows:

a) Promotion of economic growth and alleviation of poverty in the region
b) Regional integration
c) Maintenance and promotion of peace and security and self-sustaining development based on the principle of interdependence
d) Coordination of plans of member states and decision of regional policies
e) Conservation and effective use of resources in the region and strengthening of historical, social and cultural connections

The SADC is engaged in negotiations with the EU to conclude a free trade agreement (FTA) [21]. The EU provides trade-related assistance to the SADC, which includes support concerning negotiations on the part of the SADC for an SADC-EU economic partnership agreement.

(8) SACU[22]

The predecessor of the SACU was a customs union agreement launched in 1910 by five Southern African nations (Republic of South Africa, Botswana, Lesotho, Swaziland and Namibia). The SACU was founded in 1970. For the free movement of goods and services within member states, it stipulates distribution of South African rand, tax-free distribution of intraregional products, free distribution of goods with no quota restrictions and imposition of common external tariffs.

When a democratic government was established in South Africa in 1994, negotiations for a new SACU agreement began and it was signed in 2002 and entered into effect in July 2004, under which multiple independent organs (Council of Ministers, Customs Union Commission, Secretariat and Tariff Board) replaced the Southern African Trade and Customs Commission that had managed the SACU until then. The Tariff Board consists of five specialists from five member states and supervises all revisions related to external tariff approved by the supreme decision-making organ of Council of Ministers.

The new agreement forced a transition from the one-sided policy-making system by South

[21] The negotiations were proceeding with difficulty as of December 2007. (Source: http://www3.jetro.go.jp/jetro-file/search-text.do?url=13001808)
[22] SACU website http://www.sacu.int/ and a 2005 Survey on Trade and Investment, Industry and External Economic Policy of the Southern African Customs Union (SACU) including the Republic of South Africa by JICA/Mitsubishi UFJ Research & Consulting (2006)

Africa to a complex decision-making system (namely a collegiate system by all member states). This resulted in concerns over delays of negotiations with non-member nations and regions on common external policies such as the free trade agreement. However, it has yielded concrete results steadily[23]; a free trade agreement (FTA) between the European Free Trade Association (EFTA) and the SACU was put into effect on 1st January, 2008, for example.

2.2.3 Power Sector under Regional Cooperation Agreements

(1) AU

As explained in Section 2.2.2, the African Union Commission serves as the AU secretariat. Of the 12 departments in the commission, the Department of Infrastructure and Energy is responsible for energy and electric power projects. The Energy Division within the department is responsible for electric power projects.

Within the Energy Division, the African Energy Commission (AFREC) was established in 2001. Although it had been inactive since its establishment, its role was ratified at the AU assembly in February 2008. AFREC's responsibilities are as follows: a) capacity building, b) program coordination and c) fund-raising for all power pools in Africa[24]. It is expected to promote and vitalize various activities aggressively.

(2) NEPAD

The primary objectives described in Section 2.2.2 include "building and improving infrastructure (energy, transport, water and sanitation, etc.). The following is stipulated as the objectives of energy development in the NEPAD Framework Document.

[23] Although the SACU originally aimed at the effectuation of the FTA with the ETFA in 2006, it was postponed due to delayed negotiations and rectification procedures of some SACU member states. The SACU－EFTA FTA will be the first agreement in which all SACU member states participate. In expectation of the conclusion of an EFTA between the EU and the SACU or between the EU and the SADC, the EFTA began FTA negotiations with the SACU. However, the EFTA resulted in concluding the first FTA with the SACU due to delayed negotiations between the EU and the SACU. (Source: JETRO's commerce bulletin on 6th February, 2008)

[24] Based on an interview with the Energy Division of the AU Commission

Energy Development Goals in NEPAD Framework Document

- ✓ Increase of Africans' access to commercial energy supply from 10 percent to 35 percent or more within 20 years
- ✓ Stabilization and cost reduction of energy supply for economic activities
- ✓ Promotion of regional projects including power stations, power transmission lines and pipelines
- ✓ Conservation of biomass energy

Source: NEPAD Framework Document, P.26 http://www.nepad.org/2005/files/documents/inbrief.pdf

The action plan to achieve these objectives is the short-term action plan (NEPAD-STAP) formulated in 2002 supported by the African Development Bank. The NEPAD-STAP contains 52 facility construction projects, 36 investment projects, 18 survey projects and 18 capacity building projects. There is a list of priority projects that include energy-related projects in the "Infrastructure" category.

There is no committee or working group in charge of electric power within the NEPAD. Its secretariat is responsible for various coordination and resource mobilization. According to the secretariat, the following six projects are priority projects related to electric power[25].

1) Three power generation projects

a) Mphanda Nkuwaproject in Mozambique (Tariff issues are under discussion.)

b) Westcor project (4,000MW, a joint development project by power companies in the DRC, Angola, Botswana, Namibia and South Africa)

c) Kafue Gorge project in Zambia

2) Three power transmission line project

a) Interconnected power transmission lines (Mozambique<-> Malawi)

b) Interconnected power transmission lines (Zambia<-> Tanzania <-> Kenya)

c) Interconnected power transmission lines (Zambia<-> Namibia)

(3) COMESA[26]

As programs to achieve primary objectives described in Section 2.2.2, the COMESA defines four fields of a) trade promotion, b) investment promotion, c) building of infrastructure and d) development of science and technology. Infrastructure building contains infrastructure of

[25] Based on an interview with the NEPAD secretariat (Infrastructure advisor Mr. Mochebelele in charge of power projects in the secretariat)

[26] COMESA website http://www.comesa.int/about/vision/vision_chapter_6/view

transport (including aviation), information and communications, environment, and energy.

Specifically, major strategies for joint development and storage of energy resources within the region are joint exploration and joint development of such energy resources as wood fuel, fossil fuel, petroleum, hydraulic power, coal, geothermal power, biomass and solar power as well as their conversion into energy.

The East Africa Power Pool (EAPP) is one of COMESA's extraordinary organs.

(4) EAC

The Productive Sectors and Natural Resources Division is established under the Project and Program Department mentioned in Section 2.2.2. The Energy, Natural Resources and Environmental Section under the division is in charge of the power sector.

The Phase-1 report of the East African Power Master Plan Study (EAPMP) for East Africa was formulated under the EAC in November 2003, which was approved by the EAC in May 2004[27]. It is now formulating an action plan for the EAPMP supported by the World Bank in order to enhance its function as a power pool of the EAPP established in February 2005.

(5) SADC[28]

A memorandum of understanding was signed by the member states within the SADC in August 1995 to establish the Southern African Power Pool (SAPP). Assisted by the SADC, power utilities and public enterprises in nine SADC member states signed a memorandum of understanding in December the same year, which led to the establishment of a common power market and a power interchange system.

(6) Others

1) IGAD

Although building and improvement of energy-related infrastructure is stated in the IGAD objectives explained in Section 2.2.2, only the projects related to conflicts and health (HIV related) and communications are in progress[29], with no progress in energy issues.

2) ECCAS/CEEAC

The ECCAS/CEEAC Summit in March 2004 decided the establishment of the Central Africa Power Pool (CAPP) as one of its special institutions.

[27] The Master Plan's Phase-I report is accessible at EAC website: http://www.eac.int/programme.htm.
[28] SAPP website http://www.sapp.co.zw and the Report on Plant Market in South Africa (2007) released by the Japan Machinery Center for Trade and Investment
[29] IGAD website http://www.igad.org/

3) Infrastructure Consortium for Africa (ICA)[30]

After the G8 Gleneagles Summit in July 2005, the Infrastructure Consortium for Africa was launched on 6th October, 2005, mainly led by Japan and the U.K. for building large-scale infrastructure in Africa. With the African Development Bank serving as the host (secretariat), the AU Commission and the NEPAD participate from Africa and regional economic communities in Africa also participate as observers. Donors are various aid agencies in the G8 member states, the World Bank, EU and the European Investment Bank.

The consortium serves as a platform to promote financial assistance from donors for infrastructure development projects and programs (including electric power projects) in Africa. Its programs include capacity building, advocacy, compilation of handbooks for financial assistance tools and risk reduction tools for donors, project preparation (which includes compilation of online guidelines and handbooks), coordination among donors, and survey research (which includes NEPAD's Medium to Long Term Strategic Framework (MLTSF) and diagnosis by country)

[30] ICA website http://www.icafrica.org/en/

2.3 Social and Economic Structure and Power Consumption

This section summarizes political and economic relations of the Eastern and Southern African countries including the 17 counties surveyed in this study with Japan, Europe and other Asian countries.

2.3.1 Cooperation with Japan

(1) Political and Economic Relations

Japan has developed diplomatic relations aggressively with Africa recently mainly in the following three areas[31]:

Policy 1: Contribution to African issues shared by the entire international community

Based on the idea that "Global stability and prosperity cannot be achieved without the settlement of African issues", Japan's primary policy is to make proper contribution as a responsible member of the international community to the settlement of global issues concentrating in Africa. This policy is based on the recognitions that "Africa has many problems such as poverty and conflicts and is the only continent incapable of achieving any of the MDGs and that these serious problems cannot be ignored in view of humanitarian concerns and terrorist attacks, epidemics and environmental problems that have global impacts across borders are great threat to the international society."

Policy 2: Enhancement of Diplomatic Base

Based on the recognition that the enhancement of relations with 53 countries that account for about 30 percent of UN member states is essential for its stronger diplomatic base, "Japan intends to be engaged in discussions with African countries and encourage them actively as a partner for the realization of its own ideals in the international society." Africa has tremendous influence on decision-making of the international community as decisions are often made on the basis of "one country, one vote" principle. Partly because of the increased African presence after the establishment of the AU, Japan has worked to strengthen not only bilateral but multilateral relations (approach to the AU and other regional organizations.)

Policy 3: Appeal for Medium- and Long-term Development of Economic Relations

Considering the African region as a major trading partner with potential, Japan aims to

[31] Diplomatic Bluebooks 2006 and 2007, Ministry of Foreign Affairs of Japan

strengthen economic relations from a mid- to long-term perspective, with an eye on security of mineral resources. Japan assists promotion of trade investment and is strengthening partnership through such a process as the Tokyo International Conference on African Development (TICAD). In addition, Japan has developed diplomacy with a view to secure rare metal resources improportionally located in Africa.

Against the backdrop, Japan has had much closer diplomatic relations with Africa recently and their leaders are visiting each other actively as shown in the following table:

Table 2.3.1 Mutual Visits between Japanese and Major African Leaders

Year	Month	Mutual Visits between Japanese and Major Afrian Leaders
South Africa[32][33]		
2007	Aug.	・ Water Affairs and Forestry Minister Hendricks, visit to Japan
	Oct.	・ Japan Federation of Economic Organizations (Keidanren), visit to South Africa
		・ Science and Technology Minister Mangena, visit to Japan (for STS Forum)
		・ Public Enterprise Minister Erwin, visit to Japan
		・ Minerals and Energy Minister Buyelwa Sonjica, visit to Japan
	Nov.	・ Economy, Trade and Industry Minister Amari, visit to South Africa
		・ Parliamentary Secretary for Finance, Miyashita, visit to South Africa
		・ Education and Technology Minister Tokai, visit to South Africa
2006	Apr.	・ Mlambo-Ngcuka, Vice President of South-Africa, visit to Japan
	Jun.	・ Senior Vice-Minister for Foreign Affairs, Shiozaki, visit to South Africa and others
		・ Environment Minister Koike, visit to South Africa
	Jul.	・ Senior Vice-Minister for Foreign Affairs, Shiozaki, visit to South Africa
		・ Environment and Tourism Minister Van Schalkwyk, visit to Japan
	Aug.	・ Parliamentary Secretary for Finance, Nogami, visit to South Africa
	Sep.	・ Science and Technology Minister Mangena, visit to Japan
	Dec.	・ Foreign Minister Nkosazana Dlamini Zuma, visit to Japan
2005	Feb.	・ Education Minister Pandor, visit to Japan
	Apr.	・ Parliamentary Secretary for Foreign Affairs, Fukushima, visit to South Africa
		・ Transport minister Radebe, visit to Japan (for attending Japan Expo 2005 in Aichi)
	Jun.	・ Science and Technology Minister Mangena, visit to Japan
	Jul.	・ Trade and Industry Minister Mandisi Mpahlwa, visit to Japan
	Oct.	・ Chairperson of the National Council of Provinces, Mahlangu, visit to Japan
	Nov.	・ Japan-AU Parliamentary Friendship League, visit to South Africa
Tanzania		
2008	Jan.	・ Foreign Affairs Minister Kohmura, visit to Tanzania
2007	Jan.	・ Senior Vice-Minister for Finance, Tanaka, visit to Tanzania
	Feb.	・ Parliamentary Secretary for Foreign Affairs, Hamada, attended Fourth Africa-Asia Business Forum (in Tanzania) and visit to Uganda
	May	・ Foreign Affairs and International Cooperation Minister Membe, visit to Japan
2006	Jul.	・ Japan-AU Parliamentary Friendship League, visit to Tanzania
	Oct.-Nov.	・ President Jakaya M. Kikwete, visit to Japan
2005	May	・ Vice President Ali M. Shein, visit to Japan (for attending Japan Expo 2005 in Aichi)
	Jul.	・ Parliamentary Secretary for Foreign Affairs, Kawai, visit to Tanzania and Djibouti
	Nov.	・ Japan-AU Parliamentary Friendship League, visit to Tanzania。
	Dec.	・ Dispatch of Ambassador on Special Mission by M.P. Yano

[32] The first Japan-South Africa Partnership Forum that discusses not only political and economic issues between the two countries but African development and global issues was held in January 1999. The latest one was the 8th forum held in July 2006.

[33] The Japan-South Africa Agreement on Science and Technology Cooperation was signed in August 2003 to promote such cooperation between the two governments. Within the framework, the 1st and 2nd Japan-south Africa Joint Commission meetings for Science and Technology Cooperation were held in South Africa in May 2004 and June 2006, respectively.

Kenya		
2007	Jan. Mar.	・ Senior Vice-Minister for Finance, Tanaka, visit to Kenya ・ Senior Vice-Minister for Foreign Affairs, Iwaya, visit to Kenya (and Germany)
2006	Sep. Nov. Dec.	・ Agriculture, Forestry and Fisheries Minister Nakagawa, visit to Kenya ・ Tourism and Wildlife Minister Morris Dzoro, visit to Japan ・ Environment Minister Wakabayashi, visit to Kenya ・ Foreign Minister Tuju, visit to Japan ・ Parliamentary Secretary for Foreign Affairs, Hamada, visit to Kenya
2005	Feb. Feb.-Mar. Mar. Jun. Aug. Oct. Nov.	・ Assistant Minister for the Environment and Natural Resources Maathai, Planning and National Development Minister Nyong'o, Health Minister Ngilu, visit to Japan ・ Parliamentary Secretary for Foreign Affairs, Fukushima, visit to Kenya (WTO) ・ Assistant Minister for the Environment and Natural Resources Maathai, visit to Japan (for attending Japan Expo 2005 in Aichi) ・ Trade and Industry Minister Mukhisa Kituyi, visit to Japan ・ Trade and Industry Minister Mukhisa Kituyi and Tourism and Wildlife Minister Morris Dzoro, visit to Japan ・ Senior Vice-Minister for Foreign Affairs, Aisawa, visit to Kenya and Rwanda ・ Senior Vice-Minister for Foreign Affairs Aisawa and M.P. Yano, visit to Kenya

Source: Compiled by the study team based on the Chronology of Asian Activities and other materials (IDE-JETRO)

Exchanges and dialogues with regional organizations have been active. The relationship between Japan and the AU has been much closer recently as shown in the following table that tells exchanges and dialogues between their VIPs:

Table 2.3.2 Exchanges and Dialogues between Japan and the AU

Year	Month	Mutual Visits between Japan and AU
2008	Jan. Feb.	・ Former Prime Minister Mori attended Tenth (10th) AU Summit ・ JICA President Sadako Ogata visit to AU Headquarters
2006	Feb. May Jul.	・ Commissioner for Peace and Security of the AU, Djinnit, attended the TICAD Conference on the Consolidation of Peace (in Addis Ababa) ・ Senior Vice-Minister for Foreign Affairs, Shiozaki, courtesy call on Dr. Konare, Chairperson of the Commission of the AU ・ Prime Minister Koizumi visit to AU Headquarters (first time as Japanese PM) ・ Chairperson of the Commission of the AU, Konare, visit to Japan
2005	Jun.	・ Government of Japan appointed the original permanent representative to the AU (who doubled asJapanese ambassador to Ethiopia)
2004	Sep. Sep.-Oct. Nov.	・ Upper House Chairperson Chikage Ohgi attended the Second Session of the Pan African Parliament (PAP) ・ Commissioner for Peace and Security of the AU, Djunnit, and Chairperson of the Commission of the AU, Konare, visit to Japan ・ Chair of the AU, Obasanjo (The president of Nigeria) attended TICAD Asia-Africa Trade and Investment Conference (AATIC)
2003	Sep.-Oct.	・ Chair of the AU, Chisano, and Chairperson of the Commission of the AU, Konare attended TICAD-III in Tokyo
2002	Jul.	・ Senior Vice-Minister for Foreign Affairs, Sugiura, attended First AU Summit (After this, GOJ representatives attend AU Summit every year and convey messages from Japanese Prime Minister)

Source: Compiled by the study team based on MOFA website (http://www.mofa.go.jp/mofaj/area/oau/oau.html) and other materials

Looking at trade and investment between Japan and entire Africa, both import and export

values were on a decline trend until around 2000 after the burst of economic bubble. However, they have been recovering recently as shown in the figure below. Imports from Africa and exports to Africa hit the bottom in 1998 and 2001, respectively. In particular, imports from Africa have exploded since 2001 partly because of the impact of soaring crude oil prices. (Private investment policies and results will be analyzed in Section 3.6.)

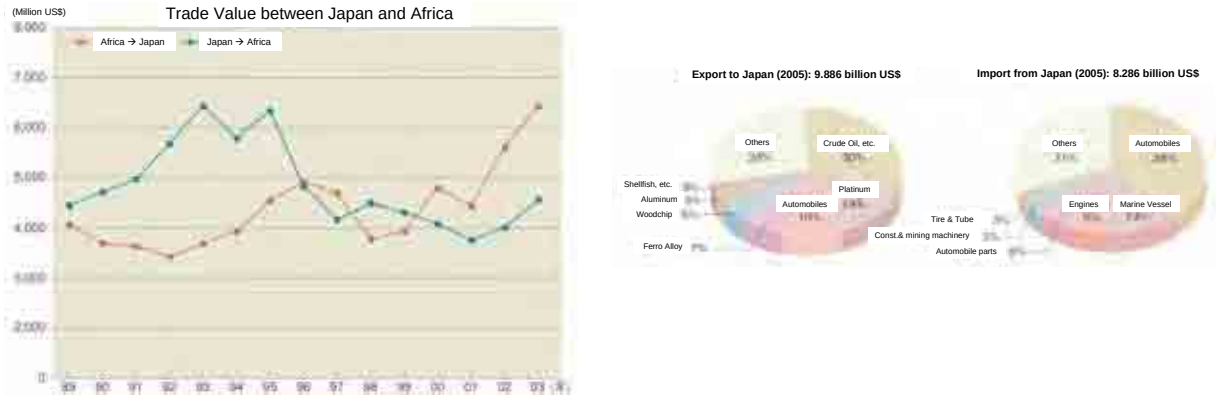


Figure 2.3.1 Trade Values between Japan and Africa and Breakdown in 2005

Source: Diplomatic Bluebooks 2006 and 2007 (Chapter 2.7 for both), Ministry of Foreign Affairs of Japan

(2) ODA for Africa and TICAD Process

In 2005, which was said to be the "African Year" as the G8 Gleneagles Summit and the Asia-Africa Summit were held, Japan launched various innovative policies for aid for Africa. The following is the major programs Japan announced in the year:

International Commitments related to Assistance for Africa
Announced by Japan in 2005

Double ODA for Africa in the next three years by 2007

Increase ODA for the entire world by 10 billion US dollars in the next five years by 2010

New initiative related to health and development (mainly for Africa)

Development initiative to support sustainable development of developing nations through trade (mainly African countries)

Support for consolidation of peace (March 2005)

Source: MOFA website http://www.mofa.go.jp/mofaj/area/africa/monitor_shiryo.html#5

Furthermore, Japan has held the Tokyo International Conference on African Development (TICAD) every five years since 1993. (Various TICAD-related conferences and initiatives are collectively called the TICAD Process.) The process is at the core of Japan's assistance for Africa with a basic philosophy of Africa's self-supporting efforts (ownership) and international assistance (partnership), Asia-Africa cooperation, human security and respect for African diversity[34]. Although the TICAD will not be evaluated here[35], "it is a farsighted initiative because it raised international awareness of assistance for Africa in the international community in the early 1990s when the assistance was decreasing as expressed in the phrase of "aid fatigue". The TICAD has also contributed to internationally spreading the concept of ownership and partnership. Importance of alleviation of poverty through economic growth by infrastructure building, South-South cooperation whose core is Asia-Africa cooperation, governance and capacity building, which the TICAD has emphasized, is now spreading among aid providers in Europe and North America and international agencies[36]." This evaluation is right to the point.

The TICAD-IV is slated to be held in late May 2008 in Yokohama. It faces the challenge of how unique its initiatives can be in comparison with the initiatives of the China-Africa Cooperation Forum or the EU-Africa Summit that are described later. It plans to propose specific actions of the international society for future African development based on the basic message, "Towards a Vibrant Africa," for supporting recent positive changes in politics and economy in Africa.[37]

The following table shows schemes realized in the TICAD process as frameworks for South-South Cooperation including African countries.

[34] MOFA website http://www.mofa.go.jp/mofaj/area/africa/monitor_shiryo.html#5
[35] Two examples are: TICAD Civil Society Forum (2006) TCSF White Paper 2006: African Development and Civil Society (an NGO example); JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region (an example of governmental evaluation).
[36] Mekata (2007) African Conditions and Japan's African Diplomacy, 161st FASID Brown Bag Lunch Seminar
[37] MOFA website http://www.mofa.go.jp/mofaj/area/ticad/ticad_iv.html

Asia-Africa Forum
Following the adoption of Tokyo Declaration at the TICAD I, the forum was launched in order to provide a forum to promote policy dialogues between the two regions to use the experience of Asian development for African development as reference. It was held in three series, the first one in Bangdung in 1994, the second one is Bangkok in 1997 and the third one Kuala Lumpur in 2000. The Bangdung Framework for Asia-Africa Cooperation (1st forum), Bangkok Declaration and the Message to the G8 Denver Summit (2nd forum) and "Kuala Lumpur New Millennium Statement" (3rd) were adopted.

