

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

**MINISTRY OF TRADE AND INDUSTRY (MOTI)**

**THE REPUBLIC OF KENYA**

**THE MASTER PLAN STUDY  
FOR  
KENYAN INDUSTRIAL  
DEVELOPMENT  
(MAPSKID)  
IN  
THE REPUBLIC OF KENYA**

**FINAL REPORT**

**January 2008**

**SANYU CONSULTANTS INC., JAPAN  
KRI INTERNATIONAL CORP., JAPAN**

## PREFACE

In response to a request from the Government of the Republic of Kenya, the Government of Japan decided to conduct a study on “the Master Plan for Kenyan Industrial Development” and entrusted to the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched a study team that is headed by Mr. Yoshio NAGAMINE of SANYU Consultants INC., and consists of SANYU CONSULTANTS INC. and KRI International Corp. between February 2006 and December 2007.

The team held discussions with the officials concerned of the Government of the Republic of Kenya and conducted field surveys in the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the promotion of Kenyan industrial development and to the enhancement of friendly relationship between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Kenya for their close cooperation extended to the study.

January 2008

Seiichi Nagatsuka,  
Vice-President  
Japan International Cooperation Agency

January 2008

Mr. Seiichi Nagatsuka

Vice-President, Japan International Cooperation Agency (JICA), Tokyo, Japan

Dear Mr. Nagatsuka,

**Letter of Transmittal**

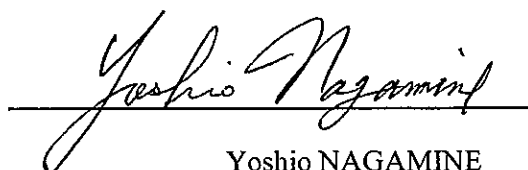
We are pleased to submit to you the Master Plan Study Report on Kenyan Industrial Development in the Republic of Kenya. Under the contract with your Agency a joint venture team (Sanyu Consultants Inc., Japan and KRI International Corp., Japan) has developed the Industrial Master Plan comprising a master plan, action plans and a development plan of the target sub-sectors from February 2006 to December 2007.

The overall goal of this study is to promote the industrial development of Kenya with emphasis on the target sub-sectors. The study was carried out in two stages. In the stage 1 three target sub-sectors were selected and in the stage 2 the Industrial Master Plan was developed. In the course of the study the skills and knowledge for developing the Master Plan were transferred to the counterpart of the Government of Kenya and the public and private partnership through promoting dialogue was strengthened.

We sincerely wish that the master plan, action plans and development plans of target sub-sectors would be duly implemented as a plan for Economic Recovery Strategy under the initiative of the Ministry of Trade and Industry with cooperation from the private sector, hence it would contribute to the development of Kenyan industry.

We wish to take this opportunity to express our sincere gratitude to your Agency, the Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry of the Government of Japan, for their valuable guidance and cooperation. At the same time we also wish to express our deep gratitude to your Agency's Kenya Office, the Embassy of Japan in Kenya, Japan External Trade Organization's Nairobi Office, Japan Bank for International Cooperation's Nairobi Office, the Ministry of Trade and Industry and other relevant Ministries and Government related Agencies in the Republic of Kenya for their precious advices and cooperation during our study.

Very truly yours,

  
Yoshio NAGAMINE

Team Leader of the Study Team

# Master Plan Study for Kenyan Industrial Development (MAPSKID) in the Republic of Kenya

## LOCATION MAP



---

# CONTENTS

Introduction Outline of Master Plan

PART I : Recent Trend of Kenyan Economy/Industry and National/Industrial Development Policy

Chapter 1 Kenyan Economy and Trend of Industry .....	4
1.1 Industrialisation in Kenya .....	4
1.2 Trend of Sectors .....	5
1.3 Outline of Manufacturing Sector .....	10
1.4 Domestic Market .....	12
1.5 International Market.....	13
1.6 Labour Markets .....	18
Chapter 2 National/Industrial Development Policy and Framework of National Economic Development and Industrial Development .....	23
2.1 National Development Policy and Industrial Development Policy .....	23
2.2 Necessity to Establish the Master Plan.....	30
Chapter 3 Ministry of Trade and Industry (MOTI) --- Its Role and Organization .....	32
3.1 Role and Organization of MOTI.....	32
3.2 Institutional Capacity Development of MOTI.....	46
Chapter 4 Institutional Framework Relating to Public Administration .....	53
4.1 Public Institutional Framework .....	53
4.2 Infrastructure Relating to Industry.....	63
4.3 Statistical Data on Trade and Industry.....	80
Chapter 5 Contents of Industrial Development Support.....	86
5.1 Framework of the Support System .....	86
5.2 Technological Development .....	89
5.3 Management and Market Development .....	103
5.4 Export Promotion .....	110
5.5 Investment Promotion .....	115
5.6 Financing .....	124
5.7 Human Resource Development.....	134
5.8 Industry Network .....	142
Chapter 6 Consideration of Environment and Social Aspects in Industrial Development .....	149
6.1 Consideration of Environment.....	149
6.2 Safety, Health and Gender .....	153

---

Chapter 7	Future Directions and Development Framework.....	155
7.1	Preconditions of the Kenyan Industry.....	155
7.2	Industrialisation Scenarios.....	161
7.3	Development Framework.....	166
Chapter 8	Action Plan of Industrial Development.....	186
8.1	Establishment of Action Plan.....	186
8.2	Scenario of Implementing Action Plan.....	187
8.3	Outline of Action Plan.....	188
8.4	Details of Individual Action Plan.....	197
Chapter 9	Selection of the Target Sub-sectors.....	222
9.1	Intention of target sub-sector selection.....	222
9.2	Selection process.....	222
9.3	Part 1: Competitiveness evaluation.....	223
9.4	Part 2: Strategic Evaluation.....	245
Chapter 10	Development Plan of Target Sub-sectors.....	252
10.1	Development Plan of Agro-processing Sub-sector.....	252
10.2	Development Plan of Agro-machinery Sub-sector.....	276
10.3	Development of Electrics, Electronics / ICT Sub-sector.....	295

---

## List of Tables

Table 1-1	Performance of Sub-sectors in Manufacturing Sector .....	11
Table 1-2	Classification and Membership of Manufacturing Industry by KAM.....	12
Table 1-3	Shares of Export to Kenya for Top 25 Major Importing Partners .....	17
Table 1-4	Shares of Import from Kenya for Top 25 Major Exporting Partners .....	18
Table 1-5	Employment by Sector .....	19
Table 1-6	Total Number of MSE and Their Employment .....	20
Table 1-7	Sectoral and Urban-Rural Distribution of MSEs.....	20
Table 1-8	Two-Digit ISIC Grouping of MSEs .....	20
Table 2-1	Development Target in Sessional Paper No.2 1997 .....	26
Table 3-1	Distribution of Staff among Departments.....	33
Table 3-2	Deployment of Commercial Attaches and the Trade Partner Rankings .....	41
Table 4-1	IPRs.....	59
Table 4-2	Number of Industrial Property Registration in Kenya.....	59
Table 4-3	Power and Energy Forecasts.....	67
Table 4-4	Generation Capacity Additions .....	69
Table 4-5	Transmission Line Additions .....	69
Table 4-6	Distribution and System Reinforcements .....	69
Table 4-7	New Institutional Arrangements for the WSS.....	72
Table 4-8	New Institutional Arrangements for NWRMS.....	73
Table 4-9	Number of Vehicles Registered .....	75
Table 4-10	Kenya Railway Line System.....	75
Table 4-11	KR Volume of Freight and Passengers.....	76
Table 4-12	Summary: Volume of Freight Handled by KPA 2001-05 .....	76
Table 4-13	Freight Traffic Handled by Airports.....	79
Table 4-14	Passenger Traffic Handled by Airports .....	79
Table 4-15	Modernisation Programme by KAA (2005-08).....	80
Table 4-16	Major Industrial Information Open to the Public .....	81
Table 5-1	Estimated Expenditures of the National Research Institutions.....	96
Table 5-2	Development Levels of the Industrial Technological Capacity.....	100
Table 5-3	Holding Tear-down Forums.....	103
Table 5-4	Main Players in Setting Institutional Framework of the B2C E-commerce .....	109
Table 5-5	Managers Surveyed Ranking Each Category as a Major Business Constraint in 2003.....	111
Table 5-6	FDI by Country.....	116
Table 5-7	Contents and Implementation of the Blue Book on Best Practice in Investment Promotion and Facilitation by JBIC and UNCTAD .....	117
Table 5-8	Institutions in Financial Sector .....	125
Table 5-9	Basic Data on MFIs .....	128
Table 5-10	Most Severe Constraints Faced by MSEs .....	130
Table 5-11	Sources of Credit for MSEs.....	130
Table 5-12	Distribution of MSEs by Number of Employees.....	131
Table 5-13	Distribution by Industry Group .....	131
Table 5-14	Domestic Credit as in December .....	132
Table 5-15	Structure of Enterprises and Financial Condition .....	132
Table 5-16	Type of Major TIVET Institutions.....	136
Table 7-1	Development Framework Table.....	171
Table 8-1	Evaluation of Development Objectives.....	187
Table 8-2	Priority Check Table of the Action Plans.....	191

---

---

Table 9-1	Interpretation of the determinants in the Diamond Model.....	224
Table 9-2	Value-Addition, Productivity and Employment .....	227
Table 9-3	EPZ Sub-sectoral Performance in 2005 .....	229
Table 9-4	Characteristics of Value Addition, Productivity and Employment .....	229
Table 9-5	FDI in Kenya from (2001-2005) (details).....	232
Table 9-6	Major Exported Commodities in 2004 (over US\$ 20 million).....	235
Table 9-7	Export Destinations of Soap and Footwear (2004) .....	236
Table 9-8	Export Performance of EPZ (2004) .....	236
Table 9-9	Results from the Statistical Analysis .....	237
Table 9-10	Area Distribution of the Sample .....	238
Table 9-11	Interviewed enterprises classified by the sub-sector.....	238
Table 9-12	Interviewed enterprises classified by the sub-sector of the final processing .....	238
Table 9-13	Factors Strengthening or Weakening Competitiveness.....	240
Table 9-14	Strategies for Upgradation (based on the diamond analysis).....	240
Table 9-15	Comparison with Development Strategies .....	244
Table 9-16	Short List from Competitive Evaluation (Part 1).....	245
Table 9-17	Relationship between the manufacturing sector and other growing sectors .....	246
Table 9-18	Strategic Clustering and Selected Sub-sectors Cross in the Competitive Evaluation.....	247
Table 9-19	Cross Checking with Industrial Development Scenarios.....	250
Table 10-1	Number of Registered and Listed Agro-Industry Related Enterprises .....	253
Table 10-2	Number of Formal Employees in Agro-Processing Manufacturing Sub-Sector .....	254
Table 10-3	Trends in Industrial Production Index .....	254
Table 10-4	International Comparison of Technical Efficiency in Selected Manufacturing Sub-Sectors.....	257
Table 10-5	Typical Examples of Processing Scale in MSE-Jua Kali Processing Units in 2005 .....	258
Table 10-6	Marketing Destinations of Kenya's Major Agro-Products in 2002~2005 ..	259
Table 10-7	Features of the Priority Fields of Agro-processing .....	263
Table 10-8	Issues Related to Agro-industry Sub-sector.....	264
Table 10-9	Examples of Stage-wise Improvement/Development of Kenya's Agro-industry .....	265
Table 10-10	Trend of Specialty Coffee Markets by Commodity .....	267
Table 10-11	Economic Structure of Agro-Machinery Industry in Kenya.....	277
Table 10-12	Firms Working in Agro and Supporting Industry in Kenya .....	278
Table 10-13	Import Tax Tariff in Kenya.....	280
Table 10-14	Domestic Exports of Selected Commodity .....	280
Table 10-15	Imports of Selected Commodity.....	281
Table 10-16	Machinery Export to COMESA (2004) .....	282
Table 10-17	Agro-Machinery Import from COMESA (2004) .....	283
Table 10-18	Trade Balance/Amount with COMESA Market.....	284
Table 10-19	Manufacturing Process of Iron and Steel.....	285
Table 10-20	World Iron Steel Production .....	286
Table 10-21	Operation Efficiency of Selected Post-Harvest Machinery .....	287
Table 10-22	Import of Bicycles and Tyre.....	287
Table 10-23	Major Component Machinery and Supply Source for Agro-processing Industry.....	289
Table 10-24	Import of Food Processing Machines and Facilities (2000-2005) .....	289
Table 10-25	Number of Tractors in Use in Kenya .....	290

---



---

Table 10-26	Import and Export of Farm Tractors.....	290
Table 10-27	Imports of Agricultural Machinery and Tractors .....	290
Table 10-28	Overall Agricultural Mechanization Development Programme .....	291
Table 10-29	Overall Agricultural Machinery Export Programme .....	292
Table 10-30	World Production Centres and Markets of the Electronic Equipment in 2005 .....	297
Table 10-31	Top 5 Countries for Production and Markets of the Electronic Equipment in 2005 .....	298
Table 10-32	Egyptian Major Trading Partners for Electronic Products in 2004.....	300
Table 10-33	Electrics, Electronics Manufacturers of Kenyan Association of Manufacturers.....	301
Table 10-34	New Investors in Electrics, Electronics Sub-sector (2000-2005).....	301
Table 10-35	Major Trading Partners for Electronic Commodities (2004).....	303
Table 10-36	Major Imported Electronic Commodities (2004).....	303
Table 10-37	Development Pattern of the Electrics, Electronics Sub-sector .....	308
Table 10-38	Target Figures for Electrics, Electronics Sub-sector .....	310
Table 10-39	Development Scenario of Electrics/Electronics Sub-sector in Kenya .....	311
Table 10-40	Main Ministries for ICT Development .....	319
Table 10-41	ICT Associations in Kenya.....	320
Table 10-42	Major ICT Solutions for the Manufactures and Actions by the Government .....	323

---

## List of Figures

Figure 1-1	Contribution to GDP by Manufacturing Sector .....	5
Figure 1-2	Contribution to GDP by Major Sector .....	6
Figure 1-3	GDP by Sector, 2006.....	6
Figure 1-4	GDP by Sector, 2002 - 2006.....	7
Figure 1-5	Output by Sector, 2005.....	7
Figure 1-6	Gross Value Added by Sector, 2004.....	8
Figure 1-7	Share of Wage Employment by Sector, 2006.....	8
Figure 1-8	Compensation of employees by Sector, 2005.....	9
Figure 1-9	Compensation of Employees by Sector, 2000 – 2005 .....	9
Figure 1-10	Outputs of All Firms and Establishments in Manufacturing Sector, 2001 – 2005.....	10
Figure 1-11	Major Trading Countries for Importation in 2004.....	12
Figure 1-12	Exports of “Goods and Services” and “Merchandise” of Kenya .....	14
Figure 1-13	Exports of “Goods and Services” by Percentage of GDP (left axis) and Annual Percentage Growth (right axis) .....	14
Figure 1-14	Imports of “Goods and Services” and “Merchandise” of Kenya.....	15
Figure 1-15	Imports of “Goods and Services” by Percentage of GDP (left axis) and Annual Percentage Growth (right axis).....	15
Figure 1-16	Shares of Kenyan Exports by Sectors.....	15
Figure 1-17	Shares of Kenyan Imports by Sectors .....	15
Figure 1-18	Shares of Kenyan Exports to Major Partners of Developed Countries.....	16
Figure 1-19	Shares of Imports from Kenya by Major Partners of Developed Countries .. .....	16
Figure 1-20	Shares of Kenyan Exports to Major Partners of Developing Countries ....	16
Figure 1-21	Shares of Imports from Kenya by Major Partners of Developing Countries . .....	16
Figure 1-22	Number of the Student Enrolment in the TVET Institutions.....	21
Figure 3-1	Organisational Structure of MOTI (present) .....	33
Figure 3-2	Proposed Organisational Structure of MOTI by the Strategic Plan 2006-11.....	34
Figure 3-3	Current Functional Structure of the Department of Industry.....	37
Figure 3-4	Distribution of Field Offices.....	39
Figure 3-5	Deployment of the Commercial Attaches .....	40
Figure 3-6	Indicative Sectoral Ceilings in 2005/06.....	42
Figure 3-7	Workflow .....	48
Figure 3-8	Benchmarking Process.....	49
Figure 4-1	Average price per unit in USA Cts/kWh.....	65
Figure 4-2	Five Year Sales Growth.....	66
Figure 4-3	Projected Electricity Energy Demand .....	67
Figure 4-4	Projected Electricity Peak Demand.....	67
Figure 4-5	Commercial Cargo Traffic at the Jomo Kenyatta International Airport ...	78
Figure 5-1	Supporting Platform alongside the Production Cycle.....	86
Figure 5-2	Origins of Plant and Equipments among KAM members in 2005.....	91
Figure 5-3	Networking for Technological Capacity Development.....	92
Figure 5-4	Creating Value Chains for Mango Producers in Malindi .....	97
Figure 5-5	ICT for Management of the Manufacturing Sector .....	105
Figure 5-6	Development of B2C E-Commerce.....	106
Figure 5-7	FDI, Net Inflows.....	115
Figure 5-8	FDI, Gross Inflows .....	115