Africa-Asia Business Forum
As a follow-up project of the TICADII, it was established with the objective to provide opportunities of business negotiations for African and Asian firms and provide Asian nations with information on African business environment in order to promote trade investment between the two regions for the realization of "poverty alleviation through economic growth". The AABF meetings were held in Kuala Lumpur in 1999, Durban in 2001, Dakar in 2004 and Dar es Salaam in 2007.

Asia-Africa Investment & Technology Promotion Centre
As a follow-up project of the TICAD II and with aid from Japan to the UNIDO, it was established in Kuala Lumpur in order to realize the development of the private sector in Africa by promoting trade, investment and technology transfer to Africa from Asia. It provides information for investors online, sends missions of Asian investors to Africa and provides training for employees of the Africa Investment Promotion Agency and other institutions. It was moved to the UNIDO Headquarters (Vienna) and still continues its activities.

TICAD Exchange Network
It is a portal website managed by the UNDP with technical assistance of the UNIDO, established as a follow-up project of the TICAD Asia-Africa Trade and Investment Conference. It provides information on trade and investment between Asia and Africa in full detail. （http://www.ticadexchange.org/ ）

Trilateral Cooperation among Japan, Malaysia and France
In 1997, the three countries decided to cooperate to assist African development under the initiative of then Prime Minister Hashimoto of Japan, then Prime Minister Mahathir of Malaysia, and then President Chirac of France. Representatives of the three countries meet regularly to make proposals mainly on human resources development, forest development and agriculture. Based on the proposals, the countries discuss specific projects.

Source: An excerpt from a Survey on the Evaluation of the TICAD Process in African Region by JICA/Mitsubishi UFJResearch & Consulting (2007)

For reference, the following shows recent assistance for Africa from Japan and other major donor countries and regional distribution of ODA from Japan. ODA for Sub-Saharan Africa in 2005 was 1.13734 billion US dollars, which has increased to account for 10.9 percent of the total ODA.

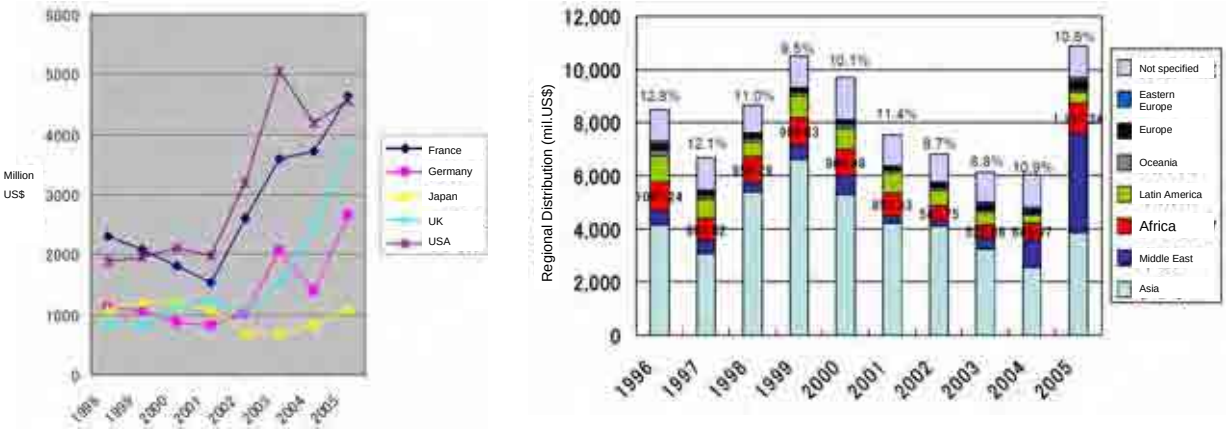


Figure 2.3.2 Assistance for Africa from Major Donor Nations (left) and Regional Distribution of ODA from Japan (right)

Source: Mekata (2007) African Conditions and Japan's African Diplomacy, 161st FASID Seminar

2.3.2 Cooperation with Europe38

(1) Cairo Process

Political dialogues between Europe and Africa are based on the Cairo Process initiated at the 1st UE-Africa Summit held in Cairo in 2000. The Cairo Process is a "forum for political dialogues and cooperation" between the EU and Africa where all African countries can discuss issues of mutual interest with Europe. The AU is recognized as a partner on the African side after its foundation in 2002. The following is a summary of Cairo Process:

1) Basic Principle of EU-Africa Relations

a) Equality, partnership and ownership

2) Structure of Cairo Process

a) Ministerial meetings of EU and AU: held in every six months in Africa and EU in rotation

b) Meetings for preparation and follow-up of ministerial meetings of EU and AU commissions: commissioner-level meeting once a year, senior-official-level meeting (joint EC-AUC task force) every six months, and many other working-level contacts

c) EU Commission representative and member embassies in Addis Abeba, Ethiopia, where the AU Commission headquarters are located have regular contact with the AU.

(2) EU Joint Strategy for Africa and EU-Africa Partnership

The EU adopted the EU strategy for Africa in 2005 and began to implement the "Principle of Consensus[39]," while clarifying a comprehensive framework to determine its orientation. The development policy in the Strategy for Africa determines a consistent common framework of relationship between ODA donor countries in the EU and Africa and recognizes that African development is a priority issue of the EU.

At the 2nd EU-Africa Summit held in Lisbon in December 2007, the Joint EU-Africa Strategy was adopted. Its objectives are to work together on various common issues ranging from climate change, development, energy, migration, peace and security, trade and regional

[38] European Commission website, http://ec.europa.eu/development/geographical/europe-cares, and JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region

[39] Leaders of EU member states approved the European Consensus on Development at the EU Summit in December 2005. It is a basic document jointly formulated by the Council (Council of Ministers), European Parliament and European Commission, directing the actions of development cooperation of member states and European Commission as EU actions. In other words, it is the first document that tells a comprehensive vision on the policy, priority and challenges. The EU development policy in the consensus is for all developing countries, which enables development assistance under the principle of single framework that binds both EU member states and European Commission for the first time in 50 years after the establishment of the EU. (Source: EU website)

integration, appropriate governance to human rights[40]. The strategy gives a long-term common vision on the EU-Africa relations in the global society and the Cairo Process is reinforced more extensively. The strategy also redefines "partnership" that is a basic principle of EU-Africa relations. A concrete action (targeting 2008-2010) in the following eight fields is adopted as the EU-Africa joint policy initiative:

EU-Africa Partnerships Reconstructed at 2nd EU-Africa Summit

Africa-EU Partnership on Peace and Security
Africa-EU Partnership on Democratic Governance and Human Rights
Africa-EU Partnership on Trade and Regional Integration (It includes the implementation of Africa-EU Partnership on Infrastructure launched in 2006)
Africa-EU Partnership on MDGs
Africa-EU Partnership on Energy
Africa-EU Partnership on Climate Change
Africa-EU Partnership on Migration, Mobility and Employment
Africa-EU Partnership on Science, Information Society and Space

Source: European Commission website

http://ec.europa.eu/development/services/events/eu-africa-summit-2007/index_en.cfm

Of the partnerships above, the Africa-EU Partnership on Infrastructure was launched in 2006. In October 2007, just before the 2nd EU-Africa Summit, the 1st steering committee meeting was held in Addis Abeba, Ethiopia[41]. The EU Infrastructure Trust Fund for Africa that mainly provides grant was established under the partnership on infrastructure. It has provided grant for such projects as the F/S of Ethiopia-Kenya Interconnected Transmission lines projects[42].

As described above, the EU-Africa Summit has also established the Africa-EU Partnership on Energy, which will discuss role sharing and compartmentalization with the Partnership on Infrastructure.

The series of arrangements described above can be understood that the EU which was lagged behind the TICAD and China in creating partnerships with African nations in terms of philosophy and action reconstructed its African strategy drastically before the TICAD-IV.

[40] European Commission President Jose Manuel Borroso said that Africa should be our priority among our diplomatic relations and we have to depart from paternalism and it's time to break our fixed ideas Europe and Africa have on each other, beyond the donor-recipient relationship. He also said, "We need each other. This joint partnership is the best political strategy to accelerate progress towards the millennium development goals and to address the global challenges we both face." (Source: European Commission website, http://ec.europa.eu/commission_barroso/president/focus/eu-africa_122007/index_en.htm)
[41] For details, refer to http://www.africa-union.org/root/au/Conferences/2007/october/IE/EU/iE/IE.htm.
[42] AU Commission, Interconnecting Africa - The EU-Africa Partnership on Infrastructure (2007).

At the 2nd EU-Africa Summit, the two parties still confronted over trade[43] and human rights issues[44].

(3) Trade Relations

The following table shows trade values between Sub-Saharan Africa and the EU, Japan and the U.S.

The EU has twice and six times as much trade with Sub-Sahara Africa as the U.S. and Japan, respectively, in value terms (as of 2006). This reflects the geographical and historical ties between the two regions. Although the EU has imported more than what it has exported since 1999, they are rather balanced, compared with the U.S. and Japan.

Table 2.3.3 Recent Trade Values of EU, Japan and US with Sub-Saharan Africa

Million US$

		1999	2000	01	02	03	04	05	06
EU	Export	29,702	30,815	32,305	33,090	41,060	47,185	53,551	61,360
	Import	31,820	36,438	39,244	37,775	45,999	50,619	59,724	66,156
	Balance	△ 2,118	△ 5,623	△ 6,939	△ 4,685	△ 4,939	△ 3,435	△ 6,173	△ 4,796
USA	Export	5,569	5,926	6,942	6,026	6,871	8,438	10,343	12,116
	Import	14,043	23,480	21,287	17,891	25,633	35,880	50,365	59,093
	Balance	△ 8,474	△ 17,555	△ 14,345	△ 11,865	△ 18,762	△ 27,441	△ 40,022	△ 46,977
JPN	Export	3,777	3,725	3,334	3,623	4,007	5,727	6,281	7,214
	Import	3,495	4,380	4,054	5,214	6,046	8,307	9,453	12,391
	Balance	282	△ 655	△ 720	△ 1,591	△ 2,039	△ 2,581	△ 3,173	△ 5,177

Source: Okada (2007) "Growing Africa - Visions of Japan and Africa" at UNAFEI seminar on Japan-Sub-Saharan Africa trade and investment

[43] Although the EU intended to conclude Economic Partnership Agreements (EPAs) that include tariff reduction partly to compete with China and India's entry into Africa, it failed to do so due to tough opposition of the African side. An Oxfam spokesperson on the European side said that a trade agreement negotiated between the EU and Africa has so much attention at this Summit, which means that current proposals have so many problems. She also said that the European Commission had implied that it needed to review its approach urgently and revise its requests. (Source: AFP News http://www.afpbb.com/article/economy/2323977/2444711)

[44] The summit did not find any solution to the Darfur issue or the human rights issue in Zimbabwe and created new sources of confrontention for the future; for example, UK Prime Minister Gordon Brown did not appear at the summit in protest against the attendance of President Mugabe of Zimbabwe, and President Mugabe in turn criticized Europe in his speech.

2.3.3 Cooperation with Asian Countries

(1) Malaysia[45]

Although Malaysia does not have any special forum for cooperation for Africa, unlike Japan, China or South Korea, it has been deeply involved in the TICAD Process, as can be in the following examples:

1) Malaysian Industrial Development Authority (MIDA):
The Malaysian Industrial Development Agency (MIDA) that promotes foreign and domestic investment in Malaysia provides technical cooperation for investment promotion institutions in developing countries through South-South cooperation frameworks. The technical cooperation is to "share the experience" in investment promotion among such organizations. About 50 people are invited to Malaysia in each session from developing countries chosen by MIDA's upper-level governmental organization of the Ministry of International Trade and Industry. (MIDA bears the cost for those participating from LDCs.) Many of the participants are from investment promotion agencies in Africa. Recently, MIDA has been actively promoting the Malaysian private sector to invest in emerging markets including those in Africa.

2) Malaysia External Trade Development Corporation (MATRADE):
The Malaysia External Trade Development Corporation (MATRADE), an external trade promotion agency under the MITI's umbrella, develops and promotes exports of Malaysian products. It has recently exerted efforts for the expansion of exports and diversification of export items to emerging markets in particular, including those in Africa. Its offices are located in 31 cities throughout the world. There are two offices in Africa, in Johannesburg and Nairobi, with Southern and Eastern Africa as major destinations of their exports.

3) Exim Bank of Malaysia:
The Exim Bank of Malaysia provides medium- and long-term credits to promote exports of Malaysian products and services to non-traditional markets (non-developed markets). The accumulated amount of loans and guarantees it has provided for Africa accounts for slightly over 10 percent of the total balance of loans and guarantees of the bank (as of the end of 2004).

[45] JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region

4) Malaysian Technical Cooperation Program (MTCP):

The program was launched in 1980. Based on the idea that the development of a country depends of the quality of human resources, the MTCP develops human resources by providing training at universities and public organdizations in Malaysia. The Economic Planning Unit of the Prime Minister's Department is in charge of the program. Although the major cooperation partners used to be ASEAN countries in the beginning, it has expanded the program to accept more than 100 people from African countries every year.

5) Malaysian South-South Corporation Bhd (MASSCORP) / Malaysia South-South Association (MASSA)

Malaysian South-South Corporation Bhd (MASSCORP) and its sister organization of Malaysia South-South Association (MASSA) are Malaysian South-South cooperation organizations. The former was established in 1992 under the initiative of former Prime Minister Mahathir with 85 Malaysian firms as shareholders. It promotes trade with and investment in developing countries including those in Africa. (Its activities include survey and formulation of investment projects, capital participation in them, provision of information on them, dispatch of missions, etc.) to support inter-governmental initiatives). It has established the Malaysian Business Center in Uganda. The latter is a non-profit organization providing information for member companies and setting up a business forum and dialogues between member companies and between member companies and companies in developing countries.

The following table shows the visits between Malaysian and African leaders since 2000. Being an Islamic state, Malaysia has close relationships with Northern Africa and the Middle East, with little tie with Southern and Eastern Africa.

Table 2.3.4 Mutual Visits and Exchange between Malaysian and African Leaders

Year	Month	Mutual Visits between Malaysian and African Leaders
2007	Feb.	- The Islamic Summit of the Organisation of the Islamic Conference (OIC), held in Kuala Lumpur
2006	May	- The Ninth Developing Eight (D-8) Foreign Minister's Meeting, held in Bali
		- Prime Minister, attended the Fifth Developing Eight (D-8) Summit in Bali
		- Prime Minister, visit to Egypy
	Aug.	- OIC emergency meeting, held in Putra Jaya, Malaysia
2005	Dec.	- OIC extraordinary meeting in Mecca, Saudi Arabia
2003	Jan.	- Prime Minister, meeting with Egyptian Prime Minister Mubarak in Cairo
	Mar.	- Prime Minister, attended OIC emergency meeting held in Doha
	Aug.	- Prime Minister, visit to Algeria
		- Prime Minister, meeting with President Sam Nujoma of Namibia at Global 2003 Smart

Year	Month	Mutual Visits between Malaysian and African Leaders
		Parnership held in Swaziland
	Oct.	- OIC Summit, held in Malaysia
2002	Apr.	- Prime Minister, visit to Morocco, Libya and Bahrain
	Jun.	- Deputy Miniter of Home Affairs, prohibited non-visa entry for 26 African nations
2001	Jul.	- The Second Africa-Asia Business Forum, held in Durban, SA
	Aug.	- Prime Minister, visit to Yemen and Uganda
2000	May	- The Third Asia-Africa Forum (AAF-III), held in Kuala Lumpur (jointly hosted by GOM, Government of Japan, UN and Global Alliance for Africa)
	Aug.	- Prime Minister, visit to Mozambique (and UK)

Source: Compiled by the study team based on the Chronology of Asian Activities and other materials (IDE-JETRO)

(2) China

Political and economic relations between China and Africa have become increasingly close in recent years. Political ties are the closest in the last half century, with the ministerial meetings of the Forum on China-Africa Cooperation (FOCAC) launched in 2000 at the core[46],[47]. China aims to build a new type of strategic partnership with Africa based on such principles as political equality, mutual trust, mutually-beneficial economic cooperation and cultural exchange. Having a say in the international community as a permanent member of the United Nations Security Council, China has developed economic cooperation with African countries without intervening in their domestic affairs.

The Chinese government launched the Forum on China-Africa Cooperation (FOCAC) in October 2000, creating a mechanism of multilateral talks among African nations to enter a new era of mutual cooperation. The Beijing Declaration of the Forum on China-Africa Cooperation and the Programme for China-Africa Cooperation in Economic and Social Development adopted by the forum serve as China's action guidelines for its African strategy.

The Chinese government held the forum three times and its presence has increased steadily.

[46] Aiko Kamiwazumi, 2006, “China's Africa Policy--Trade and Investment”, “Africa Changed by Private Firms—African Development of African and Chinese Firms”, edited by Katsumi Hirano (IDE-JETRO African Research Series No.13

[47] China has long promoted cooperation for Africa actively. In the 1960s and 70s, it provided support mainly through infrastructure building, educational exchange and provision of weapons to combat the influence of former Soviet Union on African nations after their independence. The Tanzam railway (currently called Tazara railway) that opened between Tanzania and Zambia in 1975 is widely known as a major Chinese cooperation project for Africa. After reform and opening-up of China in 1976, China's cooperation for Africa shrank as it placed importance on domestic economy. However, after the first visit to African six countries as the Chinese President by then President Jiang Zemin in May 1996, China's assistance for Africa changed drastically in quality and quantity. President Jiang declared the abolishment of cold-war ideology and a shift to economy-oriented relation. His intension was to secure stable energy supply from Africa by strengthening economic ties with Africa with potential resources. (Source: JICA/Mitsubishi UFJ Research & Consulting (2007) A Survey on the Evaluation of the TICAD Process in African Region)

1st Ministerial Meeting of Forum on China-Africa Cooperation (Beijing, October 2000)

Heads and government officials of 44 African countries attended. It announced the Beijing Declaration that underlines stronger solidarity and alliance as the third world and the Programme for China-Africa Cooperation in Economic and Social Development that summarizes China's support for African development as part of South-South cooperation.

"Programme for China-Africa Cooperation in Economic and Social Development"
(i) From aid to mutually-beneficial economic partnership
(ii)Promotion of imports of African products and investment in Africa by Chinese firms
(iii)China's active support for development of resources and infrastructure in Africa
(iv)Establishment of the China-African Business Council
(v) Partial cancellation and reduction of debt of highly-indebted African countries to China
(vi)Establishment of the African Human Resources Development Fund
(vii)Enhancing influence on the UN and the WTO as a developing country

2nd Ministerial Meeting of the Forum on China-Africa Cooperation (Addis Abeba, December 2003

Governmental representatives from 44 African countries attended. Future cooperation in such core areas as human resources development, agriculture, infrastructure development, trade and investment were discussed. China proposed (i) exemption from customs on partial imports, (ii) increase in funds for the African Human Resources Development Fund and development of 10,000 human resources in three years, and (iii) support for Chinese firms to invest into Africa. The Forum on China-Africa Cooperation-Addis Ababa Action Plan that contains concrete cooperation plans from 2003 to 2006 was endorsed.

3rd Ministerial Meeting of the Forum on China-Africa Cooperation (Beijing Summit) (November 2006)

Governmental representatives from 48 African countries (42 of them were heads) and AU Chairman attended. China proposed (i) enhancement of mutual trust and political ties based on equality of China and Africa, (ii) development of economic cooperation based on mutual benefits and prosperity, (iii) expansion of cultural exchange, (iv) promotion of balanced and harmonized global development, and (v) enhancement of international cooperation based on mutual support. It also proposed the following eight assistance measures:
(i) Double aid for Africa by 2009
(ii)Provide 3 billion-USD preferential loans and 2 billion-USD buyer's credits for Africa in the next three years
(iii)Establish a China-African Development Fund worth 5 billion USD to increase investment in Africa by Chinese firms
(iv)Build an AU conference center
(v) Release interest-free debt before 2005 for highly-indebted and less developed countries that have diplomatic relations with China
(vi)Increase custom-free import items from 190 to 440 for LLDCs that have diplomatic relations with China
(vii)Establish 3 to 5 trade and economic cooperation regions in Africa in the next three years
(viii)Plan human resources development to train 15,000 African professional in the next three years

Based on the above assistance measures, the forum adopted the FACAC Beijing Summit Declaration to establish and develop a new strategic partnership between China and Africa and the Beijing Action Plan from 2007 to 2009.

Source: Excerpt from a Survey on the Evaluation of the TICAD Process in African Region by JICA/Mitsubishi UFJ Research & Consulting (2007)

Other major developments are the 2nd China-Africa Entrepreneur Forum[48] that was held concurrently with the Beijing Summit and the document, China's Africa Policy, announced in January 2006 by the Chinese government[49].

[48] A total of 12 Chinese firms and organizations concluded a cooperation agreement for 16 projects worth 1.9 billion USD. About 1,500 participants from Chinese and African firms discussed enhancement of relations and specific projects in the fields of agriculture, industry, mining, energy, services, etc.

[49] The document points out that "the enhancement of solidarity and cooperation with African countries has long been part of China's independent peace diplomacy policy and sincere friendship, equal interaction, mutual benefit, joint prosperity, close cooperation and mutual learning and development are the basic principles and objectives of China." (Source: Chinese Government Announces Africa Policy on the website of Chinese Embassy in Japan, 13th January, 2006 (http://www.fmprc.gov.cn/ce/cejp/jpn/xwdt/t230845.htm)

Against the backdrop, China's diplomacy with Africa has been extremely active especially since 2005, as shown in the table below of VIPs visits between China and African countries. Chinese President Hu Jintao has visited Africa three years in a row since 2005. Particularly after the Beijing Summit in 2006, visits by Chinese leaders are remarkable; President Hu visited three countries in April 2006 and eight countries in February 2007 and Premier Wen Jiabao visited seven countries in June 2006 and also seven countries in January 2007[50].