---

---

Figure 5-9	Current TIVET System in Kenya.....	135
Figure 5-10	Coverage of Technical Education and Training .....	139
Figure 5-11	Process of the One Village One Product Project .....	147
Figure 7-1	Income Distribution of Kenya in 1997.....	155
Figure 7-2	Employment Opportunities in the Manufacturing Sector in 2002 (Estimate) .....	156
Figure 7-3	GDP Structure of COMESA Countries and South Africa in 2005.....	157
Figure 7-4	Fundamental Issues Surrounding Kenya’s Manufacturing Sector.....	158
Figure 7-5	Summary SWOT Analysis of Current Situations .....	161
Figure 7-6	Four Types of Linkage Creation as Industrial Transformation Triggers	163
Figure 7-7	Creation of Industrial Corridor .....	164
Figure 7-8	Strengthening Industrial Linkages .....	166
Figure 7-9	Industrial Development Implementation Framework .....	167
Figure 7-10	Horizontal and Vertical Approaches towards Industrialisation.....	169
Figure 7-11	Industrial Development Implementation Framework .....	170
Figure 8-1	Scenario of Implementation of the Action Plan .....	188
Figure 8-2	Outline of the Action Plan.....	190
Figure 9-1	Verification Process of the Target Sub-sectors .....	223
Figure 9-2	Value added and Input Productivity (all establishments).....	226
Figure 9-3	Employment and Labour productivity (large enterprises only).....	226
Figure 9-4	FDI in Kenya from (2001-2005) .....	231
Figure 9-5	FDI in EPZs (2001-2005) .....	233
Figure 9-6	International Competitiveness of Exported Commodities in 2004 .....	234
Figure 9-7	Employment Size of the Samples .....	238
Figure 9-8	Result of the Diamond Model Analysis .....	239
Figure 9-9	Strategies for Increasing Competitiveness of Sub-sectors .....	243
Figure 9-10	Strengthening Industrial Linkages .....	246
Figure 9-11	Manufacturing Sector’s Sourcing from Local Agricultural Products .....	248
Figure 9-12	Result of the Verification Process of the Target Sub-sectors.....	251
Figure 10-1	Outturn by Employee by Agro-Processing Sub-sector .....	256
Figure 10-2	Processing Process of Jatropha.....	273
Figure 10-3	Global Market Share by Product Categories in 2005 .....	298
Figure 10-4	Electronics Production in Egypt in 2005.....	299
Figure 10-5	Business Linkages of the Packaged Software Companies.....	307
Figure 10-6	Development Pattern Electrics, Electronics Products.....	309
Figure 10-7	Cost Composition of Electronic Equipments.....	315
Figure 10-8	Mobile Phone Subscribers.....	318
Figure 10-9	Range of ICT Services .....	319
Figure 10-10	ICT Utilisation by the Manufacturing Sector.....	321
Figure 10-11	Disseminating Trade and Information Data over the ICT Facilities.....	324

---

---

## Abbreviations

AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AMFI	Association of Microfinance Institutions
ARIPO	African Regional Intellectual Property Organisation
ASAL	Arid and Semi Arid Lands
ASCAs	Accumulating Savings and Credit Associations
ASDAQ	Association of Securities Dealers Automated Quotations
BDS	Business Development Services
BFP	Bio-fuel Production
BPO	Business Process Outsourcing
BSPS	Business Sector Programme Support
B2C	Business to Consumers
B2G	Business to Government
CBK	Central Bank of Kenya
CDC	Constituency Development Committees
CDF	Constituency Development Fund
CEEC	Centre for Energy Efficiency and Conservation
CMA	Capital Markets Authority
COMESA	Common Market for Eastern and Southern Africa
DANIDA	Danish International Development Agency
De-G	Directorate of e-Government
DFID	UK Department for International Development
DFIs	Development Finance Institutions
DIDO	District Industrial Development Officer
DIT	Directorate of Industrial Training
DOHSS	Directorate of Occupational Health and Safety Services
DPM	Directorate of Personnel Management
DRC	District Roads Committees
DTO	District Trade Officer
EAC	East African Community
EAM	Environmental Audit and Monitoring
EAPCC	East Africa Portland Cement Company
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMCA	Environmental Management Co-ordination Act
EPC	Export Promotion Council
EPZ	Export Processing Zone
EPZA	Export Processing Zones Authority
ERB	Electricity Regulatory Board
ERS	Economic Recovery Strategy for Wealth and Employment Creation
EU	European Union
FDI	Foreign Direct Investment
FMD	Foot-and-Mouth Disease
GDP	Gross Domestic Product
GEF	Global Environment Facilities
GER	Gross Enrolment Rate
GOK	Government of Kenya
GWh	Gigawatt-hour
HCDA	Horticultural Crops Development Authority
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
HS	Harmonised System
ICAP	Investment Climate Action Plan
ICDC	Industrial and Commercial Development Corporation
ICIPE	International Centre of Insect Physiology and Ecology

---

ICRAF	International Centre for Research in Agroforestry
ICT	Information Communication Technology
IDBC	Industrial Development Bank Capital
IEEE	Institute of Electric Electronic Engineers
IFC	International Finance Corporation
IIPA	International Intellectual Property Alliance
ILO	International Labour Organisation
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
IPC	Investment Promotion Centre
IPP	Independent Power Producer
IPR	Intellectual Property Right
IP-ERS	Investment Programme for Economic Recovery Strategy
ISIC	International Standard of Industrial Code
ITC	International Trade Centre
JBIC	Japan Bank for International Cooperation
JETRO	Japan External Trade Organisation
JICA	Japan International Cooperation Agency
JITAP	Joint Integrated Technical Assistance Programme to Selected Least Developed and Other African Countries
JKA	Jua Kali Association
JKIA	Jomo Kenyatta International Airport
JKUAT	Jomo Kenyatta University of Agriculture and Technology
JLBS	Joint Loan Boards Scheme
KAA	Kenya Airport Authority
KAM	Kenya Association of Manufacturers
KARI	Kenya Agricultural Research Institute
KATTI	Kenya Association of Technological Training Institutes
KEBS	Kenya Bureau of Standards
KCAA	Kenya Civil Aviation Authority
KeKoBI	Kenya Kountry Business Incubator
KenInvest	Kenya Investment Authority
KEPSA	Kenya Private Sector Alliance
KEWI	Kenya Water Institute
KfW	Kreditanstalt fur Wiederaufbau
KGt	Kenya Gatsby Trust
KIBT	Kenya Institute of Business Training
KICTAnet	Kenya ICT Action Network
KICTB	Kenya ICT Board
KIE	Kenya Institute of Education
KIEL	Kenya Industrial Estates Limited
KIM	Kenya Institute of Management
KIPI	Kenya Industrial Property Institute
KIRDI	Kenya Industrial Research and Development Institute
KITI	Kenya Industrial Training Institute
KNBS	Kenya National Bureau of Statistics
KNCPC	Kenya National Cleaner Production Centre
KNEC	Kenya National Examination Council
KNTC	Kenya National Trading Corporation
KPA	Kenya Ports Authority
KPLC	Kenya Power and Lighting Company
KR	Kenya Railway Corporation
KRA	Kenya Revenue Authority
Kshs.	Kenya Shillings
KWAL	Kenya Wine Agencies Limited
LATF	Local Authority Transfer Fund
MDGs	Millennium Development Goals

---

---

MFIs	Micro Finance Institutions
MIA	Moi International Airport
MLHRD	Ministry of Labour and Human Resource Development
MNEs	Multi National Enterprises
MOA	Ministry of Agriculture
MOED	Ministry of Education
MOEN	Ministry of Energy
MOF	Ministry of Finance
MOIC	Ministry of Information and Communications
MOL	Ministry of Lands
MOLF	Ministry of Livestock and Fisheries Development
MOLG	Ministry of Local Government
MOST	Ministry of Science and Technology
MOTI	Ministry of Trade and Industry
MPs	Members of Parliament
MRPW	Ministry of Roads and Public Works
MSE	Micro and Small Enterprise
MSM	Micro, Small and Medium
MSME	Micro, Small and Medium Enterprise
MTEF	Medium Term Expenditure Framework
MW	Megawatt
MOWI	Ministry of Water and Irrigation
NASDAQ	National Association of Securities Dealers Automated Quotations
NEMA	National Environment Management Authority
NES	National Export Strategy
NESC	National Economic and Social Council
NGOs	Non-Governmental Organisations
NITC	National Industrial Training Council
NMC	Numerical Machining Complex
NWCPC	National Water Conservation and Pipeline Corporation
NWRMS	National Water Resource Management Strategy
NWSS	National Water Services Strategy
PEAK	Plastic Environmental Action Kenya
POS	Point of Sales
PPP	Public Private Partnership
PSDC	Penang Skills Development Centre
PSDS	Private Sector Development Strategy
PSDS-PIP	PSDS Implementation Plan
QCT	Quality, Cost, and Cycle Time
R & D	Research and Development
RIC	Revealed International Competitiveness
ROSCAs	Rotating Savings and Credit Associations
SACCOs	Savings and Credit Cooperatives
SAGA	Semi-Autonomous Government Agency
SBP	Single Business Permit
SCM	Supplier Chain Management
SEZ	Special Economic Zone
SME	Small and Medium Enterprise
SSC	SME Solution Centre
SWAP	Sector Wide Approach to Planning
SWGs	Sector Working Groups
SWOT	Strength, Weaknesses, Opportunities and Threats
TCIP	Transparency and Communications Infrastructure Project
TNCs	Trans National Corporations
TRIPs	Trade Related Intellectual Property Rights
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
UK	United Kingdom

---

---

UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNCITRAL	United Nations Commission on International Trade Law
UNIDO	United Nations Industrial Development Organisation
UNSD	United Nations Statistics Division
UON	University of Nairobi
USA	United States of America
VAT	Value Added Tax
WRMA	Water Resource Management Authority
WAB	Water Appeals Board
WB	World Bank
WIPO	World Intellectual Property Organisation
WSB	Water Services Board
WSPs	Water Services Providers
WSRB	Water Services Regulatory Board
WSS	Water and Sewerage Services
WSTF	Water Services Trust Fund
WTO	World Trade Organisation
3R	Reduce, Reuse, Recycle

**Introduction****Outline of Master Plan****(1) Background**

Persisting economic stagnation since the 1980s has deteriorated the living standard of the people in Kenya. Under the fight against poverty, the Government of the Republic of Kenya (hereinafter referred to as “GOK”) formulated the Economic Recovery Strategy for Wealth and Employment Creation (ERS) in 2003. ERS clearly stipulates the “Industrial Transformation to the Year 2020”, (hereinafter referred to as “Sessional Paper”). The Sessional Paper, published in 1996 and revised in 1997, aimed to provide the framework for industrial development up to Year 2020; however, it is now recognised that the contents are due to be revised in order to meet situations under the global economic environment of today. GOK, then, has requested the Government of Japan (hereinafter referred to as “GOJ”) to conduct the study on “Master Plan Study for Kenyan Industrial Development<sup>1</sup>” (hereinafter referred to as “MAPSKID”).

In response to the request of GOK, GOJ has decided to conduct MAPSKID, and the Japan International Cooperation Agency (hereinafter referred to as “JICA”), the official agency responsible for the implementation of the technical cooperation programmes of GOJ, was commissioned to undertake MAPSKID. After the Scope of Work was agreed upon by and between Ministry of Trade and Industry of GOK (hereinafter referred to as “MOTI”) and JICA, JICA set up a team of consultants comprised from Sanyu Consultants Inc. and KRI International Corp. (hereinafter referred to as “the Study Team”) to carry out MAPSKID.

This Final Report is to present the result of the study up to November 2007. The study consists of Stage 1 and 2, and the details of each stage are explained in (4) Outline under Introduction Chapter (pp. 2-3). The main outcome of Stage 1 of the study was selection of the target sub-sectors (Chapter 9). In the selection process, basic data and information was collected through literature reviews and interviews with 102 manufacturers and other key stakeholders.

This report presents the Industrial Master Plan, which analyses current situations and future directions for recommendations on issues surrounding the Kenyan manufacturers (Chapter 3, 4, 5, 6,7). It also presents development plan on the three target sub-sectors (Chapter 10) based on the master plan. Furthermore, it presents the Action Plan (Chapter 8), which is one of the main outcomes of Stage 2. During the study, a series of workshops and forums have been held to construct the discussions on the report. The National Seminar was held in Nairobi in November 2007 to share the result of the Study with stakeholders.

---

<sup>1</sup> In this study the term “industry” means in principle the “manufacturing sector” though “industry” in broad sense also covers other sub-sectors producing particular things or providing particular services. However, in some specific cases where the term “manufacturing sector” is appropriate to be used, this expression is applied in the study.

---



## (2) Purpose

Purposes of MAPSKID are as follows.

- i) Overall Goal : to promote the industrial development of Kenya with emphasis on the target sub-sectors
- ii) Project Purpose :
  - to have the Master Plan adopted as a component of ERS
  - to implement Master Plan with initiatives of MOTI and cooperation from the private sector
- iii) Outputs :
  - to develop the Master Plan comprising a master plan, action plans, and a development plan of the target sub-sectors
  - to transfer skills and knowledge to the counterpart of the counterpart for developing the Master Plan
  - to strengthen the public and private partnership through promoting dialogues

## (3) Target sectors

MAPSKID focuses on the manufacturing sector. The related sectors to the manufacturing sector are also studied in the linkage analysis. Particularly, Information Communication Technology (ICT) sector shall be paid attention since ICT is an emerging sector and its potential contribution to the industry needs to be examined.

## (4) Outline

To achieve the objectives described in (2), MAPSKID implemented the items listed below.

### 1) STAGE 1: Selection of three target sub-sectors <January 2006 - October 2006>

- i) Reviewing the current situation and issues of manufacturers
  - analysis of economic data
  - analysis of economic and industrial policies, legal framework, and programmes
  - analysis of donor-funded projects
- ii) Formulating development framework
  - analysing external factors that affect the development framework and cross check with the current situation
  - setting tentative framework for industrial development up to Year 2020
- iii) Developing methodologies for selecting the target sub-sectors
- iv) Selection of three target sub-sectors
  - evaluating sub-sectors based on the developed methodology

- selecting three target sub-sectors based on their evaluation
  - analysing the situation and issues relating to the development of the three target sub-sectors
- v) Identifying the stakeholders of the selected sub-sectors
- identifying institutions assisting growth of the selected target sub-sectors
  - analysing the current status and issues for strengthening contributions from the stakeholders to the development of the selected sub-sectors
- 2) STAGE 2: Developing the Master Plan <November 2006 - November 2007>
- vi) Finalizing industrial development framework and scenario
- vii) Developing an industrial development master plan
- viii) Developing development plans of the targeting sub-sectors
- ix) Developing action plans
- x) Publication and dissemination of the industrial development master plan

## **PART I : Recent Trend of Kenyan Economy/Industry and National/Industrial Development Policy**

### **Chapter 1 Kenyan Economy and Trend of Industry**

#### **1.1 Industrialisation in Kenya**

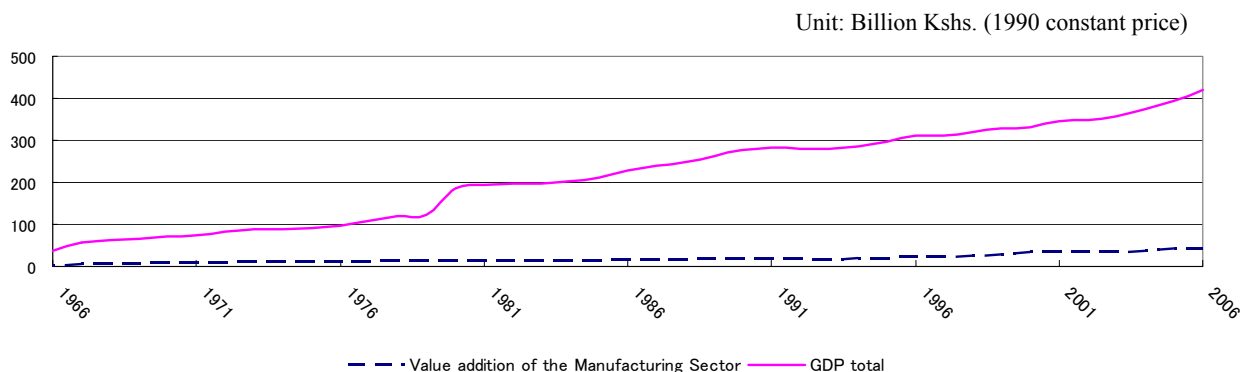
Kenyan industrial development has just started with its history of less than 40 years. Basic infrastructures, which are indispensable for economic activity, have not yet been sufficiently prepared. And an essential lack of cooperation is recognized in every scene e.g. between supplier and assembler, manufacture and sale, university and enterprise, and private sector and public sector.

During the colonial times, industrial activity was carried out in the context of economic development in the suzerain. Science and technology was harnessed only for colonial economic development as well as policy aimed at supplying raw materials to the suzerain. After independence, industrial development was conducted, based on the framework of the former East African Community (EAC).

Import substitution industrialisation policy was implemented in the 1960's-1970's, which included import restriction, application of high rate of duty, exchange control, and subsidy for interest. However, bad financial assets were increased, and the competitiveness of enterprises did not come to be strengthened because the small market was dominated by monopolized enterprises with inefficient management.

Following the dissolution of the former EAC in 1977, the necessity of industrialisation was arisen and the government was pressed to promote industrial development in the domestic economy. Then, export-oriented industrialisation policy was introduced, which included the abolition of the import restriction, the reduction of the high rate of duty, the liberalisation of the exchange, and the establishment of Investment Promotion Centre (IPC), the present Kenya Investment Authority (KenInvest), in 1982, Export Processing Zone (EPZ) in 1990, and Export Promotion Council (EPC) in 1992.

In the 1980's-1990's, the structural adjustment programmes were introduced under the development partners' framework led by the World Bank (WB) and International Monetary Fund (IMF). The policy of structural adjustment included the promotion of lifting government controls on many economic fields and reforming state corporations. However, these programmes led Kenyan economy into international economy causing serious shake-up for manufacturing sector. Production cost was increased, and the competitiveness of enterprises was declined. Many manufacturers were forced to close down their business or move their factories outside of Kenya or became importers because they were not able to cope well with the drastic change toward opening markets. Figure 1-1 shows that the increase of value addition is very slow though Gross Domestic Product (GDP) steadily increases.



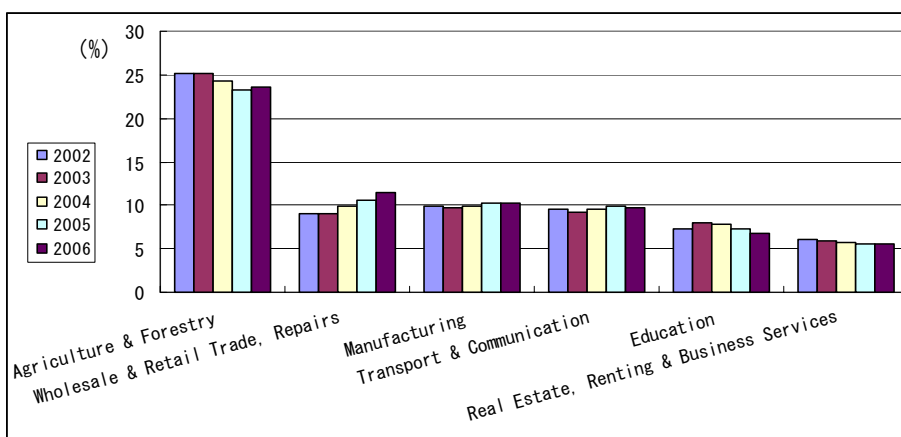
Source: Economic Survey 2007, KNBS  
**Figure 1-1 Contribution to GDP by Manufacturing Sector**

In 1997, Sessional Paper No.2 emphasized that it was necessary to improve investment condition through strengthening fundamentals of business but the condition was not satisfied. Kenyan people are making effort to promote industrial development in many sub-sectors though the current situation does not allow them easily to find appropriate targets and ways to them. Therefore, they need concrete and comprehensive picture that leads them to a goal for industrialisation in the targeted time framework with efficiency. This is one of the main purposes of MAPSKID.

## 1.2 Trend of Sectors

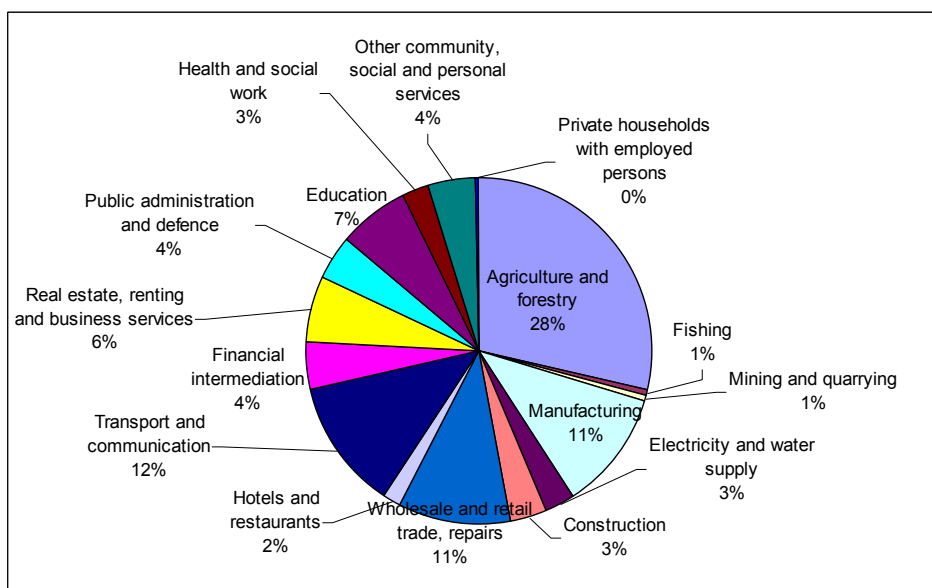
The Kenyan Economy attained growth of 6.1 % in 2006 compared to that of 5.7 % in 2005 (*Economic Survey 2007*). In 2006, the inflation rate increased from 10.3 % in 2005 to 14.5 % reflecting drought and soaring of oil prices. The high price of fuel and power would affect the economy continuously, and the industrial sector is anticipated to be obliged much more to tighten its management.

The following figure shows the trend that the biggest sector is agriculture, which occupies a quarter of GDP; yet, the second group including manufacturing, wholesale and retail trade, repairs, and transport and communication is not so small in comparison with agriculture. Each sector in the second group covers approximately ten percent, which is about a half of agriculture. The contribution of wholesale and retail trade, repairs is increasing gradually while that of agriculture is decreasing. The growth of the manufacturing has been stable.



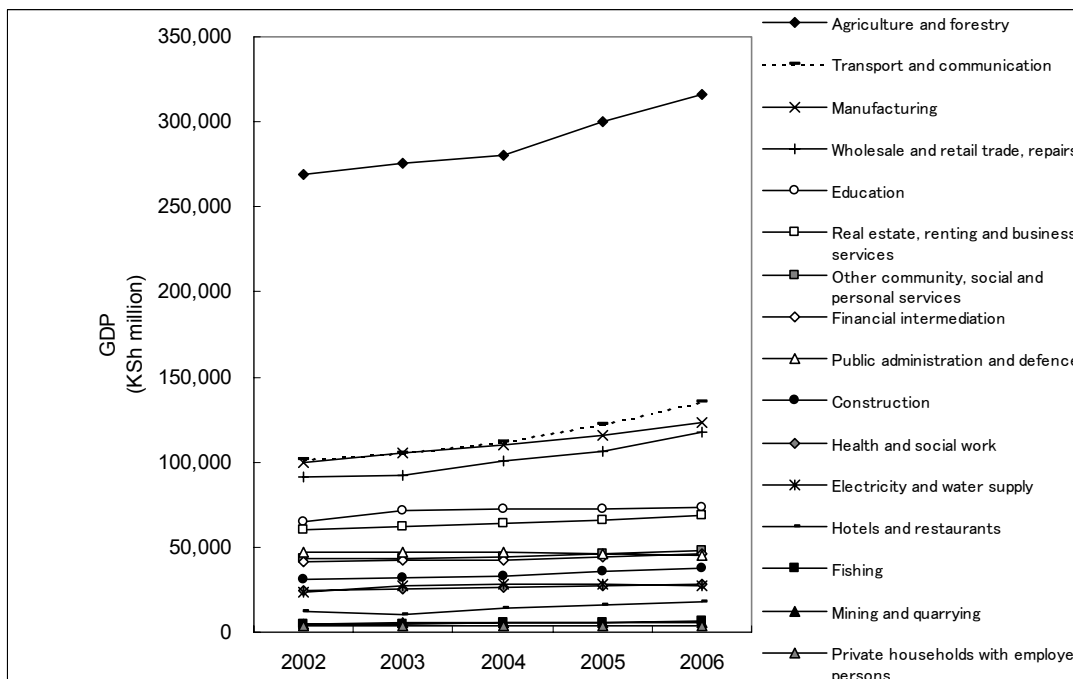
Source: Economic Survey 2007, KNBS  
**Figure 1-2 Contribution to GDP by Major Sector**

Figure 1-3 shows share of GDP in 2006 by sectors. The biggest sector is agriculture and forestry, and the second one is transport and communication. Manufacturing is the third sector and occupies 11%, showing its position as one of the major sectors in Kenya



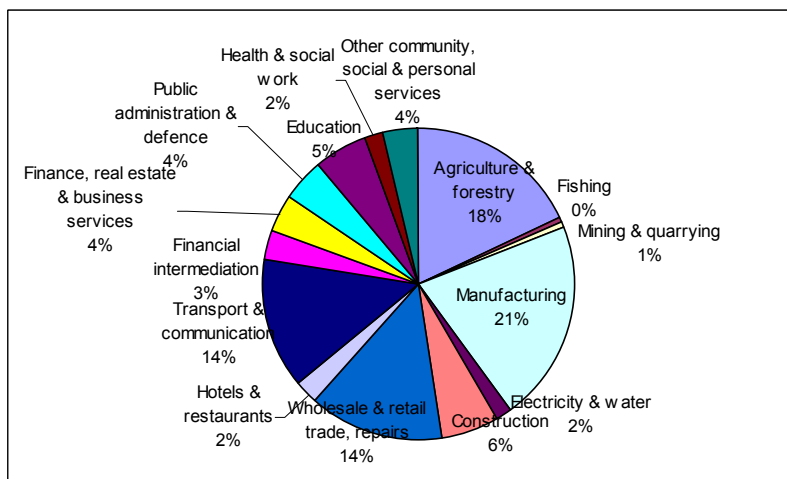
Source: Economic Survey 2007, KNBS  
**Figure 1-3 GDP by Sector, 2006**

Trend of GDP by sector in recent years is shown in Figure 1-4. We can find that the amount of agriculture and forestry is about triple in comparison with each amount of transport and communication, manufacturing, and wholesale and retail trade and repairs. Those four sectors are increasing in the recent four years.



Note: Constant 2001 prices  
Source: Economic Survey 2007, KNBS  
**Figure 1-4 GDP by Sector, 2002 - 2006**

Except for agriculture and forestry, transport and communication increased the most in the remaining three sectors. Education and real estate, renting and business services follow the second group though their increase is small.

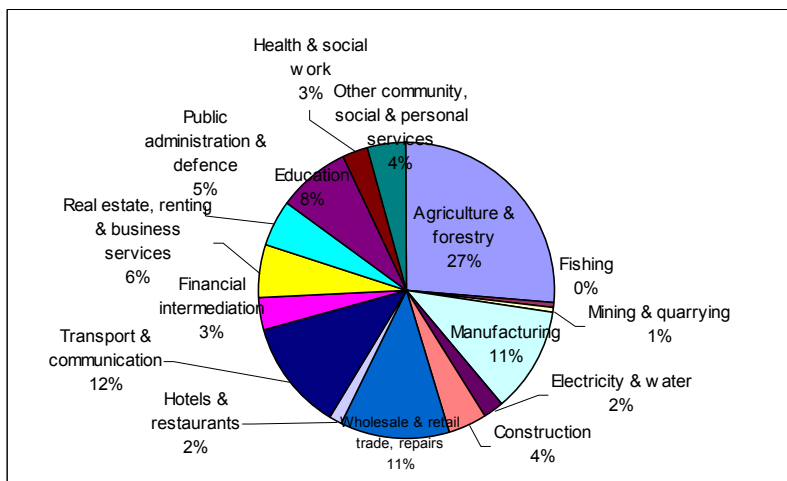


Note: At current basic prices<sup>2</sup>  
Source: Statistical Abstract 2006, KNBS  
**Figure 1-5 Output by Sector, 2005**

Figure 1-5 shows the annual output at basic prices by sectors in 2005. Manufacturing is the biggest

<sup>2</sup> Basic Prices exclude any taxes payable on products and include any subsidies receivable on products while purchasers' prices include such taxes as well as trade and transport margins.

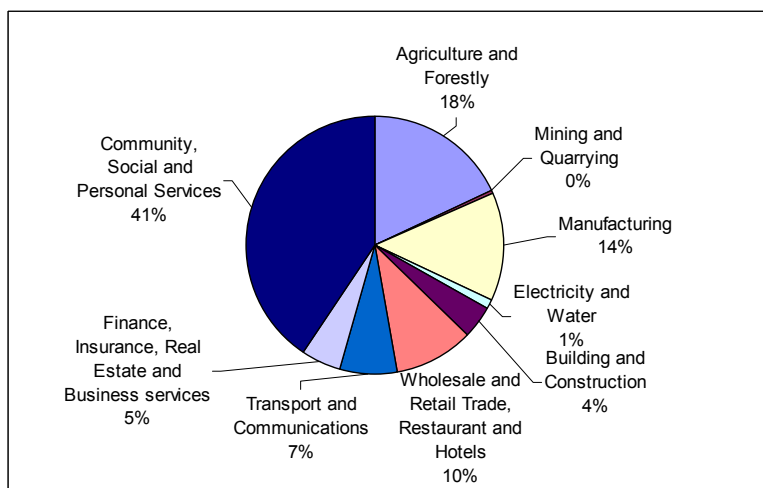
sector, which is followed by agriculture and forestry, transport and communication, and wholesale and retail trade and repairs. These industries widely influence the Kenyan economy but the ranking of manufacturing and agriculture reverses in gross value added because manufacturing consumes huge amount of intermediate goods while the intermediate consumption of agriculture is relatively small.



Note: At current basic prices  
Source: Statistical Abstract 2005, KNBS

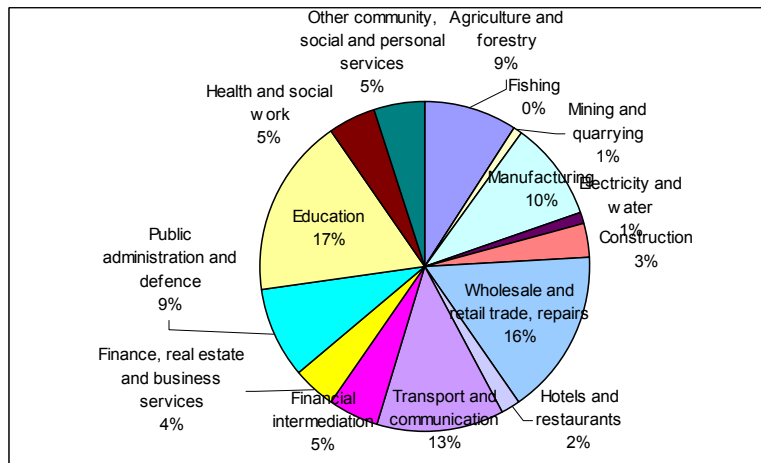
Figure 1-6 Gross Value Added by Sector, 2004

Agriculture and forestry occupies the biggest portion in Figure 1-6. The circle graph also shows that the second largest industry in gross value added is transport and communication, followed by wholesale and retail trade, repairs, and manufacturing. The each sector occupies more than ten percent, respectively.



Source: Economic Survey 2007, KNBS

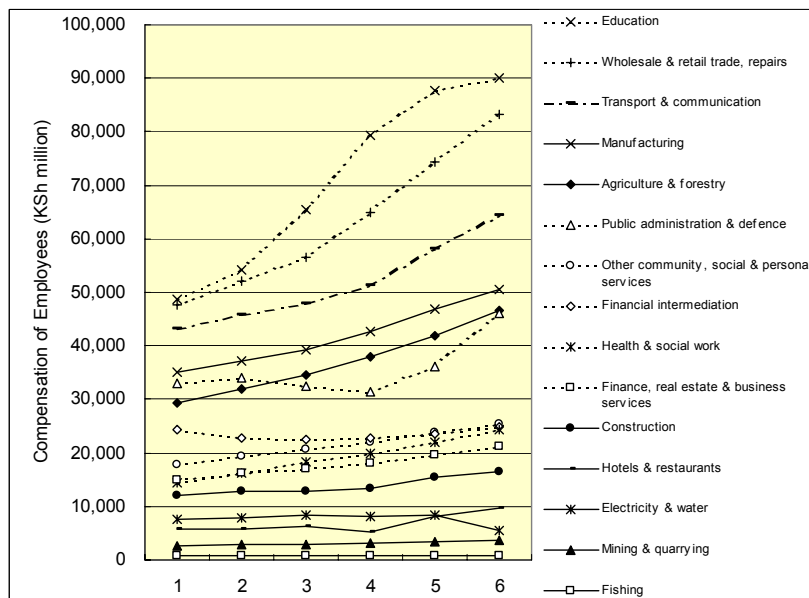
Figure 1-7 Share of Wage Employment by Sector, 2006



Source: Statistical Abstract 2006, KNBS

**Figure 1-8 Compensation of employees by Sector, 2005**

The biggest sector of wage employment except community, social and personal services is agriculture, and the second is manufacturing, which are shown in Figure 1-7. Figure 1-8 shows compensation of employees by industry and sector. The wages for employees in agriculture, whose share is 18 percent in the wage employment, receive only 9 percent of that whole compensation. On the other hand, transport and communication's employee, whose share is 7 percent in the wage employment, receive 13 percent of that whole compensation. The share of manufacturing in the wage employment is 14 percent and its share in the compensation of employee is 10 percent. We can estimate that average wage of manufacturing is slightly lower than average of all sectors.