Table 2.3.5 Mutual Visits by Chinese and African Leaders (2005-present)

Year	Month	Mutual Visits between Chinese and African Leaders
2008	Jan.	・ Foreign Minister Yang Jiechi, visit to South Africa, DRC, Burundi and Ethiopia
2007	Jan.	・ Foreign Minister Li Zhiaoxing, visit to Benin, Equatorial Guinea, Guinea Bisau, Chad, Central Republic of Africa, Eritrea and Botswana
		・ President Hu Jintao, visit to Cameroon, Liberia, Sudan, Zambia, Namibia, South Africa, Mozambique and Seycells
	May	・ Government of People's Republic of China, newly appointed "Special Representative for African Affairs"
	Jun.	・ AfDB, held annual meeting in Shanghai
	Jul.	・ Special Representative for African Affairs, Liu Guijin, (doubled as Special Representative for Darfur Affairs), visit to Egypt, etc.
	Sep.	・ Government of People's Republic of China, established "China-Africa Development Fund"
		・ President Hu Jintao, meeting with Prime Minister of the Republic of Mauritius, Dr. Ramgoolam
		・ China-Africa Foreign Ministerial Meeting, held at UN Headquarters in New York
2006	Jan.	・ Foreign Minister Li Zhiaoxing, visit to Cape Verde, Senegal, Mali, Liberia, Nigeria and Libya
	Apr.	・ President Hu Jintao, visit to Saudi Arabia, Morocco, Nigeria and Kenya
	May	・ Ministerial Round Table Meeting "Africa and Asia", held in Shanghai
	Jun.	・ Premier Wen Jiabao, visit to Egypt, Ghana, DRC, Angola, South Africa, Tanzania and Uganda
	Aug.	・ Establishment of diplomatic ties with Chad
	Nov.	・ The Third Forum on China-Africa Cooperation (FOCAC), called as "Beijing Summit", held in Beijing
	Dec.	・ Exchange economic cooperation agreement with Côte-d'Ivoire
2005	Jan.	・ Agreed with African LDC countries for customs exemptions (for 190 goods)
	Apr.	・ President Hu Jintao, attended Asia-Africa Conference held in Jakarta
	Aug.	・ The Fourth Senior Official's Meeting of FOCAC (in Beijing)
	Oct.	・ Normalization of diplomatic relations with Senegal
2004	Jan.-Feb.	・ President Hu Jintao, visit to Egypt, Gabon and Algeria
	Feb.	・ Vice President Zeng Qinghong, visit to Togo and others
	Oct.-Nov.	・ Chairman of the Standing Committee of the National People's Congress, Wu Bangguo, visit to Kenya, Zimbabwe, Zambia and Nigeria
2003	Mar.	・ President Hu Jintao, visit to Gabon
	Dec.	・ Premier Wen Jiabao, visit to Ethiopia
		・ The Second Ministerial Meeting of FOCAC, held in Addis Ababa

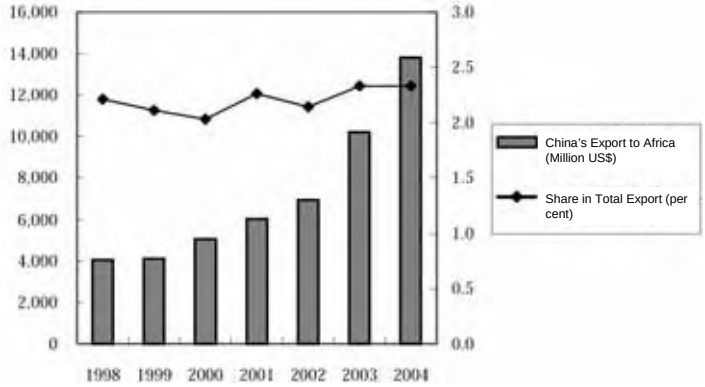
[50] China's such actions began to raise caution and objection in Europe and North America. Africa has been traditionally a market for Europe and entry of relatively-cheap Chinese products and merchandise in Africa and China's acquisition of oil and mineral resource in return for donation and low-interest loans have become issues. European and North American countries are raising concerns over China's diplomatic and fiscal aggressiveness ignoring the debt reduction discussed by international organizations (so-called free-rider issue). (Source: Yoshiki Hatanaka (2007) "Chinese President Hu Jintao Visits African Three Times in Three Years", *Latest Middle East Situations, 245*)

Year	Month	Mutual Visits between Chinese and African Leaders
2002	Apr.	• President Jiang Zemin, visit to Libya, Nigeria and Tunisia
		• Premier Zhu Rongji, visit to Egypy and Kenya
	Aug.-Sep.	• Premier Zhu Rongji, visit to Algeria, Morroco, Cameroon and South Africa
2001	Jan.	• Vice President Hu Jintao, visit to Uganda
	Sep.	• Egypt-China summit meeting by phone
	Oct.-Nov.	• Premier Li Peng, visit to Algeria and Tunisia
2000	Apr.	• President Jiang Zemin, visit to South Africa
	Oct.	• The First Ministerial Meeting of FOCAC, held in Beijing

Source: Compiled by the study team based on the Chronology of Asian Activities and other materials (IDE-JETRO)

Economic relations that include trade and investment were not so significant. China's trade value with Africa was a mere 2.6 billion US dollars in 1994. However, it began growing to exceed 10 billion US dollars in 2000 for the first time. It continues to renew a record for six straight years, reaching about 55.5 billion US dollars in 2006[51].

Of exports, electromechanical products and high-tech products account for about 50 percent. Some of other exports are iron and steel and steel products, shoes and tires. Imports are mainly primary products, with crude oil accounting for 73.4 percent in 2006. According to the Ministry of Commerce, of 200 top firms in terms of export values in 2004, foreign companies accounted for 77 percent and state-run corporations accounted for 17 percent. This shows that foreign companies with a base in China account for a big portion of exports from China to Africa[52]. The following figure and table show recent export values to Africa (left) and major direct investment destination from China in 2004 (right).



Nation	No. of Firms	FDI Value (10,000US$)	Share in FDI to Africa (%)	Nation	No. of Firms	FDI Value (10,000US$)	Share in FDI to Africa (%)
Algeria	3	15,633.0	36.2	Senegal	5	606.2	1.4
South Africa	12	10,688.4	24.7	DRC	4	564.0	1.3
Guinea	6	4,729.4	10.9	Tanzania	5	374.4	0.9
Nigeria	12	2,824.4	6.5	Egypt	3	304.4	0.7
Ethiopia	6	2,279.6	5.3	Eq. Guinea	1	298.0	0.7
Zambia	3	1,526.8	3.5	Angola	2	193.0	0.4
Madgascar	1	1,030.0	2.4	Ghana	2	180.0	0.4
Mauritania	0	969.0	2.2	Kenya	1	143.4	0.3
Sudan	6	724.4	1.7	Total to Africa	77	43,198.2	
				Total to All	**829**	**371180.5**	

Figure 2.3.3 Recent Export Values from China to Africa (left) and Major Destinations of Foreign Direct Investment from China to Africa in 2004 (right)

Source: Aiko Kamiwazumi (2006) "China's Africa Policy--Trade and Investment," *Africa Changed by Private Firms—African Development of African and Chinese Firms*, edited by Katsumi Hirano (IDE-JETRO African Research

[51] Song, 2007, "Growing Africa—Visions of Japan and Africa" at UNAFEI seminar on China-Sub-Sahara Africa trade and investment in September 2007.
[52] Aiko Kamiwazumi, 2006, "China's Africa Policy--Trade and Investment," *Africa Changed by Private Firms—African Development of African and Chinese Firms*, edited by Katsumi Hirano (IDE-JETRO African Research Series No.13

Series No.13 (The original source is Chinese Marine Customs Statistics (left) and Chinese Commerce Yearbook 2005 (right))

(3) India

Similar to political and economic relations between China and Africa, described in the previous section, those between India and Africa have become increasingly close in recent years. India and Africa have close historical relationship and there are many Indian communities especially in Eastern Africa. South Africa and India are member states of the Commonwealth of Nations. The Dutch founded the East India Company and, in 1602, established an outpost at the Cape of Good Hope, connecting India and South Africa in distribution.

Although political relations are not so remarkable as China-Africa relations, India launched the India-Brazil-South Africa (IBSA) forum together with South Africa and Brazil in June 2003 to enhance its partnership with Africa. It aims at providing wide-ranging cooperation, including cooperation in the UNSC reform and in various international conferences such as WTO meetings for partnership, economy and poverty eradication. They formulated the New Delhi Agenda for Cooperation and the New Delhi Action Plan at the Trilateral Commission Meeting in 2004. The action plan is an ambitious plan, stating its plan to seek negotiations to conclude preferential trade agreements not only between two countries but between regional organs (between Mercosur-SACU, between Mercosur-India and between SACU-India.) The forum has been held regularly since 2004 and summit meetings of the three countries were held in October 2006 and 2007. The following table shows mutual visits and exchange between Indian and African leaders.

Table 2.3.6 Mutual Visits by Indian and African Leaders

Year	Month	Mutual Visits between Indian and African Leaders
2007	Jul.	・ Foreign Minister Pranab Mukherjee, visit to Ethiopia and Libya (confirmed to expand India's economic cooperation to Sub-Sahara Africa)
	Oct.	・ Tripartite meeting between President Mubeki of South Africa, President Lula da Silva of Brazil and Singh, held in Pretoria, SA
	Nov.	・ G-20 Meeting, held in Cape Town (India's representative attended)
2006	Mar.	・ President A.P.J. Abdul Kalam and Miniter of Information Technology & Communications, visit to Mauritius
	Apr.	・ Commerce and Industry Minister Nath, announced FY2006 foreign trade policy (incl. African countries)
	Jun.	・ Top level meeting between China, Brazil, Mexico, South Africa and India (at G-8 Summit in Germany
	Sep.-Oct.	・ Prime Minister Singh, attended the 14th Summit of the Non-Aligned Movement (NAM) held in Havana ・ IBSA (India-Brazil-South Africa) Trilateral Summit held in Brazil ・ Prime Minister Singh, visit to South Africa

Year	Month	Mutual Visits between Indian and African Leaders
2005	Apr.	・ Prime Minister Singh, attended Asia-Africa Conference held in Jakarta
	Jul.	・ Prime Minister Singh, attended G-8 Summit in Gleneagles in the UK
	Dec.	・ Foreign ministerial meeting with South Africa in New Delhi
2003	Feb.	・ WTO Mini-ministerial meeting, held in Tokyo (Trade ministers in developing countries incl. India, China, South Africa invited)
	Jun.	・ Foreign ministers of India, Brazil and South Africa had a ministerial meeting in Brasilia and agreed to establish IBSA Forum
2002	Nov.	・ WTO Mini-ministerial meeting, held in Sydney

Source: Compiled by the study team based on the Chronology of Asian Activities and other materials (IDE-JETRO)

Economic relations that include trade and investment have become closer, with India's trade with Africa gradually increasing since the late 1990s. In particular, imports from Africa to India grew at an annual average rate of 14 percent from 1999 to 2004, almost doubled from the early 1990s (1990 to 1994).

Regarding the relationship with South Africa in relation to the IBSA forum described above, trade values between the two countries surged from four billion US dollars in 2005-2006 to six billion US dollars in 2007. It is expected to triple in 2010, reaching 18 billion US dollars.

The following charts show recent trade values and growth rates between Africa and India and Africa's exports to Asia by country in 2004:

Figure 2.3.4 Export values from Africa to India and China and its growth rates and destination in Asia by country

Source: Broadman, Harry G *et al.* (2007) *Africa's Silk Road – China and India's New Economic Frontier*, Washington DC: World Bank (The original source is the UN COMTRADE.)

Figure 2.3.5 Import values from India and China to Africa and its growth rate and origins by country

Source: Broadman, Harry G *et al.* (2007) *Africa's Silk Road – China and India's New Economic Frontier*, Washington DC: World Bank (The original source is the UN COMTRADE.

2.4 Social and Economic Structure and Power Consumption

2.4.1 Changes in Power Demand

In this section, power demand until 2025 in the SAPP and EAPP member states (surveyed countries) are estimated. Although a power demand estimate is obtained in the SAPP Regional Generation and Transmission Expansion Plan Study (Draft Final Report: Volume 1: Executive Summary, November 2007. Hereinafter referred to as the SAPP Master Plan for the SAPP and the East African Power Master Plan Study (Final Phase II Report) for the EAPP, the estimate method is not clear.

Thus, the estimate in this section is obtained based on the following hypotheses:

a) Use data of the Energy Information Administration of the U.S. Department of Energy (http://www.eia.doe.gov/fuelelectric.html) for power demand in 2005.

b) Use data of the real GDP growth rate of the IMF's World Economic Outlook (January 2008) of each country for power demand growth until 2008 for estimate.

c) The growth rates after 2009 are estimated as follows, with reference to the power demand growth rate applied in the SAPP Master Plan.

   The rates applied in the SAPP Master Plan have a diminishing trend, as shown in the following figure. However, considering the population growth rates and future prospects for the electrification rates in this region, together with the long term expansion of the economy of Southern Africa as a whole, it seems that the rates of the SAPP Master Plan may be moderate. Given these, one of the growth rates after 2009 is estimated 3.0 percent, as a baseline figure. (Estimate (i))

   In addition to the above, the other growth rate is estimated 4.0 percent which exceeds the baseline figure, in view of the current high economic growth in this region. (Estimate (ii))

d) The load factor of the SAPP Master Plan is used as the load factor of the net system energy demand and maximum demand.

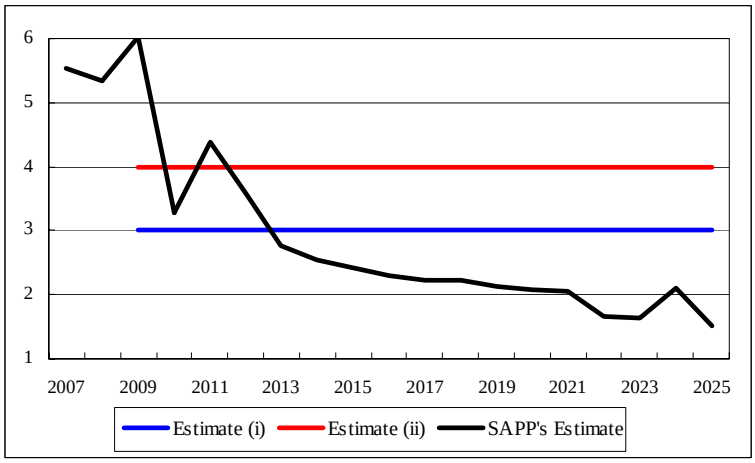


Figure 2.4.1 Comparison of Power Demand Growth Rates between Estimates (i) and (ii) and SAPP Master Plan

2.4.2 Economic Growth and Power Demand Increase

The following estimate of net system energy demand and maximum demand of the SAPP and EAPP member nations (surveyed countries) is obtained based on 2.4.1 Changes in Electric Power Demand:

⑴ SAPP Member States

The following shows net system energy demand and maximum demand of the SAPP member states:

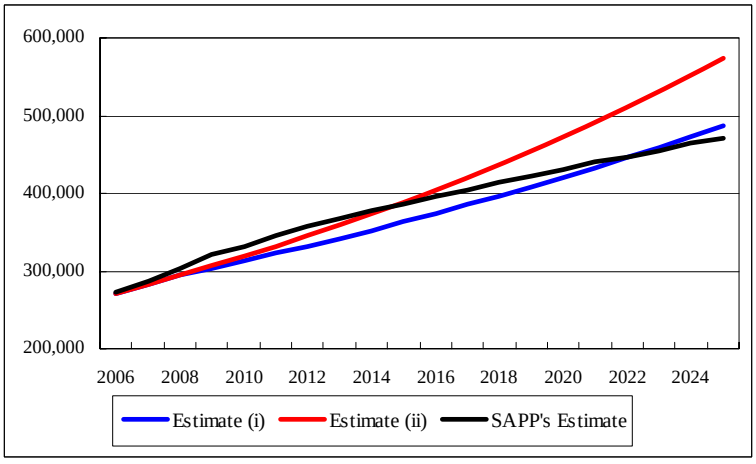


Figure 2.4.2 Estimated Net System Energy Demand of SAPP Member States (GWh)

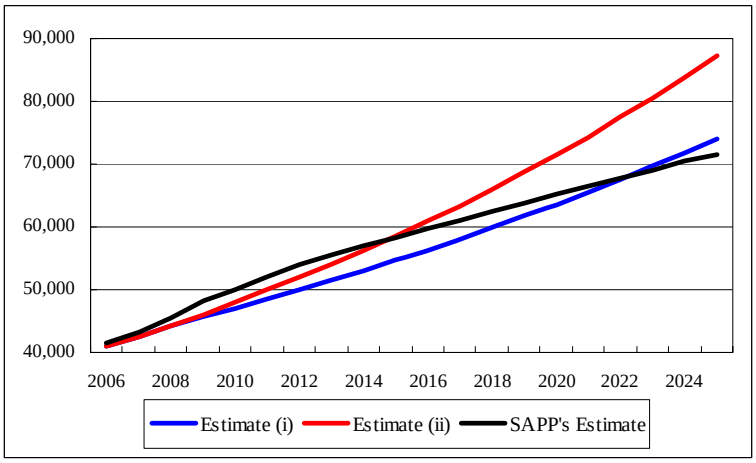


Figure 2.4.3 Estimated Maximum Demand of SAPP Member States (MW)

Table 2.4.1 Estimated Net System Energy Demand of SAPP Member States (GWh)

	2006	2007	2008	2009	2010	2015	2020	2025
Estimate (i)	270,173	282,529	294,982	303,831	312,946	362,790	420,574	487,560
Estimate (ii)	270,173	282,529	294,982	306,781	319,052	388,176	472,275	574,595
SAPP's Estimate	272,196	287,293	302,622	320,852	331,338	386,654	430,868	470,971

Table 2.4.2 Estimated Maximum Demand of SAPP Member States (MW)

	2006	2007	2008	2009	2010	2015	2020	2025
Estimate (i)	41,098	42,466	44,321	45,630	47,109	54,681	63,610	74,042
Estimate (ii)	41,098	42,466	44,321	46,073	48,029	58,507	71,430	87,260
SAPP's Estimate	41,406	43,182	45,469	48,186	49,878	58,278	65,167	71,523

The following table shows net system energy demand by country based on estimate (i):

Table 2.4.3 Estimated Net System Energy Demand by SAPP Member State (GWh) (estimate (i))

	2006	2007	2008	2009	2010	2015	2020	2025
ANG	2,610	3,213	4,087	4,210	4,336	5,027	5,828	6,756
BOT	2,670	2,803	2,949	3,038	3,129	3,627	4,205	4,874
LES	363	381	400	412	425	492	571	662
MAW	1,402	1,479	1,556	1,603	1,651	1,914	2,219	2,572
MOZ	9,903	10,596	11,338	11,678	12,028	13,944	16,165	18,740
NAM	2,995	3,138	3,283	3,381	3,483	4,037	4,681	5,426
RSA	221,246	231,644	241,373	248,614	256,073	296,858	344,140	398,953
SWZ	1,327	1,340	1,354	1,394	1,436	1,665	1,930	2,238
TAN	1,273	1,364	1,466	1,510	1,555	1,803	2,090	2,423
COD	5,541	5,901	6,397	6,589	6,786	7,867	9,120	10,573
ZAM	9,166	9,716	10,318	10,627	10,946	12,690	14,711	17,054
ZIM	11,678	10,954	10,461	10,775	11,098	12,865	14,915	17,290
Total demand	270,173	282,529	294,982	303,831	312,946	362,790	420,574	487,560

The following table shows maximum demand by country based on estimate (i):

Table 2.4.4 Estimated Maximum Demand by SAPP Member State (MW) (estimate (i))

	2006	2007	2008	2009	2010	2015	2020	2025
ANG	397	483	614	632	653	758	881	1,026
BOT	406	421	443	456	471	547	636	740
LES	55	57	60	62	64	74	86	101
MAW	213	222	234	241	249	288	336	391
MOZ	1,506	1,593	1,703	1,754	1,811	2,102	2,445	2,846
NAM	456	472	493	508	524	609	708	824
RSA	33,655	34,818	36,266	37,337	38,548	44,744	52,050	60,586
SWZ	202	201	203	209	216	251	292	340
TAN	194	205	220	227	234	272	316	368
COD	843	887	961	989	1,022	1,186	1,379	1,606
ZAM	1,394	1,460	1,550	1,596	1,648	1,913	2,225	2,590
ZIM	1,776	1,646	1,572	1,618	1,671	1,939	2,256	2,626
Peak load in total	41,098	42,466	44,321	45,630	47,109	54,681	63,610	74,042

The following table shows net system energy demand by country based on estimate (ii):

Table 2.4.5 Estimated Net System Energy Demand by SAPP Member State (GWh) (estimate (ii))

	2006	2007	2008	2009	2010	2015	2020	2025
ANG	2,610	3,213	4,087	4,251	4,421	5,379	6,544	7,962
BOT	2,670	2,803	2,949	3,067	3,190	3,881	4,722	5,745
LES	363	381	400	416	433	527	641	780
MAW	1,402	1,479	1,556	1,618	1,683	2,048	2,491	3,031
MOZ	9,903	10,596	11,338	11,791	12,263	14,920	18,152	22,085
NAM	2,995	3,138	3,283	3,414	3,551	4,320	5,256	6,395
RSA	221,246	231,644	241,373	251,028	261,069	317,631	386,446	470,171
SWZ	1,327	1,340	1,354	1,408	1,464	1,781	2,167	2,637
TAN	1,273	1,364	1,466	1,525	1,586	1,929	2,347	2,856
COD	5,541	5,901	6,397	6,653	6,919	8,418	10,241	12,460
ZAM	9,166	9,716	10,318	10,731	11,160	13,578	16,519	20,098
ZIM	11,678	10,954	10,461	10,879	11,314	13,766	16,748	20,377
Total demand	270,173	282,529	294,982	306,781	319,052	388,176	472,275	574,595

The following table shows maximum demand by country based on estimate (ii):

Table 2.4.6 Estimated Maximum Demand by SAPP Member State (MW) (estimate (ii))

	2006	2007	2008	2009	2010	2015	2020	2025
ANG	397	483	614	638	666	811	990	1,209
BOT	406	421	443	461	480	585	714	872
LES	55	57	60	63	65	79	97	118
MAW	213	222	234	243	253	309	377	460
MOZ	1,506	1,593	1,703	1,771	1,846	2,249	2,745	3,354
NAM	456	472	493	513	535	651	795	971
RSA	33,655	34,818	36,266	37,700	39,300	47,875	58,448	71,401
SWZ	202	201	203	211	220	269	328	400
TAN	194	205	220	229	239	291	355	434
COD	843	887	961	999	1,042	1,269	1,549	1,892
ZAM	1,394	1,460	1,550	1,612	1,680	2,046	2,498	3,052
ZIM	1,776	1,646	1,572	1,634	1,703	2,075	2,533	3,094
Peak load in total	41,098	42,466	44,321	46,073	48,029	58,507	71,430	87,260

⑵ EAPP Member States

The following shows net system energy demand and maximum demand of the EAPP member states:

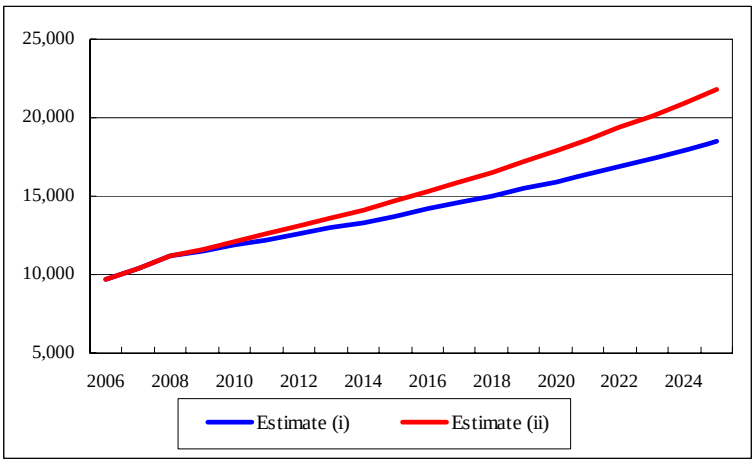


Figure 2.4.4 Estimated Net System Energy Demand of EAPP Member States (GWh)

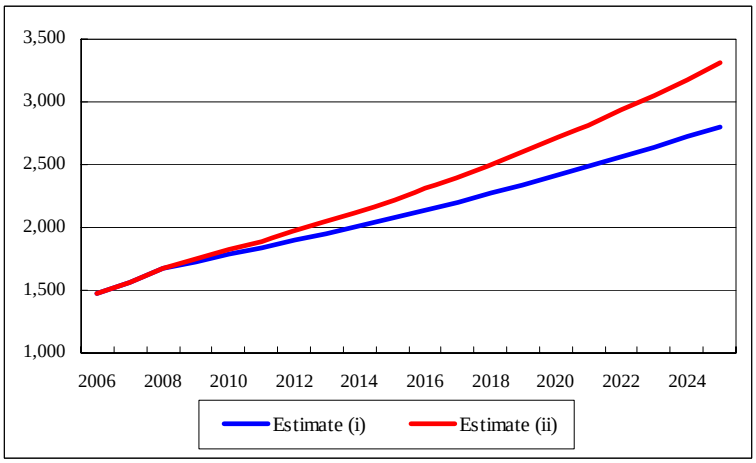


Figure 2.4.5 Estimated Maximum Demand of EAPP Member States (MW)

Table 2.4.7 Estimated Net System Energy Demand of EAPP Member States (GWh)

	2006	2007	2008	2009	2010	2015	2020	2025
Estimate (i)	9,688	10,411	11,179	11,514	11,859	13,748	15,938	18,477
Estimate (ii)	9,688	10,411	11,179	11,626	12,091	14,710	17,897	21,775

Table 2.4.8 Estimated Maximum Demand of EAPP Member States (MW)

	2006	2007	2008	2009	2010	2015	2020	2025
Estimate (i)	1,474	1,565	1,680	1,729	1,785	2,072	2,411	2,806
Estimate (ii)	1,474	1,565	1,680	1,746	1,820	2,217	2,707	3,307

The following table shows net system energy demand by country based on estimate a):

Table 2.4.9 Estimated Net System Energy Demand by EAPP Member State (GWh) (estimate (i))

	2006	2007	2008	2009	2010	2015	2020	2025
KEN	4,736	5,039	5,367	5,528	5,694	6,601	7,652	8,871
UGA	1,765	1,874	1,996	2,056	2,117	2,455	2,846	3,299
RWA	209	218	228	235	242	281	326	377
BDI	170	176	186	191	197	228	265	307
ETH	2,809	3,104	3,402	3,504	3,609	4,184	4,850	5,623
Total demand	9,688	10,411	11,179	11,514	11,859	13,748	15,938	18,477

The following table shows maximum demand by country based on estimate (i):

Table 2.4.10 Estimated Maximum Demand by EAPP Member State (MW) (estimate (i))

	2006	2007	2008	2009	2010	2015	2020	2025
KEN	720	757	806	830	857	995	1,157	1,347
UGA	268	282	300	309	319	370	430	501
RWA	32	33	34	35	36	42	49	57
BDI	26	26	28	29	30	34	40	47
ETH	427	467	511	526	543	631	734	854
Peak Load in total	1,474	1,565	1,680	1,729	1,785	2,072	2,411	2,806

The following table shows net system energy demand by country based on estimate (ii):

Table 2.4.11 Estimated Net System Energy Demand by EAPP Member State (GWh) (estimate (ii))

	2006	2007	2008	2009	2010	2015	2020	2025
KEN	4,736	5,039	5,367	5,582	5,805	7,063	8,593	10,454
UGA	1,765	1,874	1,996	2,076	2,159	2,626	3,195	3,888
RWA	209	218	228	237	247	300	366	445
BDI	170	176	186	193	201	244	297	362
ETH	2,809	3,104	3,402	3,538	3,679	4,477	5,446	6,626
Total demand	9,688	10,411	11,179	11,626	12,091	14,710	17,897	21,775

The following table shows maximum demand by country based on estimate (ii):

Table 2.4.12 Estimated Maximum Demand by EAPP Member State (MW)
(estimate (ii))

	2006	2007	2008	2009	2010	2015	2020	2025
KEN	720	757	806	838	874	1,065	1,300	1,588
UGA	268	282	300	312	325	396	483	590
RWA	32	33	34	36	37	45	55	68
BDI	26	26	28	29	30	37	45	55
ETH	427	467	511	531	554	675	824	1,006
Peak Load in total	1,474	1,565	1,680	1,746	1,820	2,217	2,707	3,307

CHAPTER 3

CURRENT SITUATIONS AND ISSUES OF THE POWER SECTOR OF SURVEYED COUNTRIES

Chapter 3 Current Situations and Issues of the Power Sector of Surveyed Countries

3.1 Current Situations of Power Sector

3.1.1 Positioning of Power Sector within National Priority Plans

This section starts with clarifying the position of the electric power sector within the national priority plans of surveyed countries, and then analyzes the progress of utility reforms. In clarifying the country positions, this report will give an overview of the visions and overall plans of the concerned countries, such as those included in the poverty reduction strategy papers (PRSP). The details on their progress in sectoral reforms will be discussed in Section 3.1.2, along with the administrative structure of utilities.

The following is an analysis of each of the seventeen countries surveyed in this study

(1) Angola[1]

Angola's long-term development strategy for the power sector is defined in the Strategy for the Development of the Electricity Sector of Angola ("Estratégia de desenvolvimento do sector eléctrico de Angola") published in 2002. This strategy analyzes various issues within the sector, and lays out short-term rehabilitation plans as well as long-term development strategies. (It should be noted that Angola has not drafted a PRSP.)

The foremost objective of the short-term rehabilitation plan, which sets the timeframe to 2007 as the period for the implementation, is to recover and rehabilitate various electricity infrastructures that were built and installed prior to their independence in 1975, and those destroyed or abandoned during the civil war[2]. Furthermore, the strategy also includes the establishment of financial basis for the utilities, review of tariffs, and technical and management training for the human resources. It also stipulates that the large-scale development of power resources should commence only after the recovery and rehabilitation.

Moreover, as a long-term guideline for the development of the power sector, the following

[1] IEA (2006), "Angola-Towards an Energy Strategy" and other sources

[2] Since its independence in 1975, civil war with the anti-government guerilla UNITA (National Union for the Total Independence of Angola) has broken out intermittently. Although a ceasefire was signed at the Lusaka Accord meeting on 20 November, 1994, a civil war broke out again in 1998. Following the death of UNITA's president Jonas Savimbi during a battle with the government forces in February 2002, another ceasefire was agreed upon in April the same year. With this, the 27 years of civil war was put to an end. (Source: Japan Electric Power Information Center Inc., 2005, "Electric Power Sector in Foreign Countries," Part Two, p565.)

five points were indicated:

a) Facilitate the improvements at a cost acceptable to the taxpayers. Said improvement includes power supply system which supports economic development, and a balanced power development considering environmental protection.
b) Implement a tariff policy which would initiate competition while corresponding to the cost of supply, and, through this policy, improve economic efficiency in the power industry.
c) Facilitate the exploration of natural resources (especially hydropower and natural gas) that will meet the domestic demand and will raise possibility for exporting power
d) Motivate local residents to participate in the development of the power sector
e) Promote private capital investment in the development of the power sector, while securing national and public interests.

Although the above policies and objectives support the sustainable development of the sector, many of these are yet to be reflected in actual practice.

(2) Botswana

In September 1997, the government issued "Vision 2016 – Towards Prosperity for All", a national vision aimed at year 2016, marking the 50th anniversary of their independence. This vision is a policy document laying out a long-term economic development outlook, and includes the following as the Vision Pillars for their future vision: an educated, informed nation; a prosperous, productive and innovative nation; a compassionate, just and caring nation; a united and proud nation; and an open, accountable and democratic nation[3]. In the power sector, the "enhancement of educational facilities through promotion of electrification" and the "electrification of rural areas through promotion of solar energy" are mentioned as means to achieve said vision. It should however be noted that Botswana has not drafted a PRSP.

The National Development Plan contains the implementation frameworks and action plans for the vision. Subsequent to the objectives of the Eighth National Development Plan aiming for a sustainable economic diversification, the Ninth National Development Plan ("NDP 9", covering initiatives from 2004 to 2009), was launched in April 2003, and, identified its theme as "Towards Realisation of Vision 2016: Sustainable and Diversified Development through Competitiveness in Global Markets". The main policy goals include economic diversification, creation of employment, reduction of poverty, stability of macro economics, maintenance of fiscal discipline, and development of human resources, as well as

[3] Botswana Vision 2016 Website : http://www.vision2016.co.bw/html/about_vision.shtm

addressing HIV/AIDS issues, and outline the strategies and policies for the energy sector[4].

Based on these high-level plans, the Ministry of Minerals, Energy and Water Resources (MMEWR) drafted the Botswana Energy Master Plan, (BEMP) in June 1996. It aims to enhance the access to energy through improvements in transmission, off-grid and solar power generation systems[5], and also to improve electricity bill collection.

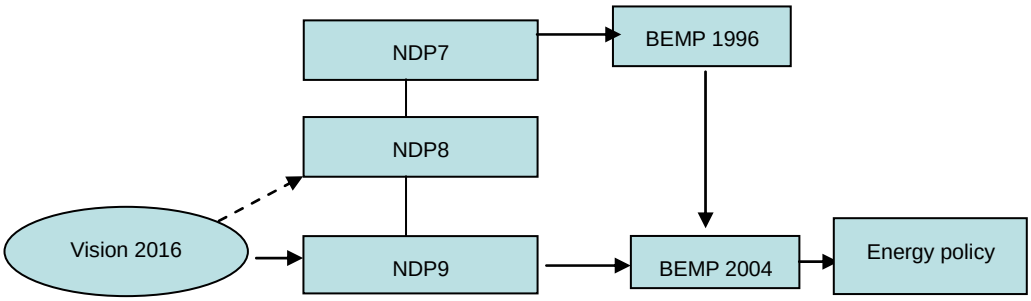


Figure 3.1.1 Relationship between Botswana's Overall Development Policies and the Botswana Energy Master Plan

Source: Development Energy in Africa (2006) Rural Electrification by Grid Electrification Case Study Report – A Case for Botswana

The BEMP was further updated in 2004, with the following goals:

a) Achieve 90% electrification by 2018
b) Improve access to electricity and ensure/supply power at an affordable price (electrification for the urban poor, continued electrification for rural and agricultural regions, continued financing scheme for solar power generation)
c) Maintain sufficient supply of fuelwood (promotion of a sustainable fuelwood management, and a community management of natural resources)
d) Beneficiate and secure affordable coal
e) Secure appropriate energy resources that meet household energy demands, and promote rational least cost options.
f) Supply paraffin and liquefied petroleum gas (LPG) at a reasonable and affordable price

(3) Lesotho

The Lesotho Electricity Master Plan Study (EMP) was initiated in the first half of 1990s, and completed in 1997. Based on this, the government launched an energy management project

[4] International Monetary Fund, 2004, Staff Report for the 2003 Article IV Consultation, pp.9, Box-2 http://www.imf.org/external/pubs/ft/scr/2004/cr04225.pdf
[5] JICA, 2003, Final Report – Study of Botswana Rural Electrication Plan by Solar Power

called the Energy Management in Lesotho in 1999.

(4) Malawi

Malawi's position in the power sector PRSP is aimed at improving access to affordable and sustainable energy in rural areas. Implementation strategies to realize this include the following: (i) raise the current electrification rate in the rural areas from the current four percent to an internationally-acceptable level, through the extension of power grid and construction of small-scale grids using small hydropower, diesel and solar power generation; (ii) reduce the use of fuelwood through provision of alternative power sources; and (iii) support the development of fuel retailers in the rural areas.

(5) Republic of Mozambique (Mozambique)

In its PRSP, the development of a national vision regarding sustainable energy and continued investment towards nationwide electrification, especially in the rural areas, are cited as the focus area in the power sector. The plan stipulates quantitative targets such as access to water and electricity throughout the day in 100 percent of the hospitals in the central, local and rural areas, and 75 percent of the medical centers by 2009. In particular, the following two strategies are to be executed:

1) Strategy regarding production, import and distribution of electric power

The energy sector has set a plan to secure enhanced access to electricity for domestic and economic activity use. For this, they will i) improve and enhance electricity production capacity and power systems; ii) allocate and conduct marketing of liquid fuel; iii) initiate operation by the National Economic Commission (NEC), iv) provide non-leaded gas at a national level, v) achieve the energy plan outlined in the Energy Master Plan, vi) develop plans for power generation and renewable energy, and vii) continue the implementation of power sector reforms.

2) Electrification Strategy

Although Mozambique holds a vast amount of hydropower resources, there are still quite a number of areas with low electrification. The main objectives of electrification are to improve access to energy for production activities with due consideration to environmental impacts, improve the commercial and economic performance of Mozambique's power industry, and increase the volume of and revenues from power exports. The three main action plans are i) complete electrification of rural areas through diesel power; ii) promotion of power generation projects (in particular, the Mphanda Nkuwa hydropower project, Moatize thermal power plant, and natural gas

power generation projects); and iii) facilitation of the development of alternative energy sources to electrify areas off the national grid.

(6) Namibia

Namibia has developed Vision 2030, a long-term national development plan where year 2030 is set as its goal, and the second mid-term national development plan for five years between 2001 and 2005. The national development policies aim at rectifying the disparity between regions, reducing poverty, creating job opportunities, and facilitating economic growth[6]. (It should be noted that Namibia has not drafted a PRSP.)

Based on the above development policies, the White Paper on Energy Policy issued in 1998 stipulates the following policy guidelines for the energy sector:

a) Maintain effective governance of the energy sector
b) Ensure security in supply
c) Achieve social upliftment
d) Promote investment and growth
e) Pursue competition and efficiency in the economy
f) Ensure sustainability.

In addition, a 100-percent responsive rate to peak demand and a 75-percent responsive rate to domestic total energy demand by 2010 are noted as the government's concrete targets.

(7) Republic of South Africa (South Africa)[7]

South Africa suffers from various issues such as poverty, high unemployment rate (26.2%), high crime rate, prevalence of the HIV infection, etc. In 1994, it published the Reconstruction Development Programme (RDP), a programme to combat poverty and aid the vulnerable. In 1996, the government created a plan, Growth, Employment And Redistribution (GEAR) which provided the initiatives to execute the RDP and promote liberalization of the economy.

Furthermore, in March 2006, it developed and announced The Accelerated and Shared Growth Initiatives of South Africa (ASGISA), which aims to achieve six percent economic growth beginning 2010 and reduce unemployment rate by 50% by year 2014. The Joint Initiative on Priority Skills Acquisition (JIPSA) was also initiated to develop human resources crucial to achieving the target.

[6] Ministry of Foreign Affairs, "Country Databook (Namibia)."
http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/kuni/06_databook/pdfs/05-32.pdf
[7] Ministry of Foreign Affairs, "Country Databook (Republic of South Africa)."
http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/kuni/06_databook/pdfs/05-41.pdf

(8) Swaziland

Swaziland has developed the National Development Strategy (NDS) in 1997, aimed at gaining achievements in 2022. The NDS's most important vision stipulates that "by the Year 2022, the Kingdom of Swaziland will be in the top ten percent of the medium human development group of countries founded on sustainable economic development, social justice and political stability," and identified seven key macro strategic areas and eight sectoral strategies[8]. (It should be noted that Swaziland has not drafted a PRSP.)

The eight sector strategy areas including physical infrastructure, roads, rail, civil aviation, postal services, media, environment, as well as energy sector have defined corresponding development goals. For concrete development strategies, the following three aspects have been identified:

a) Research and Development (R&D)
b) Efficiency (as an example, one of its included seven concrete actions is to ensure full participation in the Southern African Power Pool, or SAPP, to gain access to new regional market opportunities)
c) Accessibility.

(9) Tanzania

The Government of Tanzania developed the National Poverty Eradication Strategy (NPES) in 1997. In 1999, it announced the Tanzania Development Vision 2025, which presented the direction of the country's development. Based on these strategies, their PRSP was drafted in 2000, and the National Strategy for Growth and Reduction of Poverty (NSGPR) was issued as their second Poverty Reduction Strategy (PRS) in July 2005.

The second PRS is a comprehensive five-year policy framework aimed at reducing poverty and developing the economy. It places an importance on the ownership of the government, and adopts a cross-functional and results-oriented approach. Three factors cited for contributing to the poverty reduction include: i) growth and income poverty reduction; ii) improvement in the quality of life and social welfare; and iii) governance and accountability. The strategy for providing a reliable and affordable energy is relevant to the power sector.

(10) Democratic Republic of Congo (DRC)

DRC's PRSP lists electric power as a sector with growth potential, and points out the importance of hydropower, especially the development of Inga.

[8] The Environmental Centre for Swaziland, "The National Development Strategy (NDS)." http://www.ecs.co.sz/nds/

(11) Republic of Zambia (Zambia)

Zambia's PRSP also presents vision and goals for power/energy sector. It implies its aim to minimize the economic, social and environmental cost, and provide universal access to clean, stable and affordable energy. Its vision is to align these aims with the national development goal by 2030. Specifically, the provision of and access to clean, affordable and stable energy will be in line with the national development goals of sustainable growth, employment creation and poverty reduction.

(12) Republic of Zimbabwe (Zimbabwe)[9]

Due to various issues in the current Mugabe administration, most major donors including World Bank (WB) and IMF have ceased providing intergovernmental development aid, excluding humanitarian assistance. Based on the reports on Zimbabwe's parliamentary election in 2000 from Japan's election monitoring group, the Government of Japan has also halted providing new grant aid.

As diplomatic relations with the Western countries falter, Zimbabwe is seeking to fortify ties with countries such as China and India, under its "Look East" policy. In particular, its efforts to strengthen ties with China concerning military affairs and economy have become prominent since 2002.

(13) Kenya

Kenya's PRSP articulates that "the basic policy is to have increased participation of the private sector in power generation and distribution. In order to achieve this, legislation will be restructured further, including the review of current tariffs and rate systems, and the Electricity Regulatory Board (ERB)'s coordination role will be strengthened." In addition, it acknowledges its intent to reduce government's controlling share in Kenya Power and Lighting Company Ltd. (KPLC) from 51% to 39%, and refers to the reconstruction of Kenya Electricity Generating Company (KenGen).

(14) Uganda

The PRSP of Uganda states the concern for the shortage of electricity up to 2010, where a peak demand of 411 to 649 MW is expected. It implies that said peak cannot be accommodated by the current generating capacity of 317 MW, and emphasizes expediting the Bujagali (250 MW) and Karuma (200 MW) power generation projects in the long-term. To develop power generation for power trade to east African countries as

[9] Ministry of Foreign Affairs, "Country Databook (Zimbabwe)."
http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/kuni/06_databook/pdfs/05-21.pdf

well as domestic power supply, study of Ayago hydro power project (538MW) is undertaking by Japanese assistance.

(15) Rwanda

The PRSP of Rwanda states that "in building the economic infrastructure, the main objective for the energy sector is to increase domestic production and reduce electricity costs. Also, Rwanda will facilitate rural electrification to promote economic activities." The two strategies below are the corresponding action plans to achieve this objective:

1) Energy for the formal sector

a) Increase power generation capacity in 2002 to reduce energy costs

b) Conduct a study on procuring funds for renovation, network expansion and installation of a new power plant.

c) Promote participation of the private sector in this area, particularly in peat and gas field development.

d) Invest public funds into projects that may be economically just but unattractive to private investors

e) Privatize ELECTROGAZ by 2006.

2) Energy for the poor and companies in rural areas

a) The rural electrification program will be incorporated after careful consideration of the balance of public-private involvement in supply from 2002 to 2005. At this moment, electricity production for economic activities is deemed to be more significant than that required for domestic consumption.

b) Priority will be placed on villages that are closer to the power transmission line for the expansion and connection of the grid.

c) Spread information on improved stoves and low-cost energy and provide corresponding assistance.

d) Solar battery, drier and water heater projects should be promoted at the local, household, and corporate levels. The government will provide relevant information, support the research, and conduct presentations.

(16) Burundi

Burundi's PRSP and its Government Emergency Programme 2006 cover Burundi's development policies. Both programs aim towards the improvement of social economic criteria and the sustainable social integration of the nation to achieve the Millennium Development Goals (MDGs). The Government Emergency Programme 2006, the interim plan while the PRSP was still being developed, was announced at the Burundi Partners

Conference in February 2006.

The following five priorities are established in the Government Emergency Programme 2006[10]:

a) aid towards those affected by drought and food crisis
b) rehabilitation and construction of education infrastructure, and improvement of access to basic health care
c) reinsertion and resettlement of returnees, internally displaced persons and demobilized ex-combatants
d) good governance and restoration of the rule of law
e) budget and balance of payment supports.

The aim of the PRSP is "poverty reduction and sustainable and equitable development." To achieve this, they have defined the following four pillars:

a) improvement of governance
b) promotion of sustainable and equitable development
c) development of human resources
d) addressing the HIV/AIDS issue.

In terms of power sector development, it mentions the improved provision of electricity as a means for reducing poverty and development, namely, improve access to electricity for the majority of the nation, and provide necessary electricity to various industries and households. As part of its specific actions, maintenance (rehabilitation) of the operation of the existing power plants, and the construction of new (hydropower) plants with comparable capacity were discussed. Furthermore, they stipulate the implementation of a rural electrification plan through the extension of the power grid.

(17) Ethiopia

In 2002, WB recognized Ethiopia as one of the Heavily Indebted Poor Countries (HIPCs), and as a requirement to receive new aid, Ethiopia created its first Sustainable Development and Poverty Reduction Program (SDPRP)[11].