Source: Statistical Abstract 2006, KNBS

**Figure 1-9 Compensation of Employees by Sector, 2000 – 2005**

Figure 1-9 shows the trend of the compensation in recent five years. It is clear that in whole it is divided into six high-ranking sectors (education, wholesale & retail trade & repairs, transport & communication, manufacturing, agriculture & forestry, and public administration & defence), which



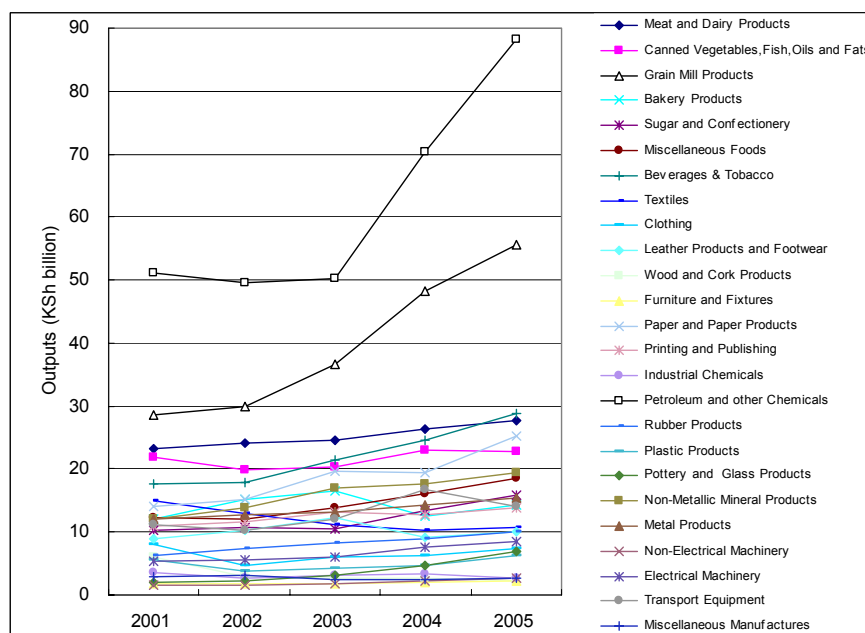
have increased rapidly, and nine low-ranking sectors, which remain stagnant.

### 1.3 Outline of Manufacturing Sector

#### 1.3.1 Outline of the Sub-sectors in Manufacturing Sector

In the manufacturing sector the main contributors for growth in the domestic economy by quantum index in 2005 were beverages and tobacco, which grew by 18 %, paper and paper products, which grew by 21 %, and plastic products, which grew by 26 %. Though there were negative elements, such as drought, high oil price, and high infrastructure utility cost, the markets of Common Market for Eastern and Southern Africa (COMESA), EAC, Southern Sudan and Rwanda played an important role in boosting the economic growth performance.

High oil price and high infrastructure utility cost continue to be the main issues to be tackled with for industrial development. The market environment, whose affect comes not only from the African Continent but also from the global level, continues to be an essential issue for industrial development. Figure 1-10 shows outputs of all firms and establishment in manufacturing sector, which is divided into 25 sub-sectors. We can see “petroleum and other chemicals” and “grain mill products” stand out from the others. In the others, “Beverage & Tobacco”, “Meat and Dairy Products”, and “Paper and Paper Products” follow the two prominent sub-sectors in 2005.



Source: Statistical Abstract 2006, KNBS

Figure 1-10 Outputs of All Firms and Establishments in Manufacturing Sector, 2001 – 2005

According to the data of formal enterprises, which were recorded by the Kenya National Bureau of Statistics (KNBS), “Timber, Wood Products & Furniture” and “Electrical & Electronics” stand out in productivity per worker. The sub-sectors whose export amount is huge are “Food, Beverage & Tobacco”, “Metal & Allied”, “Building, Construction, Mining” and “Chemical & Allied”. At the same time, “Building, Construction, Mining”, “Chemical & Allied” and “Food, Beverage & Tobacco” import a lot of amount of their raw materials.

**Table 1-1 Performance of Sub-sectors in Manufacturing Sector**

Sub-sectors	Number of Enterprises (2002)	Production Turnover (Kshs. Mn 2004)	Employment (2003)	Productivity per Worker at Basic Prices (Kshs.)	Exports (Kshs. Mn 2004)	Imports (Kshs. Mn 2003)
Food, Beverage & Tobacco	410	232,535	83,098	623,807	8,903	34,290
Leather Products & Footwear	271	8,880	18,798	54,596	3,860	524
Timber, Wood Products & Furniture	162	1,284	14,066	4,189,331	399	343
Paper & Paperboard	144	16,692	16,299	341,975	1,026	5,409
Pharmaceutical & Medical Equipment	36	4,337	3,230	405,807	2,394	9,728
Chemical & Allied	165	19,720	12,197	504,284	5,593	35,162
Plastics & Rubber	173	18,785	8,636	566,460	919	13,745
Building, Construction, Mining	89	9,915	12,031	264,983	6,713	71,456
Metal & Allied	258	7,621	20,671	444,055	8,356	17,927
Motor Vehicle Assembly Components	75	1,525	3,190	278,495	286	20,815
Electrical & Electronics	49	4,624	3,073	2,332,800	602	17,609
Textile & Garments	255	6,123	42,646	225,522	1,777	2,203
Other Manufactured Products	221	2,128	7,876	NA	7,467	2,129
<b>Total</b>	<b>2,308</b>	<b>334,169</b>	<b>245,811</b>	<b>484,186</b> <b>(Average)</b>	<b>48,295</b>	<b>213,413</b>

Source: KAM's computations from raw KNBS data and Statistical Abstract 2004, KNBS

### 1.3.2 Manufacturing Organisation

Kenya Association of Manufacturers (KAM) is the biggest manufacturing organisation in Kenya, which was established as a corporate body in 1959. The association provides an essential link for cooperation, dialogue and understanding with the Government by promoting investment, upholding standards and representing members' views and concerns to the authorities in the manufacturing industry. KAM is the biggest corporate association in the manufacturing industry but the number of formal members is only 525, which covers 23 % of the formal enterprises, recorded by KNBS. Therefore, its influence over the manufacturing industry and the linkage among the members are limited to low.

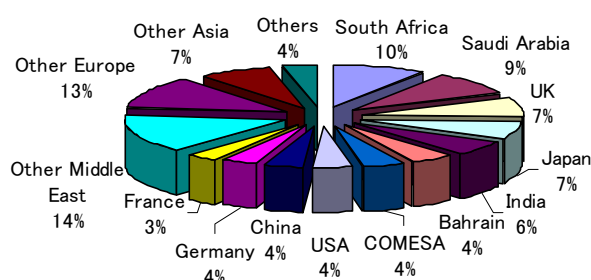
**Table 1-2 Classification and Membership of Manufacturing Industry by KAM**

Sub-Sector	Members	%/KAM's Total	%/National Total
Building, Construction & Mining	17	3.2	19.1
Chemicals & Allied	48	9.1	29.1
Energy, Electrical & Electronics	27	5.1	55.1
Food & Beverages	110	21.0	26.8
Leather & Footwear	6	1.1	2.2
Metal & Allied	52	9.9	20.2
Motor Vehicle & Accessories	18	3.4	24.0
Paper & Paper Board	56	10.7	38.9
Pharmaceutical & Medical Equipment	21	4.0	58.3
Plastics & Rubber	55	10.5	31.8
Industrial Services	21	4.0	-
Textiles & Apparels	59	11.2	23.1
Timber, Wood & Furniture	14	2.7	8.6
Tobacco	3	0.6	-
Affiliate Association	1	0.2	-
Consultants	15	2.9	-
Associate	2	0.4	-
<b>Total</b>	<b>525</b>	<b>100.0</b>	<b>22.7</b>

Source: KAM's Directory 2005/2006

#### 1.4 Domestic Market

The domestic market in Kenya is imbalanced between a small portion of the formal market and the rest of the informal market. The small formal market shows preference to high quality products with reasonable pricing. Because the Kenyan formal market is too small for the domestic enterprises to bring down the unit cost of production, they tend to lose in price competition against the imported products even with the importation tariff and transportation cost. Figure 1-11 shows the share of imports from the major trading countries. Although South Africa is outside the regional cooperation with Kenya, the impact from South Africa is quite big. Importation value from South Africa was 2.4 times as large as that from COMESA countries in 2004.



Note: Includes all products

Source: Economic Survey 2005, KNBS

**Figure 1-11 Major Trading Countries for Importation in 2004**

Enterprises also claim of illegal imports; i.e. not paying full duty, not observing the Kenyan standards or, in the worst case, pure imitation of Kenyan products. Kenyan Bureau of Standards is fighting to kick the illegal products out of the market, but they continue coming in. Introduction of the Pre-shipment Verification of Conformity Program from September 2005 is expected to reduce inflow of such illegal products.

On the other hand, the informal market is supplied mainly by the informal manufacturing sector, whose workforce was estimated to be 5.6 times that of the formal manufacturing sector in 2005.<sup>3</sup> Growth of the domestic market is closely linked to the income of people. Gross National Income per capita of Kenya was US\$ 400<sup>4</sup> in 2003 with the average growth rate of minus 0.2 % between 1999 and 2003 [WB (2005)]. 49.1 % of the total income is enjoyed only by the top 20 % of the population while 58.3 % of the Kenyan population lived under US\$ 2 a day in 1997 [WB (2006) p.71]. It is expected that poverty alleviation would expand the size of the formal market, in which globally competitive products are sold.

Kenya has two dominant retail networks: i.e. Uchumi and Nakumatt Supermarkets. The former, initially funded by the government, used to have 27 outlets all over the country and one in Kampala in its peak time. Uchumi commits itself to procuring from local manufacturers, targeting at 70 % of the procurement value, and works as a bridge between local manufactures and local consumers. However, there are some products which cannot be procured domestically such as home electric appliances and fertilisers because of lack of capacity among the local manufactures. Uchumi, as a commercial entity, also has to accommodate the consumers' preference to the imported products. Although Uchumi's popularity used to be enjoyed nationwide, its aggressive expansion strategy caused financial trouble, and all their 17 shops in Kenya were closed down in June 2006. With intensive support from the Government, Uchumi is now on the way to reopen all the shops.

On the other hand, Nakumatt is a privately owned supermarket and has emerged to be the most popular supermarket. It now has 17 outlets and targets high-end markets with a wide variety of choices among local and international brands. It is estimated that 70 % of the formal retail on food is transacted through Uchumi and Nakumatt [Global Agriculture Information Network (2006)]. The Kenyan population can have easy access to the formal market through such giant retail networks but only if they are able to receive enough income to join in these formal markets.

## **1.5 International Market**

As for international trade, total export earnings in 2005 increased by 13.7 % while in 2004 by 17.3 %. The total import bills increased by 29.3 % in 2004 and by 18.2 % in 2005. This has caused trade deficit of Kshs. 149,764 million in 2004 and Kshs. 186,542 million in 2005 respectively. Almost 50 % of the total domestic export earnings were from horticulture and tea and coffee, followed by iron and steel, essential oils, tobacco and plastic articles. In total, import bills in 2005 crude petroleum and petroleum products accounted for 22.7 %. Other major commodities in total import were industrial machinery, road motor vehicles, iron and steel and plastics in primary & non-primary forms.

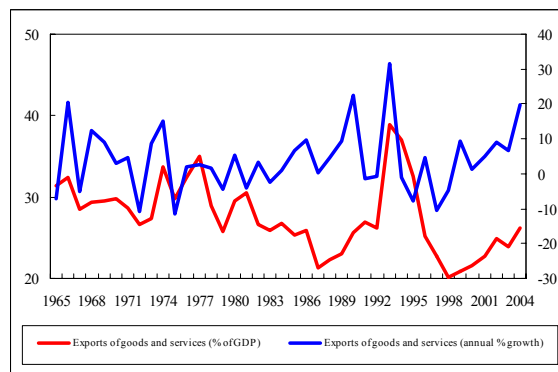
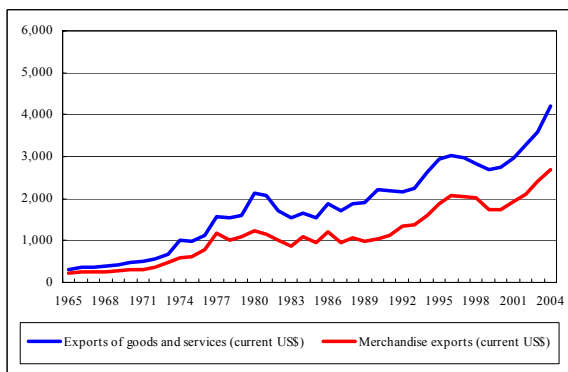
---

<sup>3</sup> In 2005, 1,386,100 people were estimated to work in the informal manufacturing sector as opposed to 247,500 people in the formal manufacturing sector [Republic of Kenya (2006) pp.65, 75].

<sup>4</sup> Conversion of this currency is converted by the WB Atlas method. It uses three-year average of conversion factor, which is the average official exchange rate after adjusting relative inflation between the country and USA [WB (2005)].

---

The export of Kenyan “goods and services” totalled US\$ 4,207 million and 26.2 % of GDP in 2004<sup>5</sup>. The amounts have been historically on an upward trend but the share has been between 25 % and 30 % of the Kenyan GDP from the mid 1990s. The annual growth of exports of “goods and services” has shown positive figures from 1999 and recorded 19.8 %, which is the highest in the last 11 years. Merchandise exports have also traditionally been on an underlying upward trend<sup>6</sup>. The amount in 2004 was US\$ 2,693 million.



Source: WB 2006, World Development Indicators

**Figure 1-12 Exports of “Goods and Services” and “Merchandise” of Kenya (current million US\$)**

**Figure 1-13 Exports of “Goods and Services” by Percentage of GDP (left axis) and Annual Percentage Growth (right axis)**

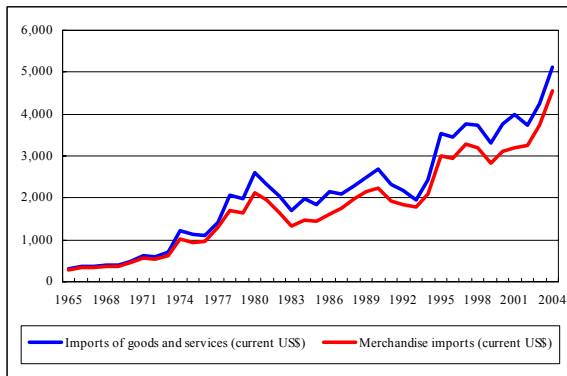
Kenyan imports of “goods and services” were US\$ 5,114 million and 31.8 % of the GDP in 2004 showing an upward trend historically<sup>7</sup>. The amounts shown are plus and minus 30 % of the Kenyan GDP. The annual growth of imports of “goods and services” has been positive from 1993 except 1999 and 2002. Merchandise imports have also risen historically and showed US\$ 4,553 million.<sup>8</sup>

<sup>5</sup> According to the World Development Indicators (2006), exports of goods and services represent the value of all goods and other market services provided to the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labour and property income (formerly called factor services) as well as transfer payments.

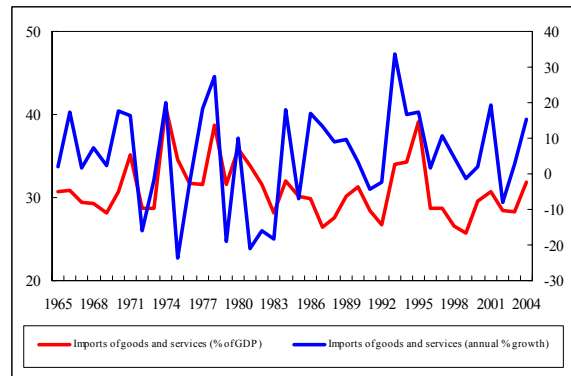
<sup>6</sup> Merchandise exports show f.o.b. value of goods provided to the rest of the world valued in current U.S. dollars. (WB 2006, World Development Indicators)

<sup>7</sup> Imports of goods and services represent the value of all goods and other market services received from the rest of the world. They include the value of merchandise, freight, insurance, transport, travel, royalties, license fees, and other services, such as communication, construction, financial, information, business, personal, and government services. They exclude labour and property income (formerly called factor services) as well as transfer payments. (WB 2006, World Development Indicators)

<sup>8</sup> Merchandise imports show c.i.f. value of goods received from the rest of the world valued in current U.S. dollars. (WB 2006, World Development Indicators)

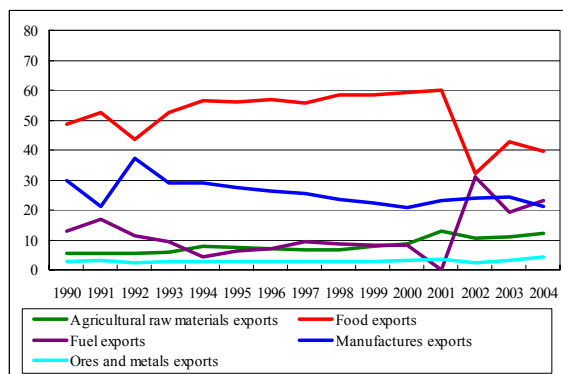


Source: WB 2006, World Development Indicators  
**Figure 1-14 Imports of “Goods and Services” and “Merchandise” of Kenya**  
 (current million US\$)

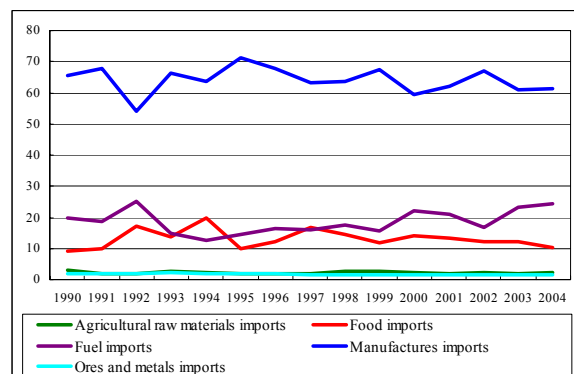


**Figure 1-15 Imports of “Goods and Services” by Percentage of GDP (left axis) and Annual Percentage Growth (right axis)**

The shares of Kenyan exports and imports by sector are shown in the following graphs. In the case of exports, food export has had major shares for a long time. In recent years, however, fuel export is promoting its share. On the contrary, the share of manufacturing imports has been at the top with more than sixty percent for more than ten years.



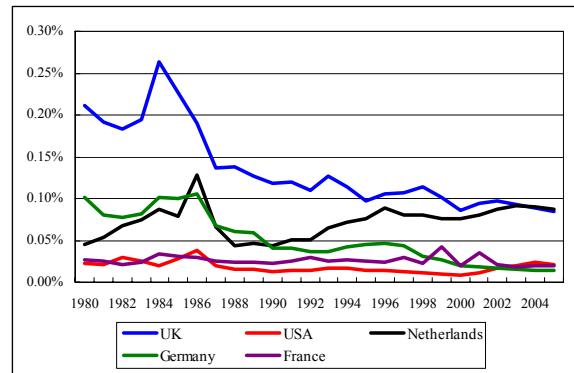
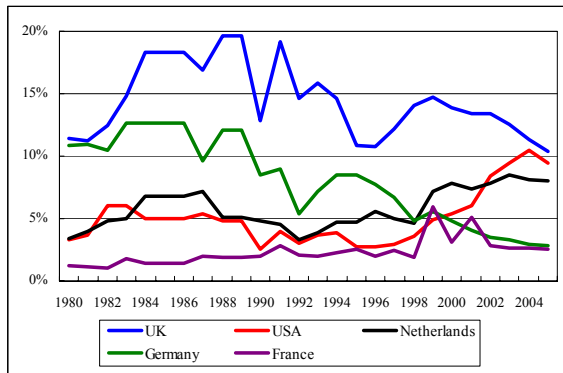
Source: WB 2006, World Development Indicators  
**Figure 1-16 Shares of Kenyan Exports by Sectors**  
 (%)



**Figure 1-17 Shares of Kenyan Imports by Sectors**  
 (%)

Looking at the trade partners, Uganda, United Kingdom (UK), USA, Netherlands, Egypt, Tanzania, Pakistan, Rwanda, Germany, Afghanistan and France have been the major ones in the recent three years. In the shares of export to developed countries, UK and Germany have been reducing their shares. However, USA and Netherlands have been increasing their shares. In the case of trade partners in developing countries, drastic changes have not happened in the recent five years.

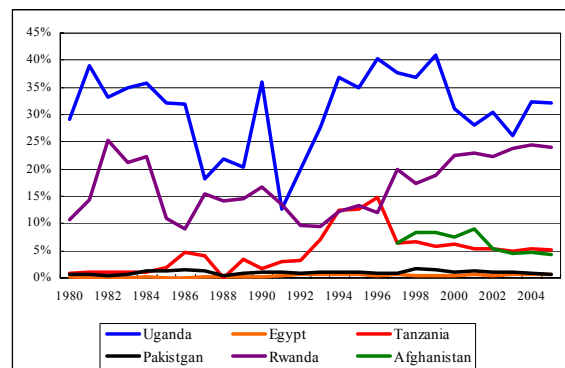
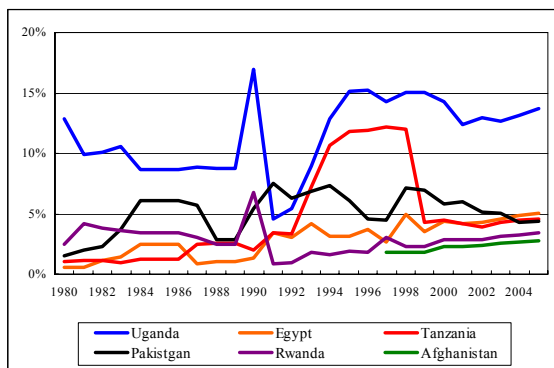
The share of imports from Kenya by developed countries has not changed largely in the recent ten years. In the case of Imports from developing countries, Uganda’s share has been declining while Rwanda’s share has been increasing over the recent years.



Source: IMF 2006, Directions of Trade Statistics

Figure 1-18 Shares of Kenyan Exports to Major Partners of Developed Countries (%)

Figure 1-19 Shares of Imports from Kenya by Major Partners of Developed Countries (%)



Source: IMF 2006, Directions of Trade Statistics

Figure 1-20 Shares of Kenyan Exports to Major Partners of Developing Countries (%)

Figure 1-21 Shares of Imports from Kenya by Major Partners of Developing Countries (%)

**Table 1-3 Shares of Export to Kenya for Top 25 Major Importing Partners**  
(Million US\$ and Shares (%))

	Amount (Million US\$)						Shares in Total					
	2000	2001	2002	2003	2004	2005	2000	2001	2002	2003	2004	2005
Uganda	268.9	255.9	284.4	324.8	426.6	487.5	14.4 %	12.5 %	13.1 %	12.8 %	13.3 %	13.9 %
U.K.	261.9	277.1	294.9	322.1	367.3	370.3	14.0 %	13.5 %	13.5 %	12.7 %	11.5 %	10.5 %
U.S.A.	102.0	124.6	183.7	242.1	340.4	334.6	5.4 %	6.1 %	8.4 %	9.5 %	10.6 %	9.5 %
Netherlands	147.9	153.0	173.2	219.5	263.6	287.2	7.9 %	7.5 %	7.9 %	8.6 %	8.2 %	8.2 %
Egypt	82.6	86.5	93.9	118.8	156.0	178.2	4.4 %	4.2 %	4.3 %	4.7 %	4.9 %	5.1 %
Tanzania	84.6	87.4	86.6	109.6	143.9	164.4	4.5 %	4.3 %	4.0 %	4.3 %	4.5 %	4.7 %
Pakistan	109.7	124.6	113.1	129.4	137.7	157.4	5.9 %	6.1 %	5.2 %	5.1 %	4.3 %	4.5 %
Rwanda	53.0	58.6	63.5	80.4	105.6	120.7	2.8 %	2.9 %	2.9 %	3.2 %	3.3 %	3.4 %
Germany	91.0	83.7	76.8	84.1	94.6	100.3	4.9 %	4.1 %	3.5 %	3.3 %	3.0 %	2.8 %
Afghanistan	42.9	47.4	51.4	65.1	85.4	97.6	2.3 %	2.3 %	2.4 %	2.6 %	2.7 %	2.8 %
France	57.9	105.1	61.5	68.4	86.1	91.1	3.1 %	5.1 %	2.8 %	2.7 %	2.7 %	2.6 %
Somalia	36.2	40.0	43.4	54.9	72.2	82.5	1.9 %	1.9 %	2.0 %	2.2 %	2.3 %	2.3 %
Congo, DR	35.7	39.4	42.8	54.1	71.1	81.2	1.9 %	1.9 %	2.0 %	2.1 %	2.2 %	2.3 %
Italy	39.0	40.7	36.7	38.1	54.3	63.0	2.1 %	2.0 %	1.7 %	1.5 %	1.7 %	1.8 %
South Africa	6.0	10.0	10.2	13.5	50.1	57.3	0.3 %	0.5 %	0.5 %	0.5 %	1.6 %	1.6 %
India	17.7	19.6	30.1	36.2	39.9	43.5	0.9 %	1.0 %	1.4 %	1.4 %	1.2 %	1.2 %
UAE	17.4	36.2	29.6	23.7	30.9	39.3	0.9 %	1.8 %	1.4 %	0.9 %	1.0 %	1.1 %
Sudan	53.0	58.6	63.5	60.2	33.8	37.0	2.8 %	2.9 %	2.9 %	2.4 %	1.1 %	1.1 %
Sri Lanka	2.4	2.1	1.5	3.2	31.7	36.2	0.1 %	0.1 %	0.1 %	0.1 %	1.0 %	1.0 %
Hong Kong	31.1	39.8	29.2	36.0	44.3	34.4	1.7 %	1.9 %	1.3 %	1.4 %	1.4 %	1.0 %
Zambia	2.6	4.8	10.0	21.2	31.1	34.2	0.1 %	0.2 %	0.5 %	0.8 %	1.0 %	1.0 %
Belgium	27.8	34.1	28.8	28.8	28.8	31.7	1.5 %	1.7 %	1.3 %	1.1 %	0.9 %	0.9 %
Burundi	7.2	8.5	14.3	20.5	26.9	30.7	0.4 %	0.4 %	0.7 %	0.8 %	0.8 %	0.9 %
Japan	19.4	22.0	25.1	22.4	32.7	29.0	1.0 %	1.1 %	1.2 %	0.9 %	1.0 %	0.8 %
Spain	8.5	10.7	13.8	16.4	25.4	25.7	0.5 %	0.5 %	0.6 %	0.6 %	0.8 %	0.7 %
Other Countries	267.1	282.0	317.0	352.3	422.0	503.4	14.3 %	13.7 %	14.5 %	13.8 %	13.2 %	14.3 %
Total	1,873.5	2,052.3	2,178.8	2,545.7	3,202.3	3,518.2	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Source: IMF 2006, Directions of Trade Statistics

The historical Trends of Trade in Kenya show that i) there is relatively no change in trade commodities for both exports and imports. In addition, it can be said that ii) there are also relatively few differences between trade partners in export as well as in imports. From these points of view, diversification of trade commodities and trade partners should be required from an observation of economic and industrial development in East Asian countries, which have developed their trade commodities from light industries to heavy industries, choosing their trade partners.

As for Kenya's major export partners, there are completely different pictures of their import structures. For Uganda, Rwanda, Somalia and Burundi, Kenya is a major import partner, which exceeds import shares of more than ten percents in 2005 (Uganda: 32.0 %, Rwanda: 23.8 %, Somalia: 13.7 % and Burundi: 12.9 %). On the contrary, such European countries as U.K., Netherlands, Germany and/or France, import shares from Kenya in total were less than 0.1 % in 2005 (U.K.: 0.08 %, Netherlands: 0.09 %, Germany: 0.01 %, France: 0.02 %). In the case of U.S., the shares were 0.02 % in 2005. From this point of view, it can be clearly said that Kenya is a major importing country for such east African countries such as Uganda, Rwanda, Somalia and Burundi. However, for Kenyan major exporting countries in Europe and U.S., Kenya has a relatively small presence as an import partner.



**Table 1-4 Shares of Import from Kenya for Top 25 Major Exporting Partners**  
(Shares (%))

	2000	2001	2002	2003	2004	2005
Uganda	30.97	28.01	30.42	26.05	32.29	31.99
U.K.	0.09	0.09	0.10	0.09	0.09	0.08
U.S.A.	0.01	0.01	0.02	0.02	0.02	0.02
Netherlands	0.08	0.08	0.09	0.09	0.09	0.09
Egypt	0.41	0.75	0.52	0.61	0.61	0.59
Tanzania	6.12	5.40	5.44	5.01	5.34	5.17
Pakistan	1.13	1.35	1.11	1.09	0.85	0.63
Rwanda	22.58	23.07	22.34	23.87	24.48	23.80
Germany	0.02	0.02	0.02	0.02	0.01	0.01
Afghanistan	7.45	9.01	5.44	4.45	4.70	4.39
France	0.02	0.04	0.02	0.02	0.02	0.02
Somalia	12.23	12.65	12.83	14.12	13.75	13.74
Congo, DR	5.91	6.46	5.22	5.78	5.82	5.70
Italy	0.02	0.02	0.02	0.01	0.02	0.02
South Africa	0.02	0.04	0.04	0.04	0.11	0.10
India	0.04	0.04	0.06	0.05	0.04	0.04
UAE	0.08	0.13	0.11	0.07	0.05	0.04
Sudan	3.94	3.40	3.18	2.43	0.91	0.61
Sri Lanka	0.04	0.04	0.03	0.05	0.44	0.38
Hong Kong	0.02	0.02	0.02	0.02	0.02	0.01
Zambia	0.26	0.49	1.02	1.51	1.59	1.47
Belgium	0.02	0.02	0.02	0.01	0.01	0.01
Burundi	5.37	6.73	12.07	14.36	13.62	12.93
Japan	0.01	0.01	0.01	0.01	0.01	0.01
Spain	0.01	0.01	0.01	0.01	0.01	0.01

Source: IMF 2006, Directions of Trade Statistics

## 1.6 Labour Markets

### 1.6.1 Employment by Sector

KNBS reports that formal employment by the manufacturing sector is 247,500 persons and 3 %, 3rd ranking following to community, social & personal services and agriculture, of total employment in 2005.

The Youth Enterprise Development Fund has been implemented since such a situation faced with an increasingly young labour force, limited economic growth which can only absorb 25 % of the 500,000 young people joining the labour market annually, leaving a majority of the 75 % unemployed which is a problem in the country. Current statistics indicate that 67 % of all those who are unemployed are young people below the age of 30 years old and 45 % are below 24 years. Clearly unemployment in Kenya, is a youth problem. Over time, however, the small and micro-enterprise sector has emerged as the main source of employment. The micro-enterprise sector, particularly in businesses in the informal sector employed close to 8 million people in 2005, compared to 1.8 million in the formal wage employment. The sector has absorbed 5 million people since 1990 as compared to only 356,000 absorbed by formal sector.

**Table 1-5      Employment by Sector**

Sector	2003	2004	2005	2005 %
Agriculture & Forestry	316.1	320.6	327.4	3.99
Mining and Quarrying	5.4	5.5	5.7	0.07
Manufacturing	239.8	242.0	247.5	3.01
Electricity and Water	21.1	20.9	20.3	0.25
Building and Construction	76.6	77.3	78.2	0.95
Trade, Restaurant and Hotels	162.8	168.0	175.7	2.14
Transport and Communication	86.8	100.8	117.3	1.43
Finance, Insurance, Real Estate and Bus	83.7	83.7	85.7	1.04
Community, Social & Personal Services	735.0	744.9	749.4	9.12
Employment in Formal Sector	1,727.3	1,763.7	1,807.2	22.00
Employment in Informal Sector	5,532.7	5,992.8	6,407.2	78.00
Total Employment	7,260.0	7,756.5	8,214.4	100.0
Population	32,200	32,800	33,400	*(24.59 %)

Note: \* Total Employment/Population in 2005  
Source: Kenya Facts and Figures, KNBS

### 1.6.2 Definition of Micro, Small, Medium, and Large Enterprises

Kenya does not have the legal definition of Micro, Small and Medium Enterprises (MSMEs). Most papers classify MSMEs by the number of employees, yet, there are some discrepancies in definitions between the papers. MAPSKID defines micro, small, medium, and large enterprises as follows unless otherwise specified due to the different definition adopted by the specific data source such as Statistical Abstract 2006, which defines large-scale establishments of those above 50 employees.

Number of employees<sup>9</sup>

- Micro: 1-9
- Small: 10-50
- Medium: 51-99
- Large: 100-

### 1.6.3 Micro and Small Enterprises (MSEs / jua kali)

MSEs as defined in this survey include businesses employing up to 50 workers. The survey made a distinction between micro enterprises or business enterprises employing up to 10 workers including working owners and small enterprises or those enterprises employing more than 10 up to 50 workers including the formal sector. Excluding primary business of agricultural production, animal husbandry, fishing, hunting, gathering, forestry and including farm-based business activities that involve some form of processing before marketing.

<sup>9</sup> The Sessional Paper No.2 of 2005 of Development of Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction defines MSEs up to 50 workers.

**Table 1-6 Total Number of MSE and Their Employment**

Stratum	% of Population	Number		Workers		Mean
		Number	%	Number	%	
Nairobi & Mombasa	9.7	204,280	15.8	394,838	16.9	2.0
Other Major Towns	6.2	157,533	12.2	279,133	11.8	1.8
Rural Towns	2.1	81,320	6.9	135,349	5.6	1.6
Rural Area	82.0	845,879	65.6	1,551,930	65.7	1.8
<b>Total</b>	<b>100.0</b>	<b>1,298,012</b>	<b>100.0</b>	<b>2,361,350</b>	<b>100.0</b>	<b>1.8</b>

Note: Total 2,361,250 = Regular Workers 2,248,588 (Proprietors 1,679,858 + Family 243,870 + Hired 271,869 + Apprentices 52,991) + Non-regular Workers 112,662

Source: Baseline Survey 1999, KNBS, International Centre for Economic Growth and K-Rep Holdings Ltd.