Furthermore, the Plan for Accelerated and Sustained Development to End Poverty (PASDEP), or the so-called second SDPRP, targeting a period of five years from 2005, was created. The plan was approved by the parliament in May 2006 The Development Assistance Group (DAG), a group of major donors pointed out issues in the plan such as the

[10] JICA, 2007, "Report on the Study of Creating a Burundi Reconstruction Assistance Project."
[11] SDPRP is available from IMF's website below: http://www.internationalmonetaryfund.org/External/NP/prsp/2002/eth/01/073102.pdf

lack of consideration for governance, but has agreed with the Ethiopian government to continue discussions on its contents. The major policies of the PASDEP are as follows[12]:

a) major efforts to facilitate economic growth
b) strategy with consideration for geographic characteristics
c) addressing population issues
d) liberation of the capabilities of Ethiopian women
e) strengthening of basic infrastructure
f) management of crisis and instability
g) acceleration of the initiatives to achieve the MDGs
h) creation of employment

Although the details of PASDEP are unclear, its major policy of "strengthening basic infrastructure" is common with that of the first SDPRP. The SDPRP outlines the policy objective for the power sector as "not only providing cost-efficient energy to clients, but improving the quality and amount of power provided by utilizing the vast water resources." It also points out the possibility of private power operators participating in the i) power generation, transmission and distribution of rural off-the-grid power business, and ii) provision of mini hydropower generation and other renewable energy (solar, wind, etc).

[12] Ministry of Foreign Affairs, "Country Databook (Ethiopia)"
http://www.mofa.go.jp/mofaj/gaiko/oda/shiryo/kuni/06_databook/pdfs/05-03.pdf

3.1.2 Progress of Power Sector Reforms and Power Business Management

The table on the following page summarizes the progress of power sector reforms in the 17 countries surveyed, with particular consideration to: i) whether a legislature for electric power exists; ii) whether a regulating body for electric power exists; iii) the state of separating power generation, transmission and distribution; iv) the involvement of the private sector in power generation; v) the involvement of the private sector in power transmission and distribution; and vi) the government's controlling share ratio in the utilities.

A regulating body has been established each in South Africa, Lesotho, Uganda, Zambia, Zimbabwe, Kenya, Malawi and Namibia. In Uganda and Zimbabwe, power generation, transmission and distribution are unbundled. Particularly in Uganda, the Uganda Electricity Board (UEB) is established as a legally-independent entity.

In Mozambique, Tanzania, Zimbabwe, Zambia, Kenya, Uganda and Ethiopia, the power generation market has been liberalized, and private funds are being invested into the market.

Table 3.1.1 Progress of the 17 Surveyed Countries and Current Situations of Utilities

Country	Power Laws and Regulations	Power Regulator	Separation of Generation, Transmission and Distribution	Private Sector's Participation in Generation	Private Sector's Participation in Transmission and Distribution	Utility	Generation	Transmission	Distribution	State Ownership	Overview of the Utility
Angola	GEA '95		No Progress	Possible	Possible	ENE	○	○	○	100%	Est. September 1998. Government investing 800 million US dollars over 20 years under the National Dam Reconstruction Program
Botswana	-	None	None	No	Under Way	BPC	○	○	○	100%	Est. 1970 under the Electricity Power Corporation Act. Over 50% of demand power is imported from South Africa (Eskom), around 20% from Mozambique (Cahora Bassa) and the SAPP's short-term energy market (STEM), and under 30% is generated domestically.
Lesotho	EA '97	LEA	No Progress	Possible	Possible	LEC	○	○	○	100%	Est. 1969 under Electricity Act No. 9. Privatization is under way (as of July 2004, 5 final tenderers) with 70% of LEC's shares planned for sale. Import from South Africa is 10% plus, particularly in drought times.
Malawi	EA '98	NECO	No Progress	No Progress	No Progress	ESCOM	○	○	○	98%	Established in 1998 pursuant to the passage of the Electricity Supply Commission of Malawi (Repeal) Act. In 2004, with the approval of the 2004 Electricity Act Amendment Bill, participation of IPPs was approved, while Escom's unbundling and privatization of three segments (generation, transmission and distribution) was also determined.
Mozambique	EA '97	Under Discussion	Proposed	Under Way	No	EDM	○	○	○	98%	Est. 1977 as a state-owned corporation and was made into a public corporation in 1995. Conducted organizational reforms to separate generation, transmission, distribution and commercialization, as well as expanding regional grids and strengthening hydropower generation.
						HCB	○			85%	Mainly provides power to South Africa (Eskom), EDM and Zimbabwe (ZESA). A delegation of power from Portugal was agreed upon in November 2005.

Country	Power Laws and Regulations	Power Regulator	Separation of Generation, Transmission and Distribution	Private Sector's Participation in Generation	Private Sector's Participation in Transmission and Distribution	Utility	Generation	Transmission	Distribution	State Ownership	Overview of the Utility
Namibia	EA '00	ECB	Under Way	Possible	No	NamPower	○	○		100%	Est. 1996 under NamPower Establishment Act. Generates, transmits, distributes and trades power as a group. Jointly planning a construction of the Kunene river hydropower plant with Angola, aimed at starting work in 2007. Primarily imports power from South Africa (Eskom) to fulfill domestic demand.
South Africa	EA '87	NER	No Progress	Possible	No	Eskom	○	○	○	100%	Public corporation with 100% ownership by the South African government. Provides approx. 95% of the domestic demand. Is able to provide cheap electricity with its abundant coal reserves, so that in terms of power generation and sales, ranks 11th and 7th in the world, respectively.
Swaziland	No progress	None	No	No Progress	No	SEB	○	○	○	100%	Est. 1963. Dependent on imports from South Africa, Eskom. 20% is generated domestically. Rural Electrification project under way.
Tanzania	EA '?	None	No	Under Way	No	TANESCO	○	○	○	100%	Est. 1964 with the merger and nationalization of Tanganyika Electric Supply Company and Dar Es Salaam. Privatization is under way, and has contracted South Africa's Net Group Solution for management until December 2006.
DRC	-	None	No	No	No	SNEL	○	○	○	100%	Burundi and Rwanda jointly established Sinelac, and Burundi owns the Ruzizi hydropower plant, while DRC operates it. With South Africa's Eskom, has contracts for strengthening the transmission line between Inga Hydropower Plan and the South African interconnection line.
Zambia	EA '95	ERB	Under Way	Under Way	Possible	ZESCO	○	○	○	100%	Changed to its current name in May 1994, from Zambian Electricity Supply Company Ltd. commercialized in 1988. Agreed to a structure wholly owned by the state, World Bank, and IMF in 2003 during its privatization talks. Provides energy to Copperbelt Energy Corporation and South Africa (Eskom).
Zimbabwe	EA '02	ZERC	Under Way	Under Way	No	ZESA				100%	Reorganized under the 2001 Electricity Act, wholly state-owned. Imports electricity from South Africa (Eskom), Mozambique (Cahora Bassa), and DRC.

Country	Power Laws and Regulations	Power Regulator	Separation of Generation, Transmission and Distribution	Private Sector's Participation in Generation	Private Sector's Participation in Transmission and Distribution	Utility	Generation	Transmission	Distribution	State Ownership	Overview of the Utility
Kenya	EPA '97	ERB	Under Way	Under Way	No	KenGen	○				Began sectoral reforms in 1997. Power generation managed by KenGen, owns all power generation facilities.
						KPLC		○	○		Same as above. KPLC is responsible for the transmission and distribution.
Uganda	EA '99	ERA	Under Way	Under Way	Under Way	UEB				100%	Unbundling of generation, transmission and distribution from UEB into UEGCL, UETCL, and UEDCL, respectively.
Rwanda	N/A		No	No	No	Electrogas	○	○	○		In 1963, Regideso Rwanda and Regideso Burundi separated, and Electrogas was formed in Rwanda in 1976. Concluded a management contract with Lajmayer in 2003.
Burundi	N/A		No	No	No	REGIDESO	○	○	○		Est. in 1939. In 1963, Regideso Rwanda and Regideso Burundi separated, and Burundi's Regideso continues to this day.
Ethiopia			No	Under Way	No	EEPCO		○	○	100%	

Source: Prepared by the study team, based on Seki, 2006, "Infrastructure and Companies in South Africa,"

Katsumi Hirano edit., "Companies Changing Africa – Companies in South Africa and Chinese Companies in Africa,"

IDE-JETRO Africa Research Series No. 13, and JICA (2007) "Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report."

3.1.3 Electric Power Tariffs

The following presents the tariffs and rate schedule for each country except for Uganda, Rwanda and Burundi, where data could not be obtained

(1) Angola

The table below shows the power rate schedule of Angola's ENE, revised in May 2004. Pricing is categorized into low-voltage and medium-voltage. The low-voltage category is further classified into Domestic, Domestic Social Tariff, Industrial, Commercial and Service, and Public Lighting while the medium-voltage category is broken down into Industrial and Commercial and Service.

Table 3.1.2 Angola ENE Rate Schedule (2004)

Customer	Unit	Value Kz	Value US$ cents (nominal)
Low Voltage:			
Domestic	/kWh	3.35	5.76
Domestic Social Tariff	/kWh	1.42	2.44
Industrial	/kWh	3.07	5.28
Commercial and Service	/kWh	3.41	5.86
Public Lighting	/kWh	2.46	4.23
Medium Voltage (1kV < 30kV):			
Industrial	/kW	171.51	294.84
	/kWh	1.44	2.48
Commercial and Service	/kW	192.66	331.20
	/kWh	1.62	2.78

Source: ENE website www.ene.co.ao

(2) Botswana

Although BPC's tariff data was unavailable for this study, BPC's website posts a simple method for simulating the electricity bill, as referenced below. It should be noted that Botswana's tariff level is said to be one of the most expensive among the Southern African states.

Electricity Bill Simulation per BPC Website

The monthly electricity bill payable is obtained by adding the fixed charge for a given customer group to the product of the energy. (kWh) used and the tariff rate.
For business 2 and 3 consumers, the maximum demand charge, (kW x rate) is added to the fixed and energy charges.

Example: A domestic consumer using 400kWh electricity a month would pay
(400 x P0.2914) + P8.09 = P126.65

where
400 = kWh used
P 0.2914 = current domestic rate per kWh used inclusive of 10% VAT
P 8.09 = fixed charge

Source: BPC website : http://www.bpc.bw/customer_info.htm

(3) Lesotho

The table below is the rate schedule of LEC, revised in 2006. Tariffs consist of fixed charge according to service level (Domestic, General Purpose, Commercial, and Industrial), and per-unit charge for every kWh consumption. For the commercial and industrial segments, either a low-voltage or high-voltage supply can be selected. High-voltage users are subject to cheaper pricing level, but must bear the cost for installing the meter[13].

Table 3.1.3 Lesotho LEC Rate Schedule (2006)

Customer	Unit	Value Kz	Value US$ cents (nominal)
Low Voltage:			
Domestic	/kWh	3.35	5.76
Domestic Social Tariff	/kWh	1.42	2.44
Industrial	/kWh	3.07	5.28
Commercial and Service	/kWh	3.41	5.86
Public Lighting	/kWh	2.46	4.23
Medium Voltage (1kV < 30kV):			
Industrial	/kW	171.51	294.84
	/kWh	1.44	2.48
Commercial and Service	/kW	192.66	331.20
	/kWh	1.62	2.78

Source: JICA (2007) Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report

[13] Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, p.693

(4) Malawi

The table below shows the rate schedule of Malawi Escom, revised in November 2003. Pricing is categorized according to consumer level, i.e., Domestic, General, Low Voltage, and Medium Voltage. Domestic power is supplied at 230V, and consists of fixed and consumption charges. The consumption charge is based on a three-stage progressive charging. Low voltage is 400V, while medium voltage is supplied at either 11kV or 33kV[14].

Table 3.1.4 Malawi ESCOM Rate Schedule (2003)

Customer	Unit	Value Kwacha	Value US$ cent (nominal)
Domestic			
Fixed charge	Fixed	90.94	84.12
≤ 30 kWh	/kWh	1.95	1.80
> 30 kWh and ≤ 750 kWh	/kWh	2.85	2.64
> 750kWh	/kWh	4.05	3.75
General (<40kVA)			
Fixed charge single phase	Fixed	298.19	275.82
Fixed charge three phase	Fixed	415.66	384.48
Consumption	/kWh	5.35	4.95
Max Demand Low Voltage			
Fixed charge	Fixed	1,100.50	1,017.94
Consumption	/kWh	2.98	2.76
Off-peak kVA charge	/kVA	350.53	324.23
Max Demand Medium Voltage			
Fixed charge	Fixed	1,061.11	981.51
Consumption	/kWh	2.39	2.21
Off-peak kVA charge	/kVA	655.24	606.09
Optional MD Medium Voltage			
Fixed charge	Fixed	1,061.11	981.51
Consumption	/kWh	2.39	2.21
Off-peak kVA charge	/kVA	327.62	303.04
Export Medium Voltage			
Max demand	/kVA	18.36	16.98
Consumption	/kWh	0.014	0.01

Source: ESCOM website www.escommw.com

[14] Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, p.657

(5) Mozambique

The table below shows the EDM rate schedule revised in February 2006. The rates are categorized into three main, namely, Low Voltage (for Social, Domestic, Agriculture and General), Low Voltage (Pre-paid), and Large Customers (Low Voltage, Medium Voltage, and High Voltage).

Table 3.1.5 Mozambique EDM Rate Schedule (2006)

Customer	Unit	Value Mt	Value US$ cents (nominal)
Low Voltage (Social, Domestic, Agriculture & General)			
Social (0<kWh≤100)	/kWh	1,010	3.77
Non-social Fixed Charge	Fixed	70.797	0.26
Domestic (0<kWh≤200)	/kWh	2,198	8.21
Domestic (200<kWh≤500)	/kWh	2,929	10.94
Domestic (500<kWh)	/kWh	3,077	11.49
Agriculture (0<kWh≤200)	/kWh	2,215	8.27
Agriculture (200<kWh≤500)	/kWh	3,164	11.81
Agriculture (500<kWh)	/kWh	3,462	12.93
General (0<kWh≤200)	/kWh	2,462	9.19
General (200<kWh≤500)	/kWh	3,516	13.13
General (500<kWh)	/kWh	3,847	14.37
LV Pre-paid			
Social	/kWh	1,010	3.77
Domestic	/kWh	2,802	10.46
Agriculture	/kWh	3,083	11.51
General	/kWh	3,532	13.19
Large Customers Low Voltage	/kWh	1,378	5.15
	/kW	105,973	395.72
	Fixed	207,308	774.12
Large Customers Med. Voltage	/kWh	1,144	4.27
	/kW	118,615	442.93
	Fixed	973,079	3,633.64
Large Customers High Voltage	/kWh	1,020	3.81
	/kW	130,654	487.88
	Fixed	973,079	3,633.64

Source: JICA (2007) Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report

(6) Namibia

The table below shows the rate schedule of Namibia's NamPower, revised in July 2006. In addition to the NamPower tariffs below, end users must also pay bills to either the local distribution company or the local government. Currently, they are in the process of simplifying and consolidating the electricity bill system.

Table 3.1.6 Namibia NamPower's Rate Schedule (2006)

Customer	Unit	Value N$	Value US$ (nominal)
Re-Distributors, Water Pumping, Commercial & Miscellaneous			
Unit charge	/kWh	0.1915	0.031
Maximum Demand	/kW	82.57	13.35
	/kVA	74.73	12.08
Rental	Fixed	Customer-specific	
Service charge	Fixed	270.00	43.65
Extension charge	Fixed	Customer-specific	
Electricity levy	/kWh	0.0045	0.0070
Mines			
Unit charge	/kWh	0.1836	0.0297
Maximum Demand	/kW	82.57	13.35
	/kVA	74.73	12.08
Rental	Fixed	Customer-specific	
Service charge	Fixed	270.00	43.65
Extension charge	Fixed	Customer-specific	
Electricity levy	/kWh	0.0045	0.0070
Export			
Unit charge	/kWh	0.2021	0.0327
Maximum Demand	/kW	82.57	13.35
	/kVA	74.73	12.08
Rental	Fixed	Customer-specific	
Service charge	Fixed	270.00	43.65
Extension charge	Fixed	Customer-specific	
Electricity levy	/kWh	0.0045	0.0070

Source: JICA (2007) Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report

(7) Republic of South Africa

The table below depicts South Africa Eskom's rate schedule (VAT included), revised on 1 April, 2006. South Africa has a total of more than 2,000 categories on pricing. EDI Holdings has announced that their selling price is around 0.3 USc/kWh and a buying price of around 0.15 USc/kWh. However, since this varies by distributors, pricing seems to be around 0.45 USc/kWh to 1.0 R/kWh.

Eskom publishes annually a 43-page booklet entitled "Tariffs & Charges Book".

Table 3.1.7 South Africa Eskom's Rate Schedule (2006)

Customer	Unit	Value R	Value US$ (nominal)
Urban			
Nightsave (≥25kVA)	R/day	3.76 – 562.15	0.61-90.88
	R/kVA	19.31-49.22	3.12-7.96
	c/kWh	11.82-15.33	1.91-2.48
Megaflex (≥1MVA)	R/day	105.61-564.31	17.07-91.23
	R/kVA	14.37	2.32
	c/kWh	9.16-61.26	3.10-9.90
	c/kVarh	3.00	0.48
Miniflex (≥25kVA & ≤5MVA)	R/day	5.30-561.64	0.86-90.80
	R/kVA	6.74	1.09
	c/kWh	8.92-62.46	1.44-10.10
	c/kVarh	1.31	0.21
Businessrate 1 (≤25kVA)	R/day	7.58	1.23
	c/kWh	26.97	4.80
Businessrate 2 (>25kVA & ≤50kVA)	R/day	9.21	1.49
	c/kWh	26.97	4.36
Businessrate 3 (>50kVA & ≤100kVA)	R/day	14.34	2.32
	c/kWh	26.97	4.36
Businessrate 4 (≤25kVA)	c/kWh	26.97	4.36
Residential			
Homepower bulk	R/day	4.38	0.71
	c/kWh	26.71	4.32
Homepower 1 (25kVA)	R/day	3.67	0.59
	c/kWh	31.70	5.12
Homepower 2 (50kVA)	R/day	6.25	1.01
	c/kWh	31.70	5.12
Homepower 3 (>50kVA & ≤100kVA)	R/day	11.12	1.80
	c/kWh	31.70	5.12
Homepower 4 (16kVA)	R/day	2.59	0.42
	c/kWh	31.70	5.12
Homelight 1 (60A, 20A or 10A)	c/kWh	48.74-54.82	7.88-8.86
Homelight 2 (60A or 20A)	c/kWh	42.33-48.42	6.84-7.83
Hometake (20A or 60A)	c/kWh	42.33-45.37	6.84-7.33
Rural			
Nightsave rural (≥25kVA)	R/day	9.47-561.56	1.53-90.78
	R/kVA	42.73-63.34	6.91-10.24
	c/kWh	9.50-13.79	1.54-2.23
Ruraflex (≥25kVA)	R/day	9.60-564.12	1.55-91.20
	R/kVA	3.92	0.63
	c/kWh	11.57-98.40	1.87-15.91
	c/kVarh	1.98	0.32
Landrate 1 (16kVA/32kVA/25kVA)	R/day	12.41	2.01
	c/kWh	28.59	4.62
Landrate 2 (64kVA/50kVA)	R/day	15.83	2.56
	c/kWh	28.59	4.62
Landrate 3 (100kVA)	R/day	21.70	3.51
	c/kWh	28.59	4.62
Landrate 4 (16kVA)	R/day	11.12	1.80
	c/kWh	57.15	9.24
Landrate Dx (10A)	R/day	12.07	1.95

Source: JICA (2007) Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report

The tariff varies by municipality, partly due to the historical background of having numerous power supply companies. Usually, each municipality conducts an annual review of the tariff levels, and the succeeding year's tariff is set corresponding to the inflation rate (CPI)[15]. This is called as the Multi-Year Price Determination (MYPD) system.

It should be noted that the revision of tariffs requires going through a cost reflecting scheme: i) Eskom, which generates power, proposes an "Eskom tariff" first, and ii) based on the Eskom tariff, each municipality determines its wholesale tariff (for large customers; also called the "mega tariff.") iii) Likewise, each municipality determines the municipality tariff (or "customer tariff") for domestic customers[16].

With the current power crisis, the implementation of a new cost reflecting scheme is under way. Once a new tariff is determined, this will be subject to review every three years.

(8) Swaziland

The table below depicts Swaziland SEB's rate schedule for 2003 (revision date unknown). The price category varies according to consumer's consumption levels, namely, Domestic (2 kVA and below), General (20 kVA and below), Small-scale Commercial/Industrial (below 20 kVA), Off-peak Hot Water (9kVA and above), Large-scale Commercial/Industrial (20kVA and over), and Irrigation (20kVA and over). Each category includes i) Fixed Fee, ii) Electricity Fee, iii) Facility Usage fee, and iv) Minimum Fee[17].

Table 3.1.8 Swaziland SEB Rate Schedule (2003)

Customer	Facility Usage Fee (SZL/month) (US$/month)	Electricity Fee (SZL/kWh) (US$/month)	Demand Electricity Fee (SZL/kVA) (US$/month)	Minimum Fee (SZL/Month) (US$/month)
Domestic	7.39 (1.10)	0.3898 (0.0581)	-	29.24 (4.36)
General	7.39 (1.10)	0.5184 (0.0774)	-	100.76 (15.04)
Small-scale Commercial/Industrial	7.39 (1.10)	0.5184 (0.0774)	-	100.76 (15.04)
Off-Peak Hot Water	7.39 (1.10)	0.2766 (0.0413)	-	50.77 (7.58)
Large-scale Commercial/Industrial	7.39 (1.10)	0.2002 (0.0299)	63.71 (9.51)	Detailed scheme exists
Irrigation	7.39 (1.10)	0.2002 (0.0299)	63.71 (9.51)	Detailed scheme exists

Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2 (originally referenced from SEB website: www.seb.co.sz/), Exchange rate: 1US$=SZL6.7 (the end of 2003 by UN)

[15] Based on interviews with NERSA.
[16] Based on interviews with NERSA.
[17] Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, p.617

(9) Tanzania

The table below which is somewhat old, Tanzania TANESCO's rate schedule, revised in 1999. The rate varies according to consumer classification, namely, Domestic/Industrial, Low-Voltage, High-Voltage, Public Lighting, and Zanzibar. Domestic/Industrial services consist of Customer Service Fee and Electricity Fee with an increasing block rate system[18].