About 30 % of MSE's labours work in urban area and 70 % work in rural area. Their main sector is trade, and services and manufacturing follow the trade sector.

**Table 1-7 Sectoral and Urban-Rural Distribution of MSEs**

Sector	Urban	Rural	Total	Share (%)
Manufacturing	45,019	127,745	172,764	13.4
Trade	273,738	552,410	826,149	64.1
Bars/Hotels/Restaurants	24,888	51,789	76,677	6.0
Services	92,937	98,398	191,335	14.8
Construction	6,551	15,537	22,087	1.7
<b>Total</b>	<b>443,133</b>	<b>845,879</b>	<b>1,298,012</b>	<b>100.0</b>

Source: Baseline Survey 1999, KNBS, International Centre for Economic Growth (ICEG) and K-Rep Holdings Ltd.

**Table 1-8 Two-Digit ISIC Grouping of MSEs**

ISIC Grouping	Number	Total Workers
Food and beverage manufacture	35,653	80,795
Textiles and leather	63,216	87,597
Wood based manufacture	43,450	96,431
Paper and paper products	579	11,255
Earthenware manufacture	10,922	23,735
Hardware manufacture	10,096	25,268
Other manufacturing	10,039	13,783
Construction	17,227	34,657
Wholesale trade	40,587	65,594
Retail	845,010	1,471,298
Bars/hotels/restaurants	85,851	185,252
Passenger car service	17,265	32,139
Real estate	18,605	34,764
Professional services	11,332	35,434
Entertainment	3,414	9,613
Repair and other services	74,766	147,584
<b>Total</b>	<b>1,298,012</b>	<b>2,361,250</b>

Source: Baseline Survey 1999, KNBS, International Centre for Economic Growth (ICEG) and K-Rep Holdings Ltd.

According to the population census of 1999, the population of ages 15 to 64 was about 15 million, about 52 % of the total population. In the same data, the ratio of the population under 15 was 44 %.<sup>10</sup> The population is growing with a growth rate of between 2.1 to 2.4 % per annum.<sup>11</sup> As a result, the

<sup>10</sup> Statistical Abstract 2005

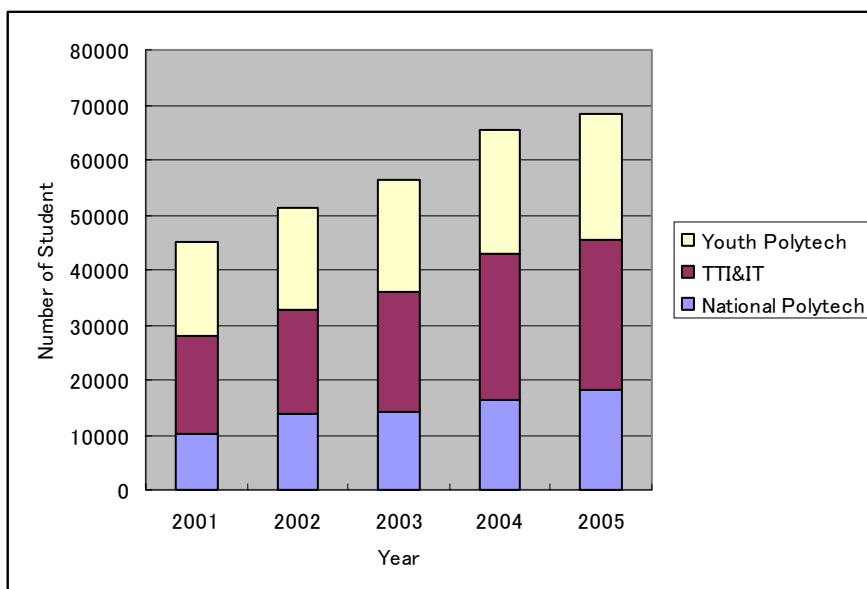
<sup>11</sup> WB, World Development Indicator: website: www.worldbank.org

labour force is expected to expand from 9.5 million in 2001 to 14 million in 2010, which means an additional 4.5million jobs have to be created by 2010.<sup>12</sup>

### 1.6.4 Vocational Training

Gross Enrolment Rate (GER) to public primary schools declined from the level of 105 % in early 1990s and regained to 99 % in 2003 and 105 % in 2005 and 2006.<sup>13</sup> The completion rate of primary school education has been on an increase from 76.2 % in 2004 to 79.9 % in 2005. This shows improvement from the survival rate with around 40 % in last decade. GER for the secondary level is 29.3 % in 2005 which has been increasing in recent years, though still low.

The number of enrolments in technical and vocational educational training institutes has been also increasing from 45,076 in 2001 to 68,379 in 2005. The outstanding increase of the number of students was observed in the number of males enrolling into youth polytechnics and the enrolment into national polytechnics.



Source: Economic Survey 2006, KNBS

Figure 1-22 Number of the Student Enrolment in the TVET Institutions

Human resources required for industrial development comprises various kinds of job groups. In an enterprise, activities such as labour, production management, marketing, general management, and Research and Development (R & D) should be carried out by workers with various skills. Skill development should be obtained through both formalised education and on-the-job training (OJT). While the former is important to provide basic skill and knowledge, in the real business scene, specialised skills and managerial skills are to be acquired through actual experience on the job. In the

<sup>12</sup> TVET Rapid Appraisal Team, Ministry of Education, Science and Technology, TVET Rapid Appraisal Report, 2003. P.1.

<sup>13</sup> GOK, Sessional Paper No.1 of 2005 A Policy Framework for Education, Training and Research, p. 6-7 and Economic Survey 2006

current industrial setting, however, a majority of the population is working in the informal sector and the kind of skills and knowledge acquired may be limited in terms of the level and variety of skills.

This situation has two significant meanings to national human resource development: a large portion of the labour force with basic education is entering into the job market; (and at the same time,) the kinds of jobs are limited where sufficient job experience will be provided for the acquisition of quality skills and knowledge.

## **Chapter 2 National/Industrial Development Policy and Framework of National Economic Development and Industrial Development**

### **2.1 National Development Policy and Industrial Development Policy**

#### **2.1.1 Policy Framework**

In order to clarify the position and scope of the Master Plan in MASPKID in relation to the overall national policy framework, the major economic development policies and strategies are reviewed and the path for the industrial development in the current context will be envisaged.

##### **(1) Kenya Vision 2030**

Long-term national development is to be envisioned by the “Kenya Vision 2030”<sup>14</sup> which envisages “A globally competitive and prosperous nation with a high quality of life by 2030.” It comprises of three pillars, namely, Economic pillar which targets sustainable economic growth to be 10 % per annum over the next 25 years, Social pillar “a just and cohesive society enjoying equitable social development in a clean and secure environment,” and Political pillar for “issue-based, people-centred, result-oriented, accountable democratic political system.”<sup>15</sup> Vision 2030 is the successor of ERS, which covers until the end of 2007. The strategies and action plans on the Vision are being prepared. The National Economic and Social Council (NESC), comprising of the public and private sectors, the academia and civil society, developed the concept of this long term vision and has been working to drive the process forward.

##### **(2) ERS<sup>16</sup>**

###### **1) ERS and productive sectors**

ERS is the basic policy document that provides medium-term policy direction of national development from 2003 to 2007 and the priority actions. ERS forecasts the average GDP growth rate at 3.3 % per annum with the contribution of average increase in investment at 16.4 % and average export growth at 11.9 % per annum during the period. ERS aims at restoring the economy on a path of high growth as a prerequisite for achieving all other developmental objectives. Based on this aim, the following three pillars are set.

---

<sup>14</sup> “Kenya Vision 2030” was launched by the President, H.E.Hon.Mwai Kibaki in October, 2006.

<sup>15</sup> NESC website: <http://www.nesc.go.ke/>

<sup>16</sup> Soon after the inauguration by the President, H.E.Hon.Mwai Kibaki, the economic strategy paper of the new administration was published in 2002. The paper is called ERS. Embodying the actions stipulated in ERS, GOK further developed IP-ERS in March 2004. IP-ERS was approved as Kenyan version of Poverty Reduction Strategy Paper. The IP-ERS is commonly referred to as ERS, and this report refers to the same.

- i) Economic growth: macroeconomic stability through reforming fiscal, monetary and financial systems and promoting the development of infrastructure, privatisation and the productive sectors
- ii) Equity and poverty reduction: development of human resources, youth and programmes targeted at agriculture, livestock, environment and poverty reduction
- iii) Governance: promoting public safety, law, order and public administration reforms

The role of the government is redefined as a facilitator in stimulating growth and investment by the private sector, to which productive and service delivery activities are transferred. Government commitment is geared towards the establishment of a competitive environment, which can attract private investment in the productive sectors including tourism, industry and trade. [Republic of Kenya (2004) pp. 12-13]. In light of this, promoting good governance is one of the key areas targeted. The improvement of the situations on law and order, security, anti-corruption, and public management reforms are envisaged.

## 2) Industrial development in ERS and the role of the Master Plan

Industry is expected to be a leading productive sector for economic growth in ERS. For the development of the sector, removing barriers to investment and lowering the cost of business for industrial development are pointed out as important factors. Planned measures include:

- i) furthering trade liberalisation,
- ii) promoting financial market deepening,
- iii) enhancing infrastructure,
- iv) improving security,
- v) facilitating the use of technology licenses,
- vi) reviewing mechanisms for wage determination, and
- vii) improving access to quality training.

ERS recognises that development of an industrial master plan is one of the major outputs of the industrial development efforts, which operationalise the Sessional Paper No.2 of 1996 for industrial transformation. The benchmark study of productivity is another activity listed under the industrial development. [Republic of Kenya (2004) p.50]

## 3) Trade and investment in ERS

Trade and investment promotion are emphasised as crucial factors. For trade development, ERS emphasises the necessity to review the situation within the context of EAC and COMESA. In concrete, the activities are listed, namely, review of licensing agreements, provision of market information to the Kenyan manufacturers, support to the private sector in identifying new markets, quality improvement of products, reducing non-commercial risks, organising export trade fairs, exploiting African Growth and Opportunity Act (AGOA).

To attract foreign investment, the business climate and privatisation are recognised as critical factors. The policy measures include developing new regulatory framework for finance and infrastructure, strengthening the rule of law, enhancing the security situation and simplification of regulatory requirements for investment. [Republic of Kenya (2004) pp.49-50]

### (3) Private Sector Development Strategy (PSDS)

PSDS provides the mechanism for the Government to lay out its activities, targeting growth and competitiveness of the private sector from 2006 to 2010. PSDS is expected to contribute towards achieving the medium-term objectives set by ERS. The strategic objectives identified by PSDS are:

- i) To create a conducive business environment for Private Sector growth by alleviating major constraints; and
- ii) To enhance the growth and competitiveness of the Private Sector, especially, the MSMEs.

In order to achieve the above objectives, PSDS identifies the following five key goals:

- Goal 1 Improving Kenya's Business Environment
- Goal 2 Accelerating Public Sector Institutional Transformation
- Goal 3 Facilitating Growth through Greater Trade Expansion
- Goal 4 Improving Productivity
- Goal 5 Supporting Entrepreneurship and Indigenous Enterprise Development

PSDS also addresses the importance of improving operational efficiency of the civil service including communication, coordination and linkages of programme activities as well as funding, monitoring and evaluation of programmes. In undertaking monitoring and evaluation of the entire programme, a secretariat will be set up within MOTI with the financial and technical support by Danish International Development Agency (DANIDA).

There are six cross-cutting issues, which are critical for the success of PSDS: namely, i) public private partnership (PPP); ii) gender issues; iii) ICT; iv) environment; v) HIV/AIDS and vi) youth concerns. PSDS is to be implemented along existing national policies and legislation on gender, ICT and environment to support their policy objectives and to entail synergetic effects.

### (4) Sessional Paper No.2 of 1997 "Industrial Transformation to the year 2020"

Currently, the existing industrial policy is the Sessional Paper No. 2 of 1997 "Industrial Transformation toward Year 2020." Industrial development related policies comprise broad areas and various categories. Hence, policies relevant to the industrial development are available. Various institutional arrangements are also in place. The current situation of these policies and its implementation will be explained below.

#### 1) Organisation of the Sessional Paper

The Sessional Paper No. 2 of 1997 was developed with the aim of providing a framework of Government policies for industrial development which was expected to stimulate economic growth and employment through expansion. This paper was developed based on lessons learned from



experiences of the Asian countries, then called NICs (Newly Industrialised Countries). The derived lessons are:

- i) high level of investment;
- ii) “deepening of the industrial sector” by creating “core” and “linkage” industries;
- iii) acquiring and domesticating relevant technologies to enhance factor productivity;
- iv) broadening the base of participation in the industrial sector and
- v) adoption of industrial culture and an export mentality. [Republic of Kenya (1996) p.17]

The policy comprises broad areas of actions comprehensively. The strategies are two-fold: the two-phased scenario of industrial transformation from 1996 to 2006 and from 2007 to 2020 with selection of industries for each phase (See Table 2-1); and cross-cutting policies listed below.

- i) mobilisation of savings,
- ii) industrial development financing,
- iii) investment promotion,
- iv) technology policies,
- v) standardisation,
- vi) export promotion,
- vii) regional and international trade arrangements,
- viii) environmental policy and
- ix) land use policy.

The strategy also notes the importance of informal and small-scale economic activities and their need to be evolved into the formal and larger scale economies. In light of the composition of the Kenyan industrial sector and social needs, the Sessional Paper aims at MSE development.

**Table 2-1 Development Target in Sessional Paper No.2 1997**

	Phase 1 (1996 to 2006)	Phase 2 (2007 to 2020)
Development target	Promotion of micro, small and medium scale industries Utilising and adding value to local raw materials Requiring relatively modest capital investment	Promotion of capital intensive manufacturing industries that will require high capital investment, support infrastructure Well developed technologies and human resource skills
Type of industry	agro-processing, building and construction materials, and the tourism industries	Metallurgical, petrochemical, pharmaceutical, machinery and capital goods and telecommunication and information processing industries

Source: Republic of Kenya (1996)

## 2) Implementation of policy

The implementation of the policies stipulated in the Sessional Paper has not been fully observed to

---

date. One of the reasons can be found in the fact that it has not been possible to establish the National Industrial Development Council under the Office of the Vice-President for coordination, implementation guidance, monitoring and evaluation. This institutional arrangement was suggested in the document. The nature of the policy requires coordination among various ministries and government agencies. However, the recent experience of PSDS development and Investment Climate Action Plan (ICAP) indicate that the coordination and ensuring the actual implementation requires more than just installing another institution. The coordination, taking into account the administrative issues such as budgeting, requires close coordination, understanding and willingness among various agencies involved. Therefore, thorough institutional arrangements with the realistic capacity and cost estimation would be necessary.

Another important point would be more emphasis on ensuring the more basic and indispensable roles of the Government. The Asian experiences were realised first and foremost the institutional capacity of the Governments which enables them to ensure the facilitation of good business environment. Before the proactive selective policies such as sector-specific policies, the Government of Thailand and Malaysia, for example, developed their capacity to implement general investment and export promotion policies such as tax incentives, management of export promotion zones, and export credits for low interest rates. Through the solid experiences of implementation of these policies, the institutional capacity can be empowered for more proactive policies. More proactive policies such as sector-specific development, on the other hand, is more successful when the private sector takes the lead rather than the public sector [Higashi, 2004.]<sup>17</sup> Fortunately, these policies have been implemented to some extent in Kenya or the ground work for the enactment has been finalised as seen in above-mentioned various policies. The Industrial Development Policy should be, therefore, emphasis and support the importance of these policies as its premises of the successful outcomes. Trade and investment promotion has been defined as prioritised economic and industrial policies in Kenya's long-term development plan (Sessional Paper No.2 of 1997) and its mid-term development plan (ERS). These plans are to be continued in the incoming long-term development plan (Kenya Vision 2030) and in the present mid-term development plan (PSDS). The government continues to understand that trade and investment promotion is one of the core economic and industrial policies and institutions for the reduction of poverty and creation of employment.

#### **(5) National Export Strategy (NES)**

Trade promotion is defined in NES: 2003 – 2007, in which sixteen items (ten sectors and six issues) are prioritised. In each item, 1) overview, 2) critical issues, 3) strategic objectives, 4) strategic interventions and 5) strategic plan matrix and level of resource requirements are specified. As a concrete action plan, the government adopted the NES: Implementation Action Plan: 2005 – 2008 at

---

<sup>17</sup> Malaysia experienced the two prominent examples of government-lead and private sector-led proactive policies: The successful human resource development has been done by PSDC where the multinational corporate involves from curriculum development to actual training. On the other hand, the Government-led auto industry development can be recognised for small returns relative to the resource invested. [Higashi, p. 139-141&p.157-159,2004]

a Cabinet meeting as phase one on May, 2005. MOTI (functioning Permanent Secretary as leader and establishing coordination office), the Ministry of Agriculture (MOA), the Ministry of Livestock and Fisheries Development (MOLF), the Ministry of Finance (MOF), EPC, the Export Processing Zones Authority (EPZA), the Kenya Revenue Authority (KRA) and the Kenya Private Sector Alliance (KEPSA) are involved in the process of formulating policies and institutions by establishing a technical steering committee.

In the above action plan, the following sectors; i) livestock and livestock products, ii) fish and fish products, iii) textiles and garments, iv) horticulture and v) food and beverages were selected. Then, i) current export flows, ii) Kenya's competitive advantages, iii) binding constraints currently preventing these current flows from reaching their full potential, iv) binding constraints currently holding these flows back and v) sector/product-group action plan are specified. Especially in the "sector/product-group action plan", concrete activities, time frame of short-term (one to two years) and short- to mid-term (two to four years), budget inflows, leading agencies and performance indicators are clearly and explicitly stated in the plan. In addition, the plan indicated that phase two was to commence around September 2005. It is true that the action plan can be highly evaluated with precise and concise analyses and clear pursuance of future direction; however, the contents of the action plan have not been implemented until today. The main reason for this is attributed to budgetary constraints of the government.

## **2.1.2 Facilitating Good Business Environment for Industrial Development**

### **(1) Policy measures for improving business environment**

It is recognised that private sector development is the crucial factor for Kenya's economic development under the national development objective. Despite the recognition, the situation of the business environment requires further improvement and, in 2006, Kenya was ranked as 83rd place out of 175 countries in terms of the easiness of doing business by the "Doing Business" survey by WB.<sup>18</sup> Though it is much higher than the one of Tanzania (142<sup>nd</sup>) and Uganda (107<sup>th</sup>), it still requires more efforts to be able to compete in this regard with middle income countries such as South Africa (29<sup>th</sup>) and Thailand (18<sup>th</sup>). Though there are a number of issues involved in the improvement of the business environment, two examples of the Government efforts are mentioned here.

#### **1) ICAP**

ICAP was developed with the recognition of the necessity to fast-track policy measures to improve the investment climate for private sector growth. The programme comprises short- and medium-term activities for private sector development to achieve tangible results, which are to be merged to PSDS. Through this approach, active Government commitment can be displayed. Another aspect is to provide a platform for multi-ministerial efforts that are also crucial for PSDS. ICAP focuses on the following nine priority areas.

---

<sup>18</sup> Doing Business 2007, WB 2006

- i) Controlling rampant and escalating insecurity
- ii) Addressing the poor state of roads
- iii) Fast-tracking construction approvals
- iv) Removing inefficient, unnecessary, unfriendly and cumbersome licensing
- v) Improving business registration
- vi) Improving land administration
- vii) Improving power hook-ups
- viii) Updating the Company Law
- ix) Improving customs and tax administration

For implementation, each authority is responsible for securing the necessary budget for its own activities. Progress is to be reported on a quarterly basis to the coordinating committee and should also be shared at the biannual forum with the private sector. After the PSDS secretariat is set up, coordination and monitoring of activities of ICAP shall also be handed over to the PSDS secretariat.

One of the major components is the business licensing reform. The review of 1,400 licenses was embarked on. They are categorised into three, namely, the licenses, permits and authorisations under the control of the local authorities (about 600), licenses under the central government authorities, and the rest. For the first category, model licenses are to be developed to simplify and rationalise the formats. For the second category, the Licensing Laws Miscellaneous Amendment Bill was drafted and submitted to the Parliament. The third category is under review either to merge with others and simplify the reporting and fee systems. All the tasks are under process.

One of the biggest challenges of these measures is how to ensure implementation since the local authorities reserve the power to decide on licensing and permits. This is to be submitted to MOF and eventually to the Parliament to establish its legal status.

## 2) Single Business Permit (SBP)

SBP has been introduced nation-wide in order to reduce the number of processes involved in business registration. According to the review, while there seems to be some successful implementation, it has been recognised that the actual practice indicates that while the SBP may contribute to revenue collection, accountability leaves some problems.<sup>19</sup> The way forward should be considered and handled carefully in the legal package mentioned above.

### (2) Problems and solution to improve the situation

Due to the issues involving various stakeholders and the government intuitions, one of the major constraints for swift delivery of the policy measures is, indeed, to have the continuous and persistent

---

<sup>19</sup> MOLG, May 2006, Policy Review of the Single Business Permit Final Report

commitment from relevant ministries and the Government institutions. Moreover, many issues are actually deeply rooted institutionally and systematically. Therefore, in order to change and improve the situation, ample time and continuous commitment are required. Leadership is also required.

The positive improvement is i) the introduction of performance contracts; and ii) continuous monitoring of the progress on the activities under initiative of ICAP and taken over by PSDS. If actions are chosen to be included into the performance contracts of relevant senior management, it is more likely to be pursued. Moreover, PSDS will establish the ministering function within MOTI and will continuously monitor the actions taken over from MAPSKID.

## **2.2 Necessity to Establish the Master Plan**

### **2.2.1 Industrial Development for Driving Force for Growth and Poverty Alleviation**

Industrial development in the context of the current national development policy stipulated in ERS is the driving force to achieve the overall goal of restoring the national economy to a high growth path. Industrial development is expected to entail high productivity and employment opportunities. The economic growth is to alleviate poverty eventually.

It should be noted that ERS defines the strategy for high growth to be realised through export-led economic development. The outcome of development of productive sectors such as tourism, manufacturing and trade is expected to contribute under the overall indicator of the Economic Growth Pillar, i.e., the GDP growth rate to be 6.5 % by 2006. More specifically, ERS sets its target for the development outcome as growth in trade sector with employment creation and export growth and the reduced share of traditional agricultural products in the export revenue earnings.

In line with the ERS pillar, PSDS defines its objectives as enhancing growth and competitiveness of the private sector, especially the MSMEs. It further sets its goal as facilitating growth through greater trade expansion. In this context, the industrial development policy is expected to be integrated in order to fully exploit “comparative advantages and outward-looking strategies.”

There are also needs for the adequate implementation arrangement with a clear road map. It should also be noted ERS recognises that three important issues for the industrial development. First, it identifies the role of the Government as a facilitator of the business environment. Second, on the other hand, the collaboration with stakeholders, especially putting the private sector as the heart of the issue and establishing a good working relationship is highlighted. Third, in order to ensure realisation of the idea, the industrial development master plan is to be in place. The master plan should be, therefore, a feasible and realistic road map that can be operationalised.

### **2.2.2 Updating the Sessional Paper No.2 of 1997 “Industrial Transformation to the Year 2020”**

Currently available industrial development policy is the Sessional Paper No. 2 “Industrial Transformation to the Year 2020.” This document drew the lessons from the success of Asian countries, and various policy measures were laid out in order to replicate their experiences. For example, it was envisaged that industrial development could start from more labour-intensive light

industries with relatively low technology level and establish the experiences for further development of more technology-intensive and high value-adding industries.

However, the current structure of the manufacturing sector in Kenya has some significant characteristics. One of the issues is, for example, the current level of wages do not provide much in terms of the industries looking for cheap labour. Moreover, it is not likely that traditional import substitution programmes and other closed trade policies could be applied. Another aspect is current competition in the global market, which is supported by well established global supply chains, makes it difficult for Kenya to enter into the chain. In light of these constraints, the transitional pattern from an agrarian and primary commodity-dependant economy to industrial economy is not likely to be the same as experiences of Asian countries. Therefore, it is a mandate of MAPSKID to critically review the theoretical background and direction proposed in the Sessional Paper No. 2 and to provide the new direction for industrial development based on constraints and possibilities of the Kenyan industry.

## **PART II : Industrial Development (Manufacturing Sector) --- Analysis of Present Situation/Issues, and Future Directions**

### **Chapter 3 Ministry of Trade and Industry (MOTI) --- Its Role and Organization**

#### **3.1 Role and Organization of MOTI**

##### **(1) Role of MOTI**

Industrial development formulation and administration is the primary responsibility of MOTI. Based on the Presidential Circular No. 1/2006, the mandates of MOTI are summarised as follows:<sup>20</sup>

- i) trade development policy,
- ii) industrial development policy,
- iii) international trade development,
- iv) patent policy,
- v) quality control,
- vi) consumer protection, and
- vii) development of MSEs.

However, the actual implementation of policies that affect industrial development is undertaken by various institutions as are identified in Annex 1 and Annex 2. For example, among the various requests from KAM to the Government is that, the issues that MOTI can handle by itself are standards, Intellectual Property Right (IPR), counterfeits, and trade agreements, while other issues such as taxation, shipping clearance, infrastructure, industrial trainings, environment, safety, and health audits fall into the hands of other ministries.<sup>21</sup> Consequently, a set of action plans for industrial development inevitably involve various stakeholders. Thus it is important for the MOTI officers to take a proactive role in developing linkages with other ministries and stakeholders in order to gain the goodwill and cooperation of other stakeholders. Even though MOTI may not have control over the actions of other ministries, linkage creation is necessary to gain cooperation and coordination across the ministries so that MOTI can successfully perform the important task of representing manufacturers' interests. It is therefore necessary to set up the institutional framework that will allow and promote collaboration amongst the stakeholders.<sup>22</sup>

---

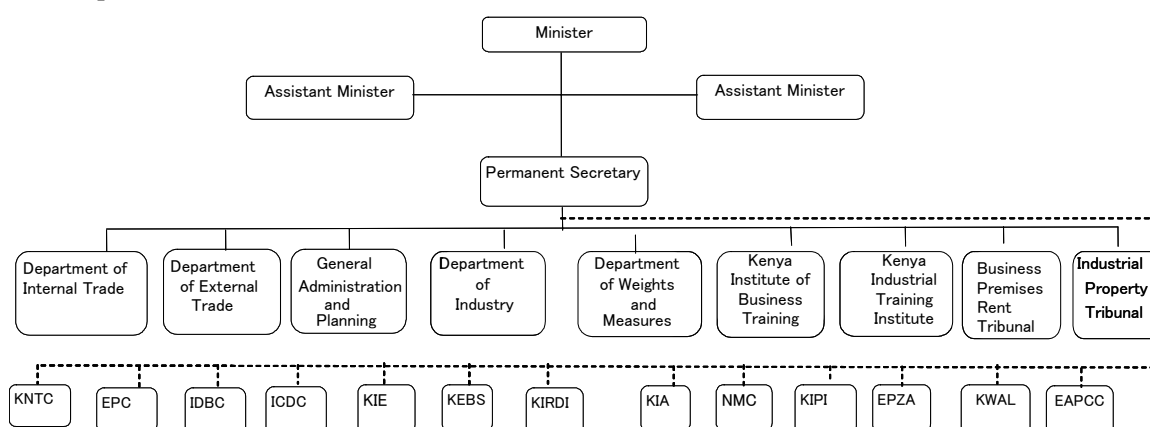
<sup>20</sup> MOTI, Strategic Plan 2006-2011, p.7

<sup>21</sup> KAM (2007) Report of the 4<sup>th</sup> KAM/Government Partners Dialogue: "Exploring Ways of Improving the Performance of Industry", from the meeting held on 31<sup>st</sup> July, 2007.

<sup>22</sup> Draft Industrial Policy proposes setting up the National Industrial Development Commission, which will comprise of the key stakeholders both from the public and the private sectors.

## (2) Organisation of MOTI

Figure 3-1 presents the current organisational structure of MOTI, which comprises of five departments, two training institutes, and two tribunals. Under MOTI, specialised agencies are established to provide specific services, namely R & D, human resource development, standards and metrology, intellectual property, export promotion, and investment promotion. The number of staff in each department is shown in the next table.



Note: i) KNTC, ii) EPC, iii) IDBC, iv) ICDC, v) KIEL, vi) KEBS, vii) KIRDI, viii) KenInvest, ix) NMC, x) KIPI, xi) EPZA, xii) KWAL, and xiii) EAPCC.

Source: MOTI

Figure 3-1 Organisational Structure of MOTI (present)

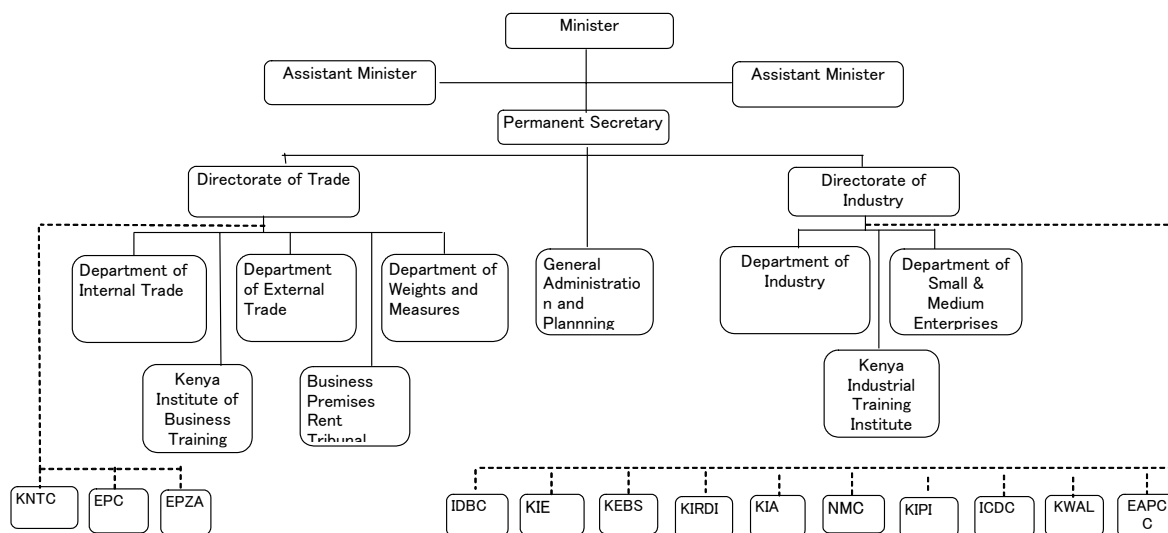
Table 3-1 Distribution of Staff among Departments

Department	Professional staff	Support staff	Total	(%)
General Administration and Planning	48	120	168	20.0
Internal Trade	73	165	238	28.4
External Trade	52	20	72	8.6
Weights and Measures	56	81	137	16.4
Industry	49	62	111	13.3
Business Premises Rent Tribunal & Industrial Property Tribunal	1	23	24	2.9
KIBT	20	12	32	3.6
KITI	28	27	55	6.6
Total	327	510	837	100.0

Source: Personnel Division, MOTI, Distribution of staff list of April 2006

While the current organisational structure is flat type (Figure 3-1), the Strategic Plan 2006-2011 proposes integrating major functions into two main Directorates, namely Directorate of Trade and Directorate of Industry (Figure 3-2). Although this has not yet been implemented, the new organisational structure would make it easier to coordinate and consolidate various activities and to avoid duplicate efforts within MOTI.





Source: MOTI, Strategic Plan 2006-2011

**Figure 3-2 Proposed Organisational Structure of MOTI by the Strategic Plan 2006-11**

In this paragraph, each department, regional offices, which assume the main role of regional industrial development, and the commercial attaches dispatched by MOTI, which assume the main role of trade and investment promotion, are further analysed hereunder<sup>23</sup>.

### 1) General Administration and Planning

The General and Planning Administration Department is divided into the following:

- i) Administration Division
- ii) Central Planning Unit
- iii) Finance Division
- iv) Accounts Division
- v) Procuring Entity
- vi) Personnel Division

### 2) Department of Internal Trade

Department of Internal Trade is charged with the responsibility of facilitating orderly development and growth of domestic trade through formulation and implementation of appropriate policies and strategies. The roles of the department are as follows:

- i) Trade policy formulation, implementation, harmonisation and domestication of regional trade arrangements including trade licensing. Contact: Trade Policy and EAC Division (District Trade Officer (DTO))

---

<sup>23</sup> Source: <<http://www.tradeandindustry.go.ke>>

- ii) Promotion of small enterprises, business counselling, training and consultancy services, management of traders credit scheme and facilitation of micro credit programmes. Contact: Business Support Services Division (DTO)
- iii) Trade practices/policies monitoring, research trade policy evaluation, trade information management & dissemination and trade promotion. Contact: Trade Monitoring and Research Division (DTO, Provincial Directors of Trade)
- iv) Trade licensing under the Trade Licensing Act Cap. 497, and import/export licensing under the Cap. 502.

The Department provides its services through a network of 20 zones and 8 sub-zones operating at the district level throughout the country. Its activities are coordinated at the provincial level by the Provincial Director of Trade with technical support from the Director of Internal Trade at the Head Office. The Director of Internal Trade assisted by the Deputy Director, Assistant Directors and several Trade Development Officers heads the Department.

### 3) Department of External Trade

Department of External Trade is in charge of trade issues related with the World Trade Organisation (WTO), United Nations Conference on Trade and Development (UNCTAD), United Nations Development Programme (UNDP), WB, IMF, United Nations Industrial Development Organisation (UNIDO), World Intellectual Property Organisation (WIPO), and FAO. The roles of the department are as follows:

- i) Formulation, implementation coordination, monitoring and reviewing of external trade policies
- ii) Identification and monitoring of new trade and investment policies
- iii) Promotion of bilateral, regional and multilateral trade relations consistent with Kenya external trade interests
- iv) Initiating and negotiating bilateral/multilateral trade agreements arrangements in order to secure the favourable terms for Kenya external trade
- v) Promotion of Kenya products
- vi) Attracting foreign investments
- vii) Coordination of international trade activities
- viii) Liaising with International Trade Organizations (ITOs) on trade matters, the ITOs are: - WTO, UNCTAD, and International Trade Centre (ITC)
- ix) Coordination of regional trade matters: COMESA, ACP, European Union (EU), COTONOU AGREEMENT, EAC, IGAD, etc, through participation in bilateral, regional and multilateral trade negotiations to safeguard Kenyan trade interests, in the face of globalisation
- x) Cooperation and launching aggressive marketing campaigns through Kenyan commercial

attaches

The Department has three divisions: WTO Division, Bilateral Division, and Regional Division. WTO Division handles all trade matters in relation to WTO, UNCTAD, UNDP, WB, IMF, UNIDO, WIPO, FAO, and participating in meetings of these organizations.