Table 3.1.9 Tanzania TANESCO Rate Schedule

Service Classification	Monthly Electricity Consumption	Customer Service Fee (Tsh/Meter Reading Period) (US$/Meter Reading Period)	Demand Fee (Tsh/kVA) (US$/kVA)	Per Unit Fee (Tsh/kWh) (US$/kVA)
Domestic/Industrial	Under 100 kWh	200.00 (0.25)	-	24.00 (0.03)
	101-500 kWh	750.00 (0.94)	-	38.75 (0.05)
	501-2,500 kWh	2,000.00 (2.51)	-	88.50 (0.11)
	more than 2,500 kWh	2,000.00 (2.51)	-	160.50 (0.20)
Low-voltage		4,000.00 (5.01)	7,660.00 (9.60)	70.35 (0.09)
High-voltage		4,000.00 (5.01)	5,950.00 (7.46)	67.50 (0.08)
Public Lighting		-	-	27.80 (0.03)
Zanzibar		4,000.00 (5.01)	3,350.00 (4.20)	21.50 (0.03)

Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2 (originally referenced from TANESCO Country Report 1999), Exchange rate: 1US$=Tsh800 (the end of 1999 by Tanzania Central Bank)

(10) DRC

The table below shows the electric power rate schedule for DRC (revision date unknown). The rates are categorized according to consumer levels, i.e., High-voltage clients, Boilers, Low-voltage (general use), and Low-voltage (commercial use).

[18] Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, p.628

Table 3.1.10 DRC Rate Schedule

Customer	Unit	Value FC	Value US$ cents (nominal)
HV clients	/kW	Customer-specific charge	
	/kWh	Customer-specific charge	
MV Boilers	/kWh	NA	36.00
LV Domestic			
Social	/kWh	2.50	Unknown
Residential 1	/kWh	3.56	Unknown
Residential 1	/kWh	5.68	Unknown
LV Commercial & Motive			
Commercial	/kWh	NA	11.00
Motive	/kWh	NA	15.00

Source: JICA (2007) Baseline Study on the Electric Power Sector in Southern and Eastern Africa, Final Report

(11) Zambia

The table below depicts the electricity rate schedule for Zambia's ZESCO, revised on 1st April, 2005. The rates are categorized as Residential, Commercial, Social Services and Maximum Demand use. Each category consists of fixed and per unit fee.

Table 3.1.11 Zambia ZESCO Electric Power Rate Schedule (2005)

Customer	Unit	Value (Kwacha)	Value US$ (nominal)
Un-metered Residential			
Consumption ≤2A	/Month	4,911.00	$1.06
Consumption >2A and ≤15A	/Month	17,770.00	$3.83
Metered Residential (15kVA)	Fixed	5,845.00	$1.26
Consumption ≤300kWh	/kWh	70.00	1.51c
Consumption >300kWh and ≤700kWh	/kWh	100.00	2.15c
Consumption >700kWh	/kWh	163.00	3.51c
Commercial (15kVA)	Fixed	29,227.00	$6.30
Consumption	/kWh	163.00	3.51c
Social Services	Fixed	23,382.00	$5.04
Consumption	/kWh	135.00	2.91c
Maximum Demand			
MD1 - Capacity >25kVA and ≤300kVA	/kVA	6,943.00	$1.50
Consumption	/kWh	100.00	2.15c
Fixed	Fixed	68,002.00	$14.65
MD2 - Capacity >300kVA and ≤2000kVA	/kVA	12,990.00	$2.80
Consumption	/kWh	85.00	1.83c
Fixed	Fixed	136,003.00	$29.30
MD3 - Capacity >2000kVA and ≤7500kVA	/kVA	19,587.00	$4.22
Consumption	/kWh	63.00	1.36c
Fixed	Fixed	272,006.00	$58.60
MD4 - Capacity >7500kVA	/kVA	19,696.00	$4.24
Consumption	/kWh	52.00	1.12c
Fixed	Fixed	544,012.00	$117.19

Source: ZESCO website www.zesco.co.zm

(12) Zimbabwe

The table below depicts ZESA's rate schedule for general residential use as of 2002. ZESA have reviewed their tariffs with the objectives of protecting the low income group and reduction of overcharging from the high income bracket. Based on the internal study of the actual state of electricity consumption in the general residential use, rates are categorized into four as follows: i) the first group: those in the low-income bracket with 50kWh monthly average consumption; ii) second group: those belonging to the largest customer group with 300kWh monthly average consumption; iii) third group: those within the high-income bracket with 1,000kWh monthly average consumption; and iv) fourth group: thouse within the within super-high-income bracket with more than 1,000kWh monthly average consumption[19]. The tariff levels of the first and second groups are based on the comparison between the users' solvency and alternative fuel costs.

Table 3.1.12 Zimbabwe ZESA Rate Schedule (2002, for general residential use)

Category	ZWD	USD
Fixed Fee	133.7	2.43
First 50kWh	1.42	0.025
51kWh-300kWh	1.57	0.028
301kWh-1,000kWh	3.68	0.066
More than 1,000kWh	3.82	0.069

Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2 (originally referenced from ZESA Annual Report 2002).

[19] Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, pp.613-614.

(13) Kenya

The table below, although the data is somewhat old, shows the electricity rate schedule for Kenya, revised on 29th May, 2000. The rates are categorized into Domestic and Business uses, and designed to achieve the electricity supplier's profit and meet financial targets[20]. The tariff consists of i) basic fee, ii) per unit fee, and iii) demand fee.

Table 3.1.13 Kenya's Rate Schedule (2002)

	Category	Voltage (V)	Consumption (kWh/month)	Fixed Fee (KSh/month)	Unit Fee (KSh/ kWh)	Demand Fee (KSh/ kVA / kWh)
A0	Domestic	240, 415	0 - 50	75	1.55	-
			51 - 300		6.65	
			301 - 3,000		7.00	
			3,001 - 7,000		13.80	
A1	Small-scale commercial/ industrial	240, 415	≤7,000	150	6.70	-
B0	Medium-scale irrigation	240, 415	7,000 - 100,000	800	6.40	-
B1	Medium-scale commercial/ industrial	240, 415		600	5.16	300
B2		11,000, 33,000		2,000	4.60	200
B3		66,000, 132,000		7,500	4.40	100
C1	Large-scale commercial/ industrial	415	100,001 - 5,000,000	300	5.10	300
C2		11,00, 33,000		2,000	4.40	200
C3		66,000, 132,000		7,500	4.17	100
C4			5,000,001 - 7,500,000		4.07	80
C5			≥7,500,001		4.00	
D0	Interruptible Off-Peak Supply	240	≤7,000	150	4.95	-
E	Public Lighting	240	Unlimited	250	6.20	-

Source: Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2 (original source: Electricity Regulatory Board. Annual Report 2001/2002)

[20] Japan Electric Information Power Inc., 2005, "Electricity Business in Foreign Countries," Part 2, pp.596-597.

(14) Ethiopia

The table below shows EEPCO'S average tariff from 2004 to 2006, based on "Ethiopian Power System Expansion Master Plan Update" carried out in 2006. The 2006 average electricity tariff (nominal) was 0.50 Birr/kWh, which is a 3.5 percent increase from the 2000 average tariff. In US currency and in real terms, the 2006 rate was 5.5 US¢/kWh.

Table 3.1.14 Ethiopia's Electricity Tariff Rate

Item	2004	2005	2006
Tariff - Nominal - Birr/kWh	0.43	0.42	0.50
Local Inflation Index (2000=100)	96.6	100.0	103.5
Tariff - Real - Birr/kWh (2000 prices)	0.44	0.42	0.48
Tariff - Nominal - USD/kWh	0.048	0.048	0.056
US Inflation Index (1999=100)	98.0	100.0	102.0
Tariff - Real - USD/kWh	0.049	0.048	0.055

Source: EEPCO (2006) ETHIOPIAN POWER SYSTEM EXPANSION MASTER PLAN UPDATE, JUNE 2006

It should be noted that tariffs and rate schedule data could not be obtained for Uganda, Rwanda and Burundi.

3.2 Electric Power Demand

3.2.1 Energy Balance

This section gives an overview of the surveyed countries' total electricity demand, electricity generation volume, import-export volume of electric power, and the current state of transmission and distribution loss (electricity balance). For Southern African regions where data are abundantly available, discussions will include information on peak demand, installed capacity and available capacity for each country.

Other relevant information are also presented in other sections of this study, namely, Section 2.4 for projections on the countries' future electricity and power capacity demands, Section 3.5 for supply/demand of the countries' primary energy (including energy balance), and Section 4.4 for the analysis and discussion on the verification of the region's energy supply/demand balance and estimate of interchangeable power.

1) Angola

According to the chart shown, total electricity demand steadily increased since 1980, reaching 2.2 TWh in 2005. Approximately 60 percent of electricity is generated by hydropower, while the rest by thermal power. Annual per capita electricity consumption is 182 kWh. The increasing trend of distribution loss rate is a concern. It should be noted that there are no records of electricity trade for Angola, as of 2005..

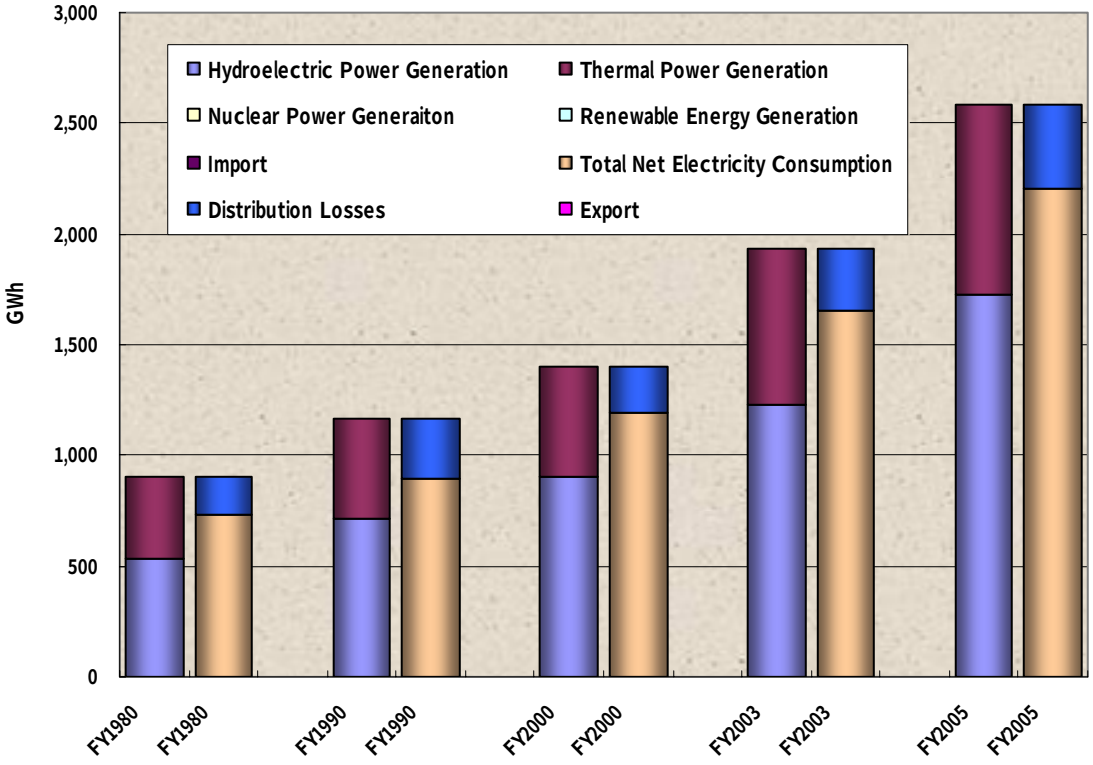


Figure 3.2.1 Angola's Electricity Balance

Table 3.2.1 Angola's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	530	715	903	1,229	1,730
Thermal	375	451	501	709	855
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	-	-	-	-
Supply Total	905	1,166	1,404	1,938	2,585
Demand (GWh)					
Total power demand	736	899	1,193	1,650	2,201
Distribution loss	169	267	211	288	384
Exports	-	-	-	-	-
Demand Total	905	1,166	1,404	1,938	2,585

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

2) Botswana

The trend for total power demand is somewhat constant since 2003. As of 2005, the demand reached 2.6 TWh. As for power generation, two thirds of the total is imported from Eskom, ZESA and ZESCO, while domestic generation declined after hitting its peak in 2000. Hence, as of 2005, domestic generation remains to merely one third of the total.

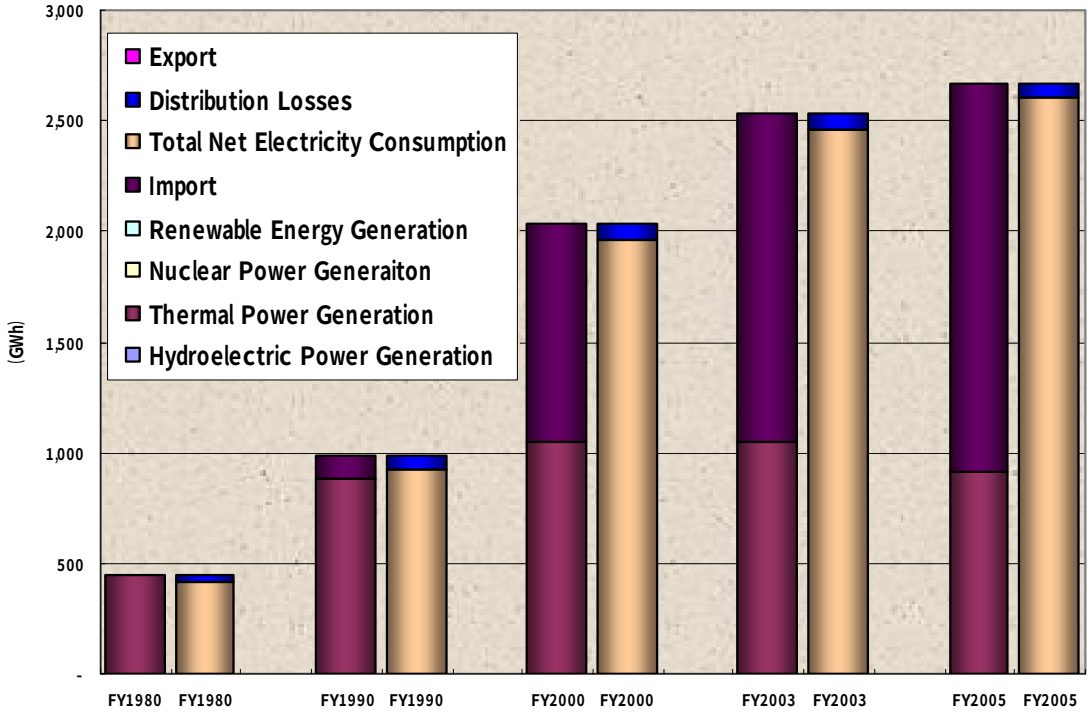


Figure 3.2.2 Botswana's Electricity Balance

Table 3.2.2 Botswana's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	-	-	-	-	-
Thermal	423	879	1,047	1,046	912
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	106	986	1,490	1,754
Supply Total	443	985	2,033	2,536	2,666
Demand (GWh)					
Total power demand	412	923	1,960	2,463	2,602
Distribution loss	31	62	73	73	64
Exports	-	-	-	-	-
Demand Total	443	985	2,033	2,536	2,666

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

Table 2.1.14 Major Social and Economic Indicators (Uganda)

	1960s	1970s	1980s	1990s	2001	2002	2003	2004	2005
Total population (Million people)	8.0	11.0	15.2	21.3	25.1	26.0	26.9	27.8	28.8
Population growth (Annual %)	3.4	3.0	3.4	3.1	3.2	3.3	3.4	3.5	3.5
Population ages 0-14 (% of total)	46.6	48.0	48.6	49.7	50.3	50.4	50.4	50.4	50.5
Population ages 15-64 (% of total)	50.8	49.4	48.9	47.7	47.1	47.1	47.1	47.1	47.1
Population ages 65 and above (% of total)	2.6	2.6	2.5	2.6	2.6	2.6	2.5	2.5	2.5
Urban population (% of total)	5.6	7.1	9.4	11.7	12.2	12.3	12.4	12.5	12.6
Urban population growth (Annual %)	7.6	4.2	7.4	4.0	4.1	4.2	4.2	4.3	4.3
Population density (People per square kilometer)	40.6	55.8	77.0	107.9	127.4	131.7	136.3	141.2	146.2
GDP growth (Annual %)	-	-	3.4	6.8	4.9	6.3	4.7	5.5	6.6
GDP per capita (Constant 2000 US$)	-	-	168.4	208.7	247.7	254.7	257.8	262.6	270.2
GDP per capita, PPP (Constant 2000 international $)	-	-	806.1	999.0	1,185.3	1,219.0	1,233.6	1,256.8	1,293.1
Agriculture, value added (% of GDP)	51.5	66.8	56.1	46.0	36.4	31.0	32.4	32.2	32.7
Industry, value added (% of GDP)	13.4	8.1	10.1	15.9	20.2	21.6	21.2	21.2	24.8
Manufacturing, value added (% of GDP)	8.5	6.1	5.7	7.6	9.5	10.0	9.3	9.2	9.2
Food, beverages and tobacco (% of value added in manufacturing)	33.6	40.2	61.1	-	..	9.8	9.6	9.0	..
Textiles and clothing (% of value added in manufacturing)	25.6	20.4	14.4	-	..	32.8	28.0	23.6	..
Chemicals (% of value added in manufacturing)	2.0	3.6	5.8	-	..	1.0	..	..	..
Machinery and transport equipment (% of value added in manufacturing)	1.5	1.8	2.5	-	..	0.8	0.6	0.9	..
Other manufacturing (% of value added in manufacturing)	37.3	33.9	16.2	-	..	55.7	61.8	66.6	..
Services, etc., value added (% of GDP)	35.1	25.1	33.9	38.1	43.4	47.5	46.4	46.6	42.5
Employment in agriculture (% of total employment)	-	-	80.1	90.6	..	..	69.1	..	..
Employment in industry (% of total employment)	-	-	3.2	5.6	..	..	7.6	..	..
Employment in services (% of total employment)	-	-	16.2	4.0	..	..	22.2	..	..
Official exchange rate (Local currency per US$, period average)	0.1	0.1	82.8	1,148.0	1,755.7	1,797.6	1,963.7	1,810.3	1,780.7
Real effective exchange rate index (Year 2000 = 100)	-	1,226.7	290.2	112.4	97.5	93.5	81.8	84.6	88.8
Consumer prices inflation (Annual %)	-	-	103.4	12.8	2.0	-0.3	7.8	3.3	8.2
Money and quasi money (M2) as % of GDP	8.6	17.4	8.5	11.4	15.8	18.1	19.1	19.4	19.3
Money and quasi money growth (Annual %)	53.0	27.7	95.0	31.9	9.2	25.0	17.9	11.1	16.5
Lending interest rate (%)	-	10.8	27.1	23.1	22.7	19.1	18.9	20.6	19.6
Real interest rate (%)	-	-	-31.9	14.4	15.2	23.9	8.4	13.5	11.0
General government final consumption expenditure (% of GDP)	9.7	-	9.6	11.7	13.8	15.3	14.8	14.7	14.4
Household final consumption expenditure, etc. (% of GDP)	75.7	-	87.7	83.2	79.7	80.1	78.8	76.9	78.5
Final consumption expenditure, etc. (% of GDP)	85.2	91.8	97.6	94.9	93.5	95.3	93.7	91.6	92.9
Exports of goods and services (% of GDP)	25.2	15.2	10.3	10.2	12.1	11.9	12.4	13.7	13.1
Imports of goods and services (% of GDP)	22.7	16.0	17.1	21.9	24.3	26.6	26.6	27.6	27.2
Foreign direct investment, net inflows (% of GDP)	0.3	0.0	0.0	1.9	2.7	3.2	3.2	3.3	2.9
Foreign direct investment, net outflows (% of GDP)	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross domestic savings (% of GDP)	14.8	8.2	2.4	5.1	6.5	4.7	6.3	8.4	7.1
Gross capital formation (% of GDP)	12.4	8.9	9.2	16.8	18.6	19.3	20.5	22.3	21.2
Food exports (% of merchandise exports)	-	89.8	-	81.0	68.7	73.0	66.8	64.3	64.0
Food imports (% of merchandise imports)	-	7.9	-	16.1	12.2	14.0	16.2	16.8	15.0
Agricultural raw materials exports (% of merchandise exports)	-	6.8	-	8.9	15.2	10.7	23.4	15.5	11.6
Agricultural raw materials imports (% of merchandise imports)	-	0.6	-	2.6	2.5	2.6	2.0	1.9	1.5
Ores and metals exports (% of merchandise exports)	-	2.2	-	1.2	3.4	1.9	0.3	0.4	2.3
Ores and metals imports (% of merchandise imports)	-	1.3	-	2.1	1.6	1.4	1.3	1.5	1.2
Fuel exports (% of merchandise exports)	-	0.8	-	1.5	5.7	6.5	0.1	4.6	5.1
Fuel imports (% of merchandise imports)	-	29.6	-	8.5	16.2	16.3	13.7	10.0	16.9
Manufactures exports (% of merchandise exports)	-	0.4	-	7.4	6.9	7.8	9.4	15.3	17.0
Manufactures imports (% of merchandise imports)	-	60.5	-	70.7	67.4	65.7	66.7	69.5	64.5
Aid per capita (Current US$)	2.9	3.5	17.2	33.7	31.5	27.3	36.3	43.0	41.6
Poverty gap at $1 a day (PPP) (%)	-	-	-	-	..	..	..	..	..
Total debt service (% of exports of goods, services and income)	-	17.3	45.1	31.4	4.7	6.1	7.2	6.9	9.2
Total reserves in months of imports	-	0.1	1.1	3.6	7.0	6.4	6.8	6.7	5.8

Source: The World Bank. 2007. World Development Indicators: 2007.

3) Lesotho

As of 1980, Lesotho relied all of its electricity consumption on imports from South Africa. However, with the development of hydropower during the late 1990s, the country became almost self-sufficient in terms of power supply. Its annual per capita consumption of electricity is 120 kWh. As of 2005, the total energy demand was 363 GWh, with a distribution loss rate of approximately seven percent.

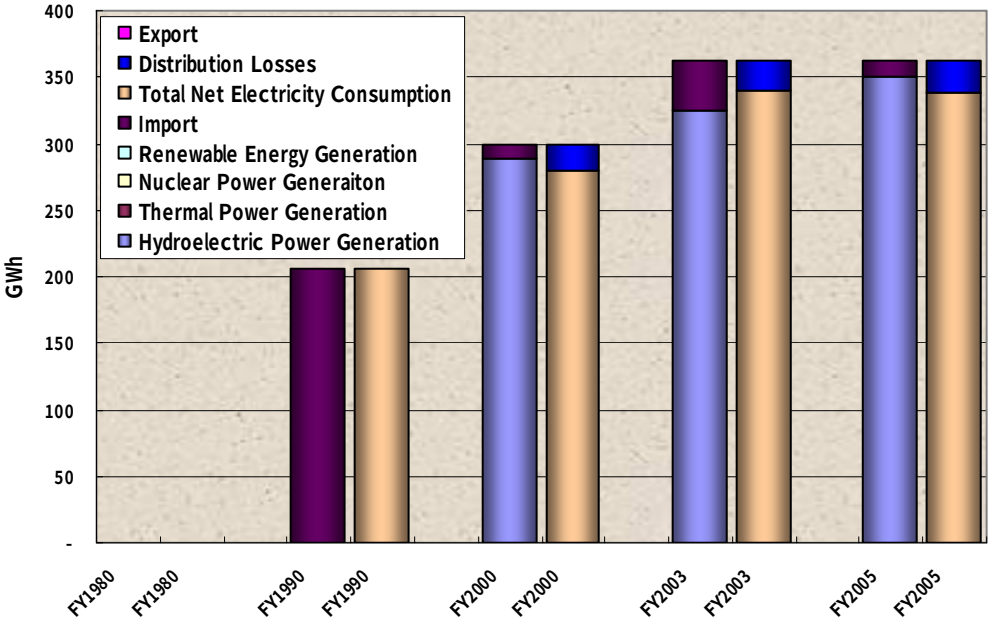


Figure 3.2.3 Lesotho's Electricity Balance

Table 3.2.3 Lesotho's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	-	-	288	325	350
Thermal	-	-	-	-	-
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	206	12	38	13
Supply Total	-	206	300	363	363
Demand (GWh)					
Total power demand	-	206	280	340	339
Distribution loss	-	-	20	23	25
Exports	-	-	-	-	-
Demand Total	-	206	300	363	363

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

4) Malawi

As the chart below indicates, the total demand for power increased steadily since 1980, eventually reaching 1.4 TWh as of 2005. Almost all of power generation is sourced from the Shire River, which flows into Zambezi, with some diesel-fired thermal power generation. Its annual per capita electricity consumption is 99 kWh.

They have no transmission or distribution tie lines with neighboring countries. As of 2005, there was also no record of electricity trade.

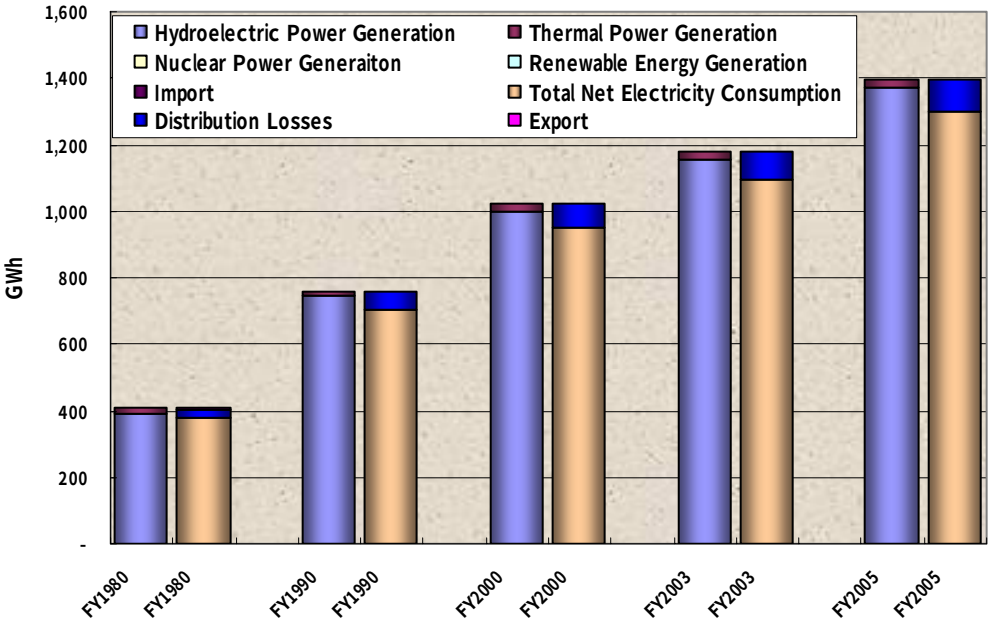


Figure 3.2.4 Malawi's Electricity Balance

Table 3.2.4 Malawi's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	388	743	998	1,153	1,369
Thermal	19	14	22	24	28
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	-	-	-	-
Supply Total	407	757	1,020	1,177	1,397
Demand (GWh)					
Total power demand	377	704	949	1,095	1,299
Distribution loss	28	53	71	82	98
Exports	2	-	-	-	-
Demand Total	407	757	1,020	1,177	1,397

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

5) Mozambique

Because of the civil war, electricity supply was devastated for a certain period of time. With the recent economic growth, electricity demand seems surging, as indicated in the chart below (note that Mozal aluminum plant's consumption accounts for a major portion of the demand). With the resumption of the Cahora Bassa hydropower plant in 1997, the energy balance situation has changed drastically, with an annual per capita electricity consumption of 510 kWh.

It should be noted that its structure of energy balance differs from other countries. In its southern region including Maputo, its capital, relies on electricity imports from South Africa, while its northern region exports electricity to Eskom and ZESA through HCB.

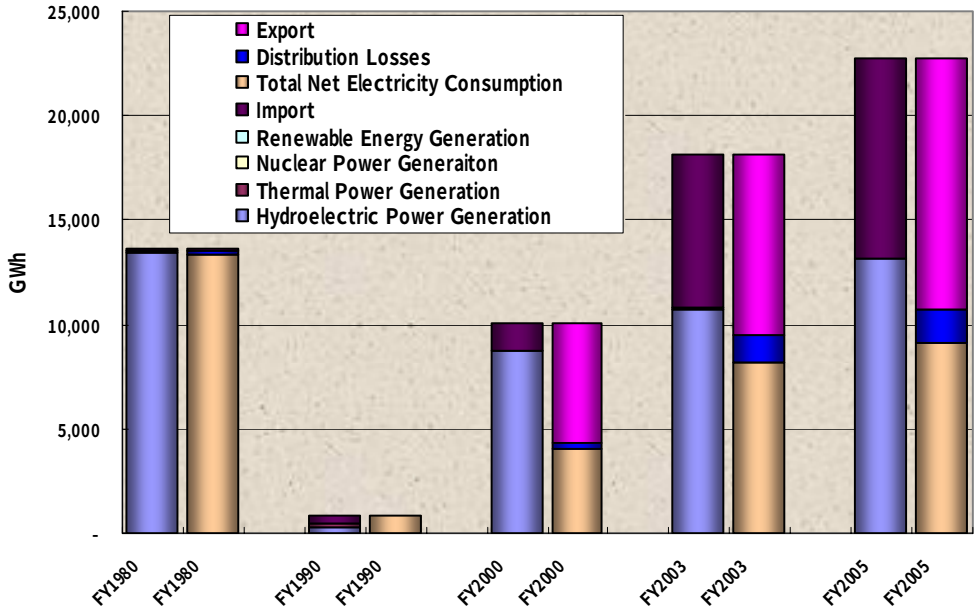


Figure 3.2.5 Mozambique's Electricity Balance

Table 3.2.5 Mozambique's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	13,409	320	8,748	10,761	13,131
Thermal	151	139	12	31	38
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	56	383	1,300	7,363	9,588
Supply Total	13,616	842	10,060	18,155	22,757
Demand (GWh)					
Total power demand	13,369	812	4,049	8,142	9,127
Distribution loss	181	30	243	1,388	1,629
Exports	66	-	5,768	8,625	12,001
Demand Total	13,616	842	10,060	18,155	22,757

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

6) Namibia

Since its independence, the total energy demand has increased steadily, and has already reached, 3.2 TWh as of 2005. About 50 percent of its power is generated by hydropower, with the rest imported from South Africa. Although its annual per capita electricity consumption is small with a volume of 1,414 kWh, Namibia is also exporting electricity to its neighboring countries.

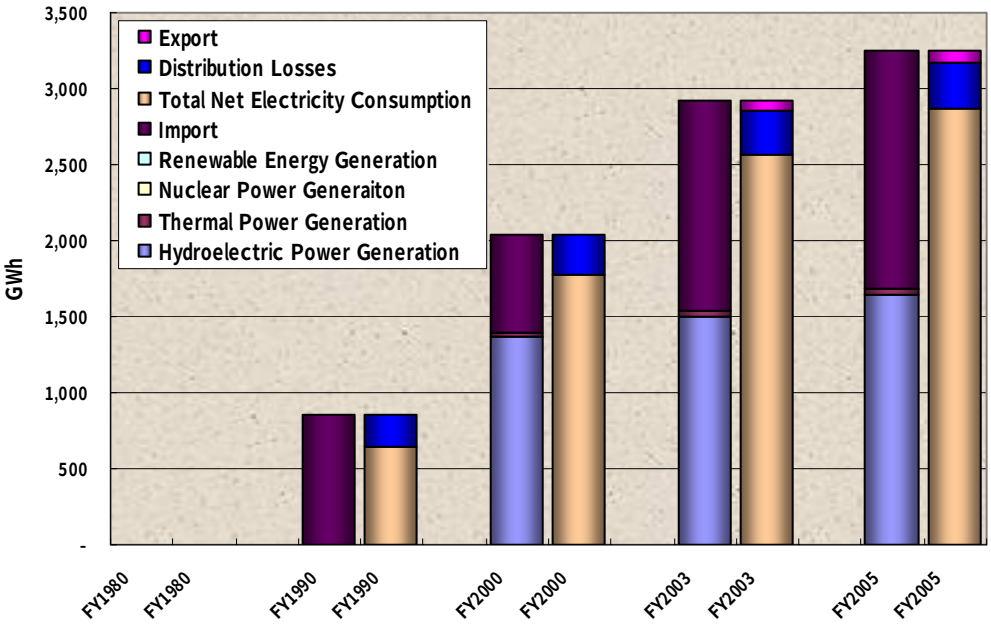


Figure 3.2.6 Namibia's Electricity Balance

Table 3.2.6 Namibia's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)			1,366	1,497	1,641
Hydro	-	-	32	44	47
Thermal	-	-	-	-	-
Nuclear	-	-	-	-	-
Renewable	-	851	640	1,380	1,567
Imported	-	851	2,038	2,921	3,255
Supply Total					
Demand (GWh)	-	651	1,778	2,565	2,863
Total power demand	-	200	260	287	314
Distribution loss	-	-	-	69	78
Exports	-	851	2,038	2,921	3,255
Demand Total			1,366	1,497	1,641

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

7) Republic of South Africa

As the foundation of South African Power Pool, South Africa exports electric power through the SAPP's STEM and bilateral agreements with neighboring countries. Its total electricity demand for 2005 was 239 TWh, with annual per capita electricity consumption of 4,650 kWh, the highest in the region. Power is mostly generated through coal-fired plants (89.7%), and as of 2005, the rate of nuclear power generation was low.

Due to the power crisis in 2008, the portfolio below may drastically change. Eskom is currently planning to utilize more renewable energy and to expand nuclear power generation. If it becomes very difficult to secure cheap coal supplies from the domestic market in the near future, it is anticipated that the share of thermal power generation will decrease in the long run.

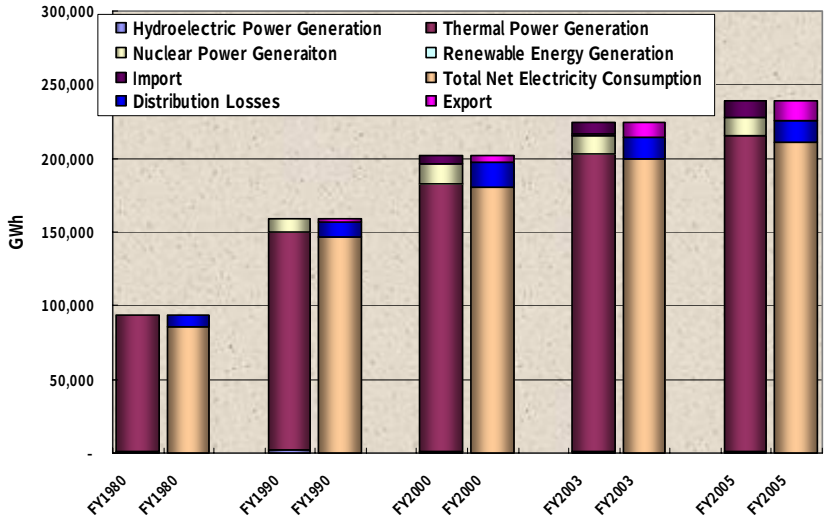


Figure 3.2.7 Republic of South Africa's Electricity Balance

Table 3.2.7 Republic of South Africa's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	992	1,980	1,343	777	903
Thermal	92,081	147,760	181,814	202,240	214,893
Nuclear	-	9,144	13,010	12,663	12,238
Renewable	-	-	292	299	300
Imported	-	254	5,294	8,294	11,079
Supply Total	93,073	159,138	201,753	224,273	239,413
Demand (GWh)					
Total power demand	85,519	146,283	180,733	199,850	210,710
Distribution loss	7,554	10,975	17,053	14,160	15,281
Exports	-	1,880	3,967	10,263	13,422
Demand Total	93,073	159,138	201,753	224,273	239,413

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

8) Swaziland

Since 1980, the total electricity demand has increased steadily. As of 2005, the demand consequently reached 1.3 TWh. About 65 percent of its supply is imported from South Africa, and the rest is generated by thermal or hydropower. Annual per capita electricity consumption is 989 kWh.

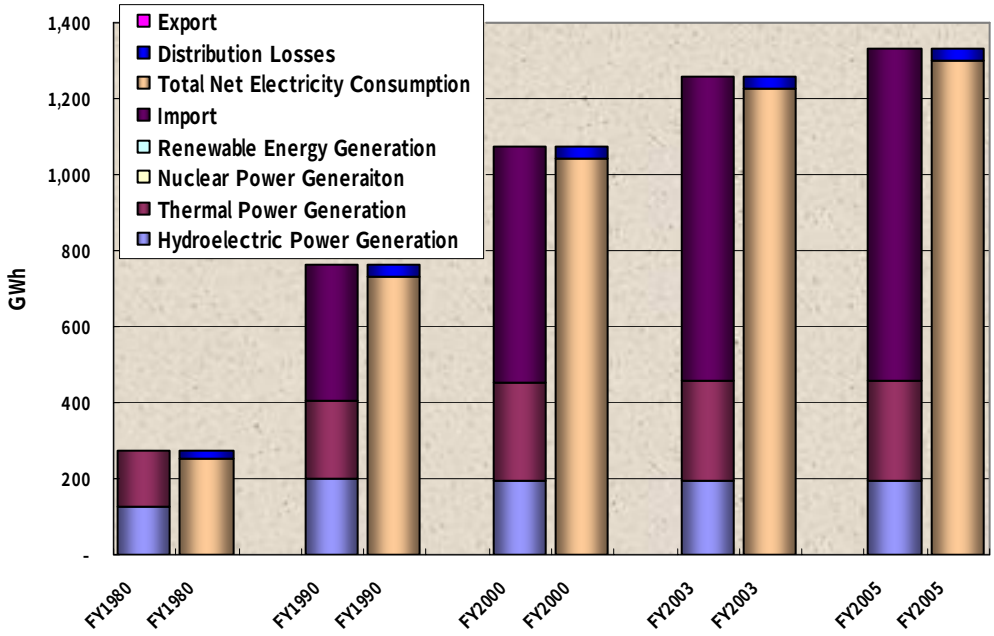


Figure 3.2.8 Swaziland's Electricity Balance

Table 3.2.8 Swaziland's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	126	202	195	193	195
Thermal	147	202	259	263	265
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	357	620	800	872
Supply Total	273	761	1,074	1,256	1,332
Demand (GWh)					
Total power demand	254	733	1,042	1,224	1,300
Distribution loss	19	28	32	32	32
Exports	-	-	-	-	-
Demand Total	273	761	1,074	1,256	1,332

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

9) Tanzania

Although the total electricity demand had increased steadily from 1980 to around 2003 as indicated in the chart below, the demand in 2005 decreased to 60 percent of the 2003 level. About 80 percent of its demand is supplied by hydropower, supplemented with a small amount from thermal power generation. Its annual per capita electricity consumption is 67 kWh.

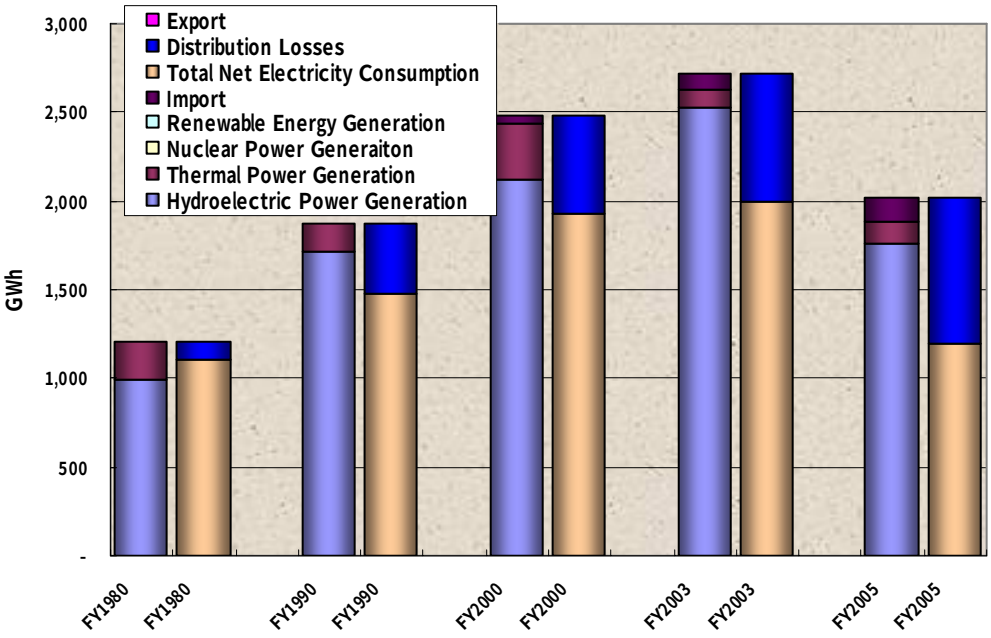


Figure 3.2.9 Tanzania's Electricity Balance

Table 3.2.9 Tanzania's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	987	1,709	2,121	2,523	1,760
Thermal	221	164	314	103	120
Nuclear					
Renewable					
Imported	-	-	47	95	136
Supply Total	1,208	1,873	2,482	2,721	2,016
Demand (GWh)					
Total power demand	1,100	1,479	1,927	1,999	1,199
Distribution loss	108	394	555	722	817
Exports					
Demand Total	1,208	1,873	2,482	2,721	2,016

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

10) DRC

Since 1980, the total electricity demand has increased steadily as the chart below indicates, reaching 7.4 TWh as of 2005. Almost 100 percent of its supply is by hydropower generation sourced from the Congo River, while approximately a quarter of the total power generation is exported. DRC's Annual per capita electricity consumption is 90 kWh.

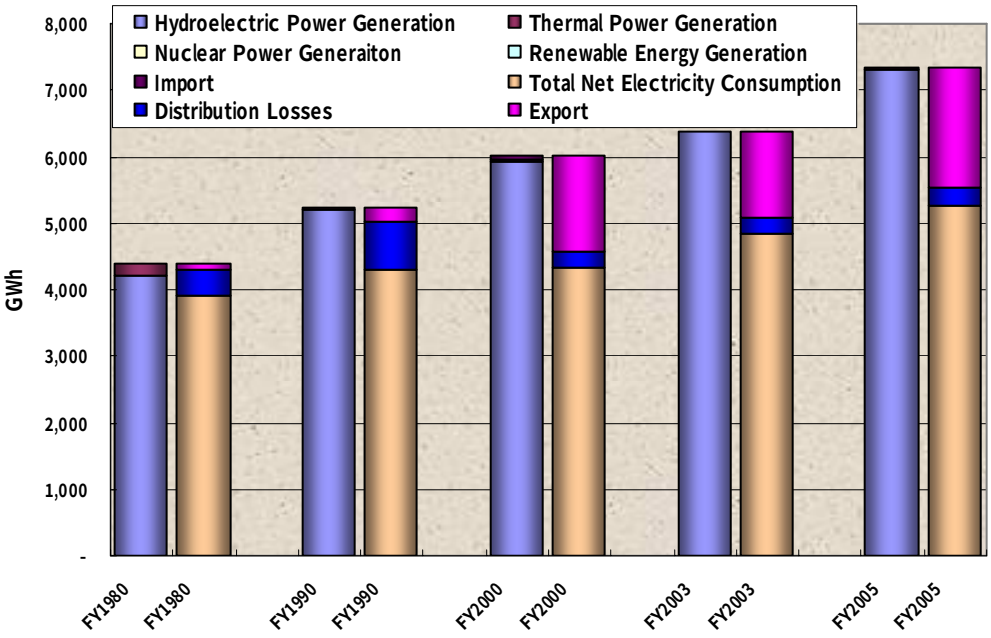


Figure 3.2.10 DRC's Electricity Balance

Table 3.2.10 DRC's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	4,199	5,206	5,939	6,361	7,322
Thermal	189	21	18	20	19
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	10	2	53	6	6
Supply Total	4,398	5,229	6,010	6,387	7,347
Demand (GWh)					
Total power demand	3,921	4,306	4,332	4,843	5,272
Distribution loss	370	725	228	244	275
Exports	107	198	1,450	1,300	1,800
Demand Total	4,398	5,229	6,010	6,387	7,347

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

11) Zambia

Owing in part to the drastic transformation of the industrial structure, Zambia's total power demand has remained constant since 1980. As of 2005, the total power demand reached 9.3 TWh. About 95 percent of its supply is generated by hydropower, while the remaining five percent is imported. Its annual per capita electricity consumption is 620 kWh. Since the 1980s to the first half of 2000, Zambia used to export electricity. However, the volume exported in 2005 has reduced to merely eight percent of that in 1980.

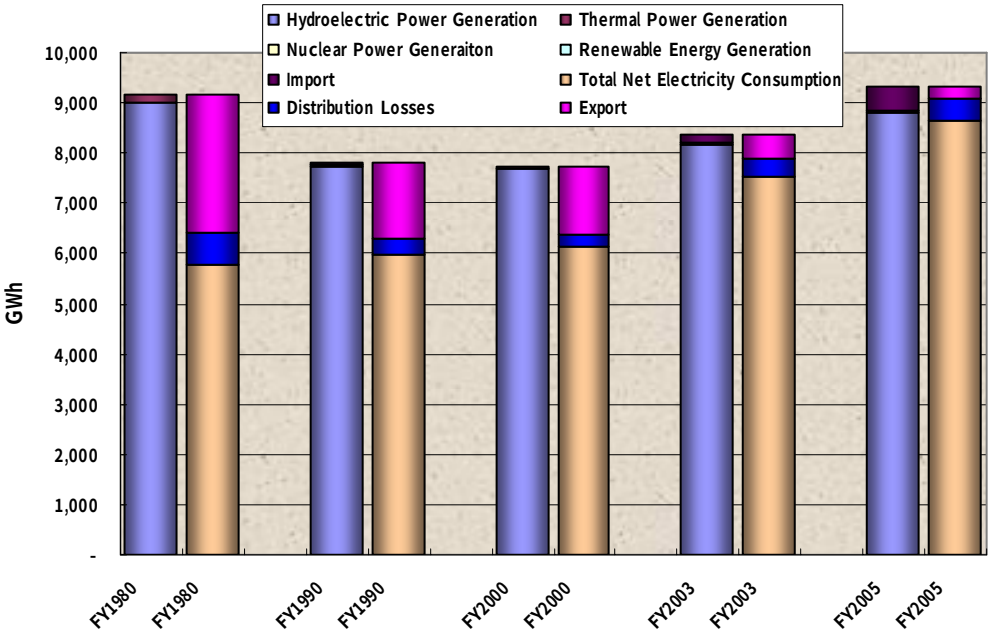


Figure 3.2.11 Zambia's Electricity Balance

Table 3.2.11 Zambia's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	9,010	7,715	7,673	8,174	8,794
Thermal	162	61	45	48	56
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	9	20	-	151	465
Supply Total	9,181	7,796	7,718	8,373	9,315
Demand (GWh)					
Total power demand	5,790	5,958	6,143	7,544	8,655
Distribution loss	643	338	249	325	417
Exports	2,748	1,500	1,326	504	243
Demand Total	9,181	7,796	7,718	8,373	9,315

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

12) Zimbabwe

Since 1980, the total electricity demand has mildly increased. As of 2005, it reached 12.9 TWh. Electricity supply as of 2005 indicates that approximately 45 percent is generated through hydropower, 32 percent through thermal power, and the rest imported from South Africa. Its annual per capita electricity consumption is 917 kWh.

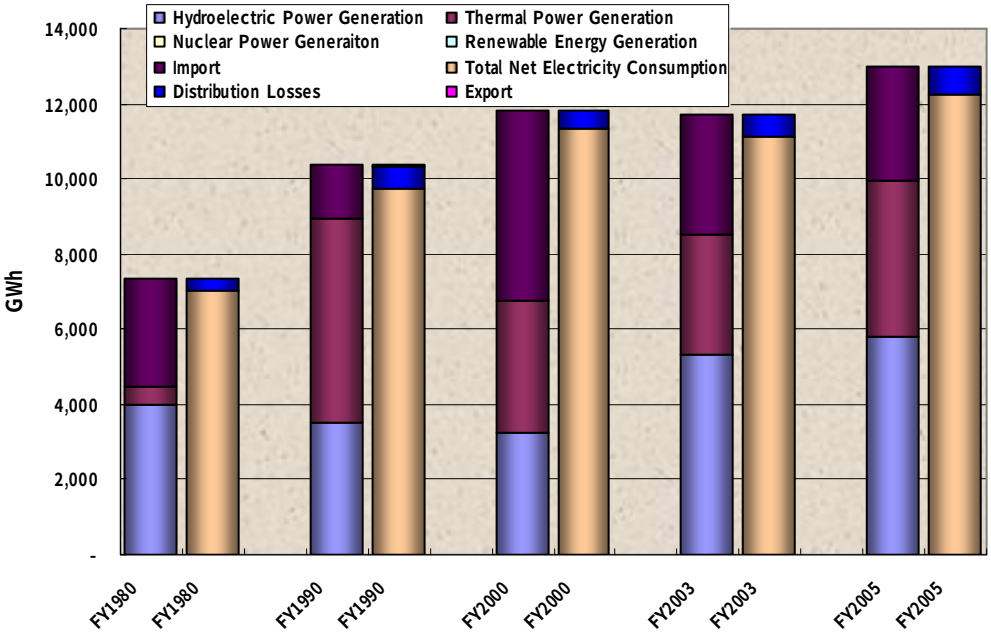


Figure 3.2.12 Zimbabwe's Electricity Balance

Table 3.2.12 Zimbabwe's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	3,966	3,527	3,227	5,305	5,776
Thermal	499	5,426	3,511	3,234	4,174
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	2,893	1,431	5,095	3,185	3,013
Supply Total	7,358	10,384	11,833	11,724	12,963
Demand (GWh)					
Total power demand	7,016	9,715	11,361	11,126	12,267
Distribution loss	313	627	472	598	697
Exports	29	42	-	-	-
Demand Total	7,358	10,384	11,833	11,724	12,963

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

13) Kenya

As the chart below indicates, total electricity demand has grown steadily since 1980, reaching 5.5 TWh as of 2005. Although its main source is hydropower, power generation from year to year fluctuates wildly due to droughts and other factors. Thus, in 2005, it was 12 percentage points down to 54 percent, compared to the previous year. Kenya's annual per capita electricity consumption is 170 kWh.

It should be noted that renewable energy power generation, i.e., geothermal power, is on the rise over the recent years. Hence as of 2005, it was already 15% of the total power generation.

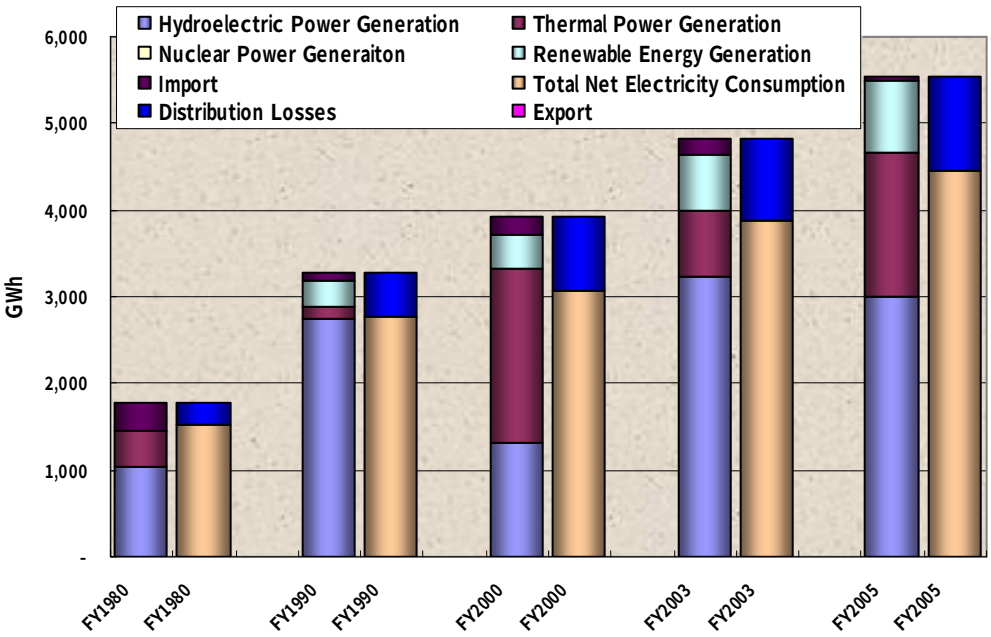


Figure 3.2.13 Kenya's Electricity Balance

Table 3.2.13 Kenya's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	1,049	2,742	1,312	3,227	2,996
Thermal	403	149	2,001	768	1,664
Nuclear	-	-	-	-	-
Renewable	-	283	408	648	842
Imported	315	110	210	189	28
Supply Total	1,767	3,284	3,931	4,832	5,530
Demand (GWh)					
Total power demand	1,529	2,777	3,064	3,887	4,464
Distribution loss	238	507	867	945	1,066
Exports	-	-	-	-	-
Demand Total	1,767	3,284	3,931	4,832	5,530

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

14) Uganda

As the chart below indicates, total electricity demand has increased steadily. As of 2005, the demand reached 1.9 TWh. Out of the total power generation, almost 100 percent is generated by hydropower generation such as the Owen Falls Dam situated on the Nile. Although it also exports electricity, the percentage of exportation from the total power generation is gradually declining. Its annual per capita electricity consumption is 170 kWh.

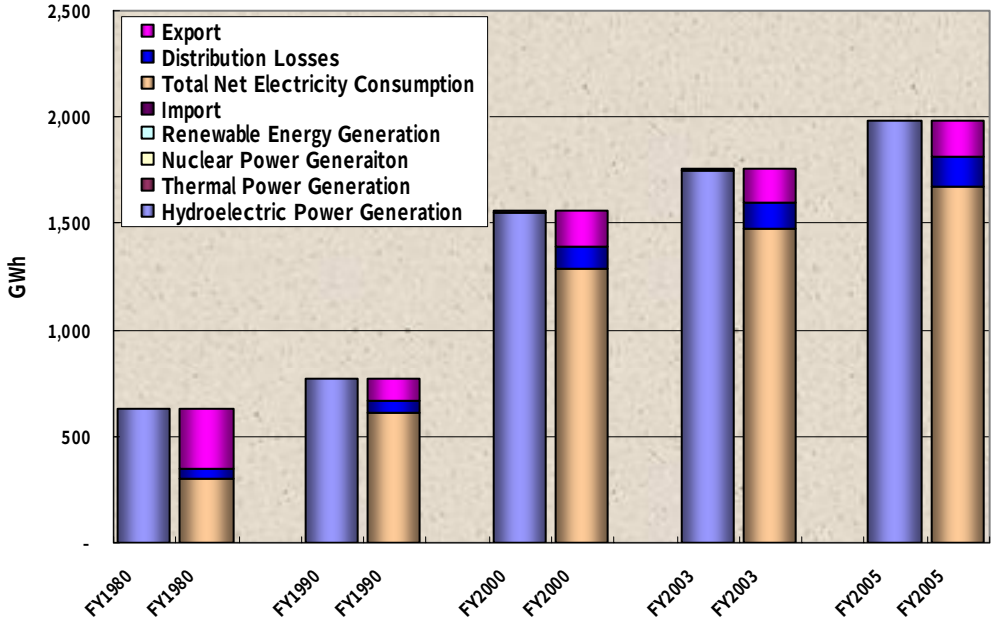


Figure 3.2.14 Uganda's Electricity Balance

Table 3.2.14 Uganda's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	633	768	1,551	1,752	1,980
Thermal	1	7	6	5	3
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	-	-	1	-	-
Supply Total	634	775	1,558	1,757	1,983
Demand (GWh)					
Total power demand	301	609	1,284	1,474	1,674
Distribution loss	44	54	109	123	139
Exports	289	112	165	160	170
Demand Total	634	775	1,558	1,757	1,983

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

15) Rwanda

Since 1980, due to the effects of civil wars, the total electricity demand has been volatile as indicated in the chart below. As of 2005, the demand was 215 GWh. Due to droughts and other factors, its main hydropower generation is waning, thus the 2005 level declined to 80 percent that of 1980. Only 45 percent of the total demand can be covered by hydropower (as of 2005), while the rest is imported from its neighboring countries.

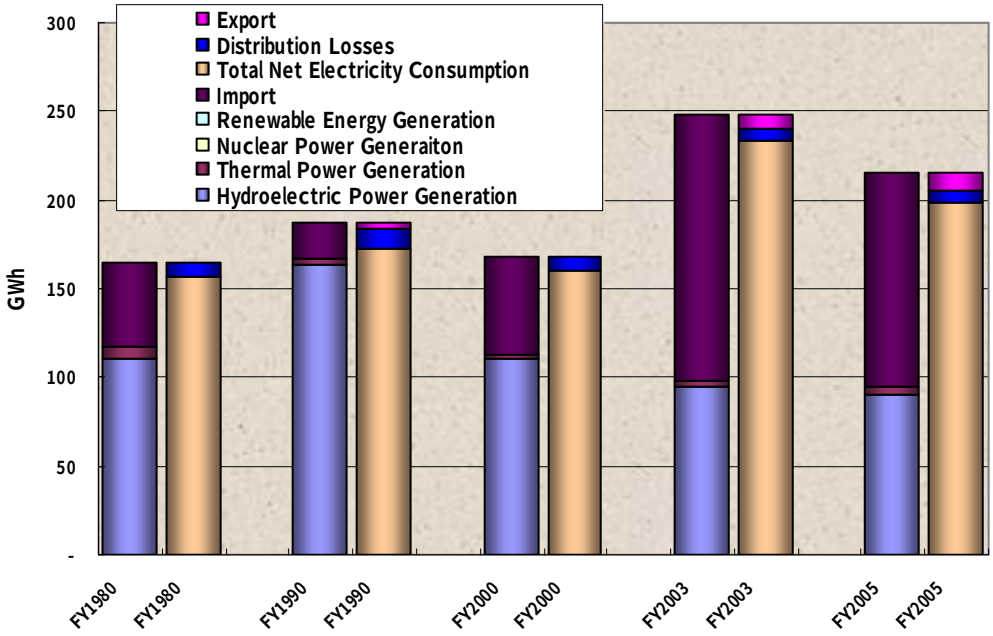


Figure 3.2.15 Rwanda's Electricity Balance

Table 3.2.15 Rwanda's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	111	163	110	95	90
Thermal	6	4	3	3	5
Nuclear	-	-	-	-	-
Renewable	-	-	-	-	-
Imported	48	20	55	150	120
Supply Total	165	187	168	248	215
Demand (GWh)					
Total power demand	157	172	160	233	198
Distribution loss	8	12	8	7	7
Exports	-	3	-	8	10
Demand Total	165	187	168	248	215

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

16) Burundi

Similar to Rwanda, civil war and other factors caused a volatile electricity demand. However in the recent years, its trend is increasing due to economic growth. Total electricity demand for 2005 is 171 GWh, with 20% of the demand supplied through import.

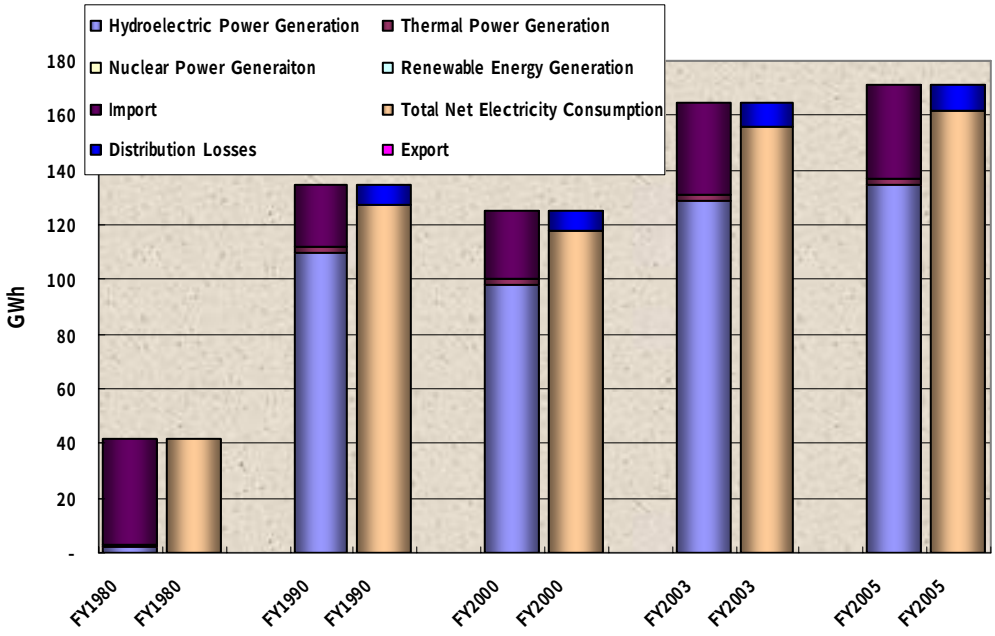


Figure 3.2.16 Burundi's Electricity Balance

Table 3.2.16 Burundi's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	2	110	98	129	135
Thermal	1	2	2	2	2
Nuclear	0	0	0	0	0
Renewable	0	0	0	0	0
Imported	39	23	25	34	34
Supply Total	42	135	125	165	171
Demand (GWh)					
Total power demand	42	127	118	156	161
Distribution loss	0	8	7	9	10
Exports	0	0	0	0	0
Demand Total	42	135	125	165	171

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

17) Ethiopia

Since 1980, total electricity demand has increased dramatically as the chart below indicates, due to factors such as the recent high economic growth rate. As of 2005, the total electricity demand was 2.8 TWh. With its abundant water power resources, hydropower is the governing supply source. Subsequently, the power generation is continuously increasing.

Meanwhile, distribution loss is also gradually increasing in the past several years. As of 2005, the distribution loss ratio is approximately 10 percent.

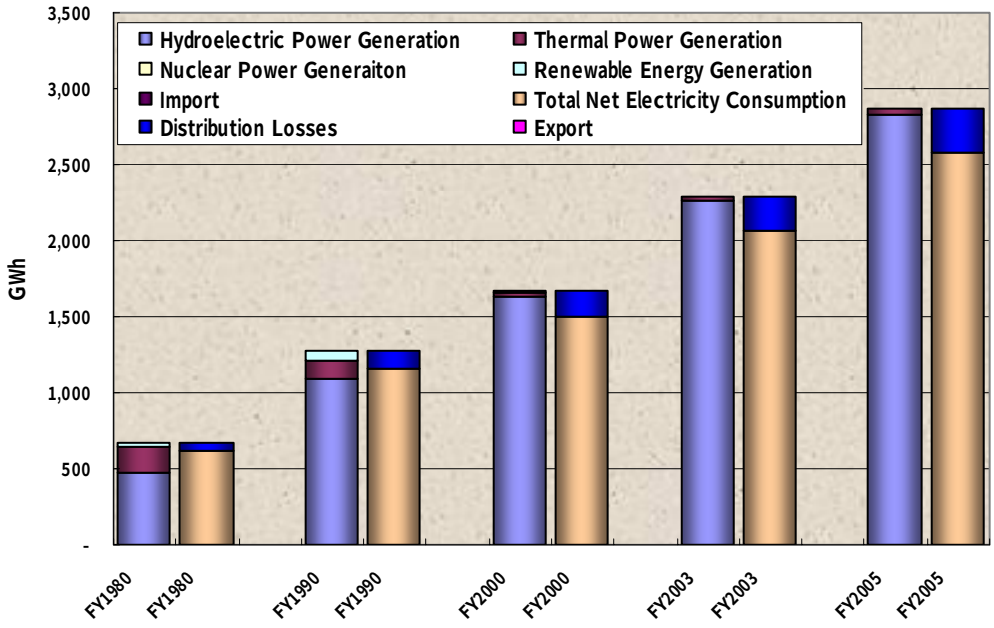


Figure 3.2.17 Ethiopia's Electricity Balance

Table 3.2.17 Ethiopia's Electricity Balance

	1980	1990	2000	2003	2005
Supply (GWh)					
Hydro	473	1,097	1,630	2,257	2,823
Thermal	178	114	22	38	40
Nuclear	-	-	-	-	-
Renewable	24	67	19	1	1
Imported	-	-	-	-	-
Supply Total	675	1,278	1,671	2,296	2,864
Demand (GWh)					
Total power demand	621	1,157	1,504	2,066	2,577
Distribution loss	54	121	167	230	287
Exports	-	-	-	-	-
Demand Total	675	1,278	1,671	2,296	2,864

Source: Based on publicly available data from Department of Energy (DOE) – Energy Information Administration (http://www.eia.doe.gov/fuelelectric.html)

18) Peak demand and generation capacity of the SAPP member countries

The chart below summarizes the peak demand, installed capacity and availably capacity of the SAPP member countries.

Table 3.2.18 Installed Capacity, Available Capacity and Peak Demand of the SAPP Member Countries (1/2)

2007

Region/Country	Installed Capacity (MW)	Availability Capacity (MW)	2007 Peak Demand (MW)	Surplus (MW)
Angola	1,127	943	476	467
Botswana	132	120	493	▲ 373
DRC	2,442	1,170	1,075	95
Lesotho	72	70	109	▲ 39
Malawi	302	246	240	6
Mozambique	307	0	343	▲ 343
	2,250	2,075	0	2,075
Namibia	393	390	449	▲ 59
South Africa	43,061	37,258	36,513	745
Swaziland	51	50	196	▲ 146
Tanzania	897	680	635	45
Zambia	1,632	1,630	1,468	162
Zimbabwe	2,045	1,125	1,758	▲ 633
	54,711	**45,757**	**43,755**	**2,002**

Source: SAPP

2006

Region/Country	Installed Capacity (MW)	Availability Capacity (MW)	2006 Peak Demand (MW)	Surplus (MW)
Angola	742	590	432	158
Botswana	132	120	473	▲ 353
DRC	2,442	1,170	993	177
Lesotho	72	70	101	▲ 31
Malawi	305	261	247	14
Mozambique	307	0	299	▲ 299
	2,250	2,075	0	2,075
Namibia	393	390	408	▲ 18
South Africa	42,011	36,208	34,807	1,401
Swaziland	51	50	188	▲ 138
Tanzania	897	680	567	113
Zambia	1,632	1,630	1,414	216
Zimbabwe	1,990	1,825	1,904	▲ 79
	53,224	**45,069**	**41,833**	**3,236**

Source: SAPP Annual Report 2007

Table 3.2.19 Installed Capacity, Available Capacity and Peak Demand of the SAPP Member Countries (2/2)

2005

Region/Country	Installed Capacity (MW)	Availability Capacity (MW)	2005 Peak Demand (MW)	Surplus (MW)
Angola	742	-	397	345
Botswana	132	-	434	▲ 302
DRC	2,442	-	1,012	1,430
Lesotho	72	-	90	▲ 18
Malawi	285	-	242	43
Mozambique	233	-	285	▲ 52
	2,250	-	0	2,250
Namibia	393	-	491	▲ 98
South Africa	42,011	-	33,461	8,550
Swaziland	51	-	172	▲ 121
Tanzania	839	-	531	308
Zambia	1,732	-	1,330	402
Zimbabwe	1,975	-	2,066	▲ 91
	53,157	-	**40,511**	**12,646**

Source: SAPP Annual Report 2006

2004

Region/Country	Installed Capacity (MW)	Availability Capacity (MW)	2004 Peak Demand (MW)	Surplus (MW)
Angola	624	-	374	250
Botswana	132	-	402	▲ 270
DRC	2,442	-	1,012	1,430
Lesotho	72	-	90	▲ 18
Malawi	285	-	227	58
Mozambique	177	-	266	▲ 89
	2,250	-	0	2,250
Namibia	461	-	393	68
South Africa	42,011	-	34,195	7,816
Swaziland	51	-	172	▲ 121
Tanzania	839	-	509	330
Zambia	1,672	-	1,294	378
Zimbabwe	1,975	-	2,069	▲ 94
	52,991	-	**41,003**	**11,988**

Source: SAPP Annual Report 2005