- i) Coordination of Kenya position paper on all multilateral & international trade issues with regard to WTO.
- ii) Responsible for trade policy review, WTO notifications obligations. It coordinates functions and activities of national committees on WTO.
- iii) Analyse WTO agreements impact on the Kenyan - economy and give recommendations on the same, liaising with Government Ministries and other organizations regarding WTO.

Bilateral Division handles bilateral trade policy formulation, monitoring and evaluation.

- i) Advise the business community on policies for trade promotion.
- ii) Liaising with the private sector in handling bilateral trade matters.
- iii) Preparation for participation in international trade fairs.
- iv) Advise the business community on new business opportunities policies.
- v) Trade statistics on main trade partners and main products of trade.
- vi) Analyse opportunities for investment and NES.

Regional Division is handling trade issues related to regional economic integration groups - COMESA, EAC, ACP-EU, COTONOU Agreement, and Commonwealth Secretariat.

- i) Handles trade policy formulation and preparation of economic briefs on these regions.
- ii) Promotes new regional initiatives such as NEPAD under the African Union.
- iii) Co-operation with other Regional bodies such as Southern African Customs Union (SACU), Southern African Development Community (SADC), NAFTA, MERCUSOR, ASEAN, etc.

#### **4) Department of Weights and Measures**

Its departmental mission is to ensure the use of accurate weighing and measuring equipment in trade transactions, encouraging fair trade practices and protecting the consumer in order to enhance social economic development. The Department has grown both in structure and scope to encompass a wider area in the measurement field than hitherto, such as the field of measurements needed for ensuring public health and human safety as well as introducing other areas of consumer protection and fair trade practices. The functions of the Weights and Measures Department are:

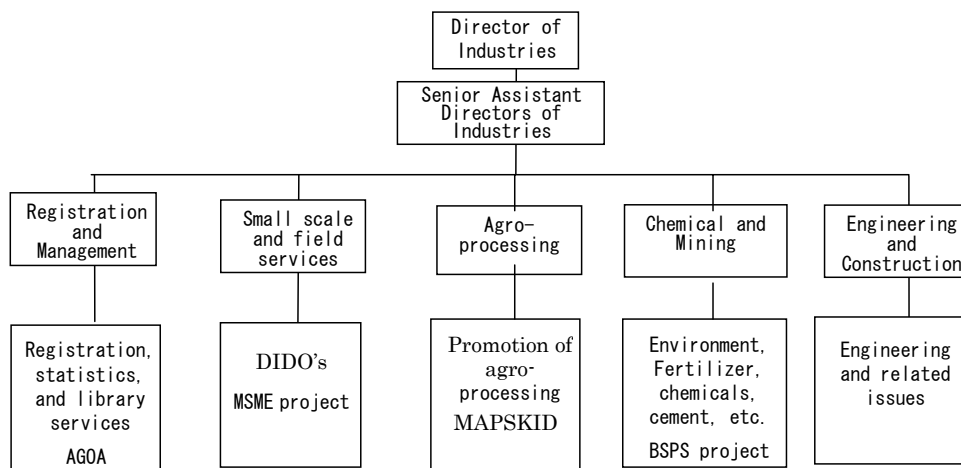
- i) Uniformity of all measurements in trade
  - ii) The use of accurate weighing and measuring equipment
  - iii) Fair trade practices
-

iv) Consumer protection

### 5) Department of Industry

Department of Industry is in charge of development, co-ordination, and implementation of industrial development policies. The estimates of expenditure for 2006/07 is the recurrent cost of Kshs. 41.7 million<sup>24</sup>, a 30 % increase from 2005/06, is mainly explained by the increase in personal allowances. The development expenditure for 2006/07 is estimated at Kshs. 206 million, 19 % decrease from the previous year. The ratio to the total estimate of MOTI is 1.8 % and 33.5 % of the recurrent and development expenditures, respectively.

Currently, there is no permanent position with fixed specific function officially stipulated in the Department of Industry. Figure 3-3 is the latest organisational structure with the function currently applied. Lack of official stipulation of function sometimes causes the responsibility and officers in charge unclear on certain work items.



Note: This unauthorised structure is the one functioning as of November 2007.

Source: Department of Industry, MOTI

Figure 3-3 Current Functional Structure of the Department of Industry

The Department of Industry has 49 professional staff including 20 field officers, designated as District Industrial Development Officer (DIDO).<sup>25</sup> The current level of staffing is considered to be half of the requirement due to the public service retrenchment.<sup>26</sup> This limited number of the work force calls for improvement in productivity of the officers through clear job definition and appropriate allocation of the work.

### 6) Business Premises Rent Tribunal

The departmental mission is to offer legal protection to tenants carrying out businesses in rental premises with leases that are inadequate and ensure landlords obtain fair returns from their

---

<sup>24</sup> the sum of the expenditure estimates of the Directorate of Industry and the Industrial Registration Division

<sup>25</sup> The number of staff is as of August 2007.

<sup>26</sup> MOTI, Strategic Plan 2006-2011, pp. 14-15.

investments. The Tribunal was established in 1965 by an Act of Parliament namely the Land Lord and Tenant (Shops, hotels and catering establishments) Act, Cap. 301 in 1965.

#### 7) Industrial Property Tribunal

The mandate of the Tribunal under the Act is to adjudicate and determine disputes that arise from rights that are granted under the Act namely patents, industrial designs and utility models.

#### 8) Kenya Institute of Business Training (KIBT)

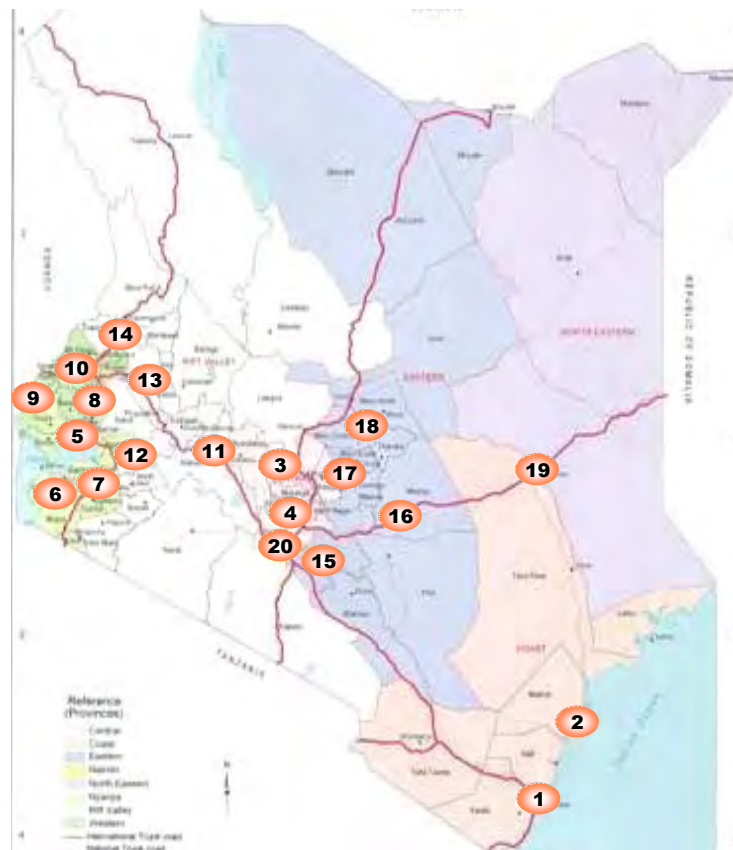
The Institute is operated under MOTI holding business/management development courses/seminars such as “The Effective Supervisor”, “Purchasing and Supply Management”, “Accounting & Finance for the Non-Financial Manager”, and diploma full/part-time courses such as “Higher diploma in entrepreneurship development” and “Diploma in marketing”.

#### 9) Kenya Industrial Training Institute (KITI)

The Department’s mission is to provide practical oriented business and management development training for the growth of commercial and industrial sectors of the economy. Here are offered courses mainly at craft and diploma levels and are offered academic courses such as mechanical engineering department.

#### 10) Regional offices

The regional outreach of MOTI is deployed nationwide; however, the number of field offices has been reduced over time due to the civil service retrenchment. Consequently, the country is divided into 20 zones, each staffed with a DIDO, DTO, and a Weights and Measures Officer. This staffing level necessitates that each DIDO has to cater for 3.5 districts on average. It is also observed that sufficient recurrent budget is not allocated to the regional offices to oversee such wide areas. This makes it very difficult for the DIDO to grasp the industrial situation of the whole area under his or her jurisdiction. It is also observed that important policy issues are sometimes not shared with DIDOS and that they are unable to act effectively as liaison between the main office and their beneficiaries in the field.



Legend: Zone 1 Mombasa, Zone 2 Malindi, Zone 3 Nyeri, Zone 4 Thika, Zone 5 Kisumu, Zone 6 Homa Bay, Zone 7 Kisii, Zone 8 Kakamega, Zone 9 Busia, Zone 10 Bungoma, Zone 11 Nakuru, Zone 12 Kericho, Zone 13 Eldoret, Zone 14 Kitale, Zone 15 Machakos, Zone 16 Mwingi, Zone 17 Embu, Zone 18 Meru, Zone 19 Garissa, Zone 20 Nairobi  
Source: The JICA Study Team

Figure 3-4 Distribution of Field Offices

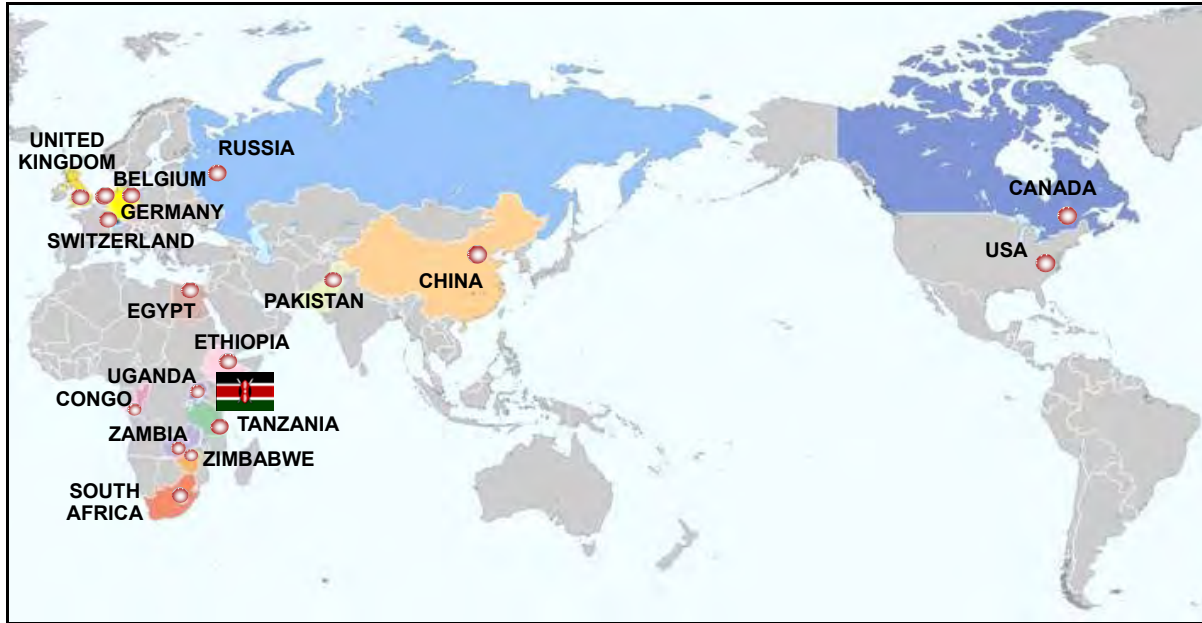
The roles of DIDOs are multiple, namely

- i) industrial information collection (both quantitative and qualitative),
- ii) industrial information delivery service,
- iii) consultation service for the manufacturers, and
- iv) investment promotion.

Ideally, DIDOs should take the leading role in development of an industrial development plan for the districts; however, adding that task on top of the above is a heavy load for one professional staff in the office. To tackle the situation, DIDOs are trying to create networks with other officers in the districts. This networking is to an extent working positively, but the collaboration is not strong enough to create a competitive edge for the industrial development. For example, the Eldoret Office of KenInvest, in charge of the Western region, proposed establishment of the local investment promotion committees, but many local authorities were not interested mainly because the proposal was not supported by the funding mechanism.

### 11) Foreign missions

Foreign missions are catered for by the commercial attaches deployed to embassies in 17 countries (Figure 3-5). The commercial attaches sent from MOTI are in charge of promoting trade and investment. In those embassies without commercial attaches, trade and investment activities are undertaken by the secretaries dispatched from other ministries with very limited budgets.



Source: The JICA Study Team

Figure 3-5 Deployment of the Commercial Attaches

The MOTI strategic paper recognises that the current deployment is not directly linked to the trade and investment promotion strategies and that there is a need to reinforce the capacity of the foreign missions.<sup>27</sup> For example, Table 3-2 shows that some countries with commercial attaches are not major trading partners while some major trading countries do not have commercial attaches.

<sup>27</sup> MOTI Strategic Plan 2006-20011, p.26, p.61; MOTI Strategic Plan 2004-2009, p.27, p.34

**Table 3-2 Deployment of Commercial Attaches and the Trade Partner Rankings**

Countries with Commercial Attaches			Other major trading partners		
	Export Ranking	Import Ranking		Export Ranking	Import Ranking
Uganda	1	46	Netherlands	3	14
United Kingdom	2	4	Rwanda	7	94
Tanzania	4	27	France	9	11
Pakistan	5	21	India	12	6
Egypt	6	16	UAE	20	1
Germany	8	10	Japan	23	5
USA	12	8	Saudi Arabia	25	3
Belgium	16	12	Bahrain	60	7
Zambia	18	49			
Ethiopia	21	69			
South Africa	23	2			
Switzerland	26	18			
Russia	31	24			
China	34	9			
Canada	45	23			
Zimbabwe	61	58			
Congo	89	131			

Note: Above figures indicate the trade ranking in exports and imports as of Year 2004.  
 Source: UN Commodity Trade Statistics Database

### (3) Financial issues

The Government budgeting and expenditure have been operational under the Medium Term Expenditure Framework (MTEF) since 1999. This system ensures effective fiscal policy management by linking financial resources to the national development objectives. Under the MTEF system, the Sector Working Groups (SWGs) comprising the relevant ministries discuss sector priorities and agree on the budget distribution among policies. Formation of KEPSA<sup>28</sup> in 2003 and its participation in the SWGs made some improvement in establishing collaboration with the private sector in formulating government policies with direct links to the budget. KEPSA has been actively involved in formulation of PSDS. The PSDS development process displays the work of SWGs in MTEF and is expected to be the forum for the inter-ministerial coordination with participation of the private sector.

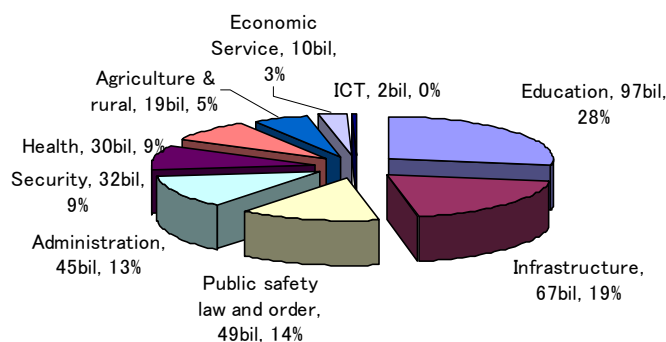
MOTI is in the General Economic Services Sector (GESS) together with the Ministry of Labour and Human Resource Development (MLHRD), the Ministry of Gender Sports and Culture, the Ministry of Tourism and Wildlife, and the Ministry of State for Youth Affairs. Figure 3-6 shows the indicative ceilings of each sector in 2005/06. Taking importance of improvement in the fundamental conditions of the Kenyan economy, the Government devotes majority of the resources to education, infrastructure, safety, law, and order. In Year 2005/06, the ceiling towards GESS was 3 % of the total budget amounting to 350 billion Kshs. while MOTI's funding was 25 % of the sectoral budget

---

<sup>28</sup> KEPSA is an umbrella body, representing the voices of the private sector, with memberships of 52 associations and 161 enterprises. (source: homepage of KEPSA)



amounting to 2.5 billion Kshs. or 0.7 % of the total budget.



Source: MOF (2006) Budget Outlook Paper 2006/07-08/09  
 Figure 3-6 Indicative Sectoral Ceilings in 2005/06

Given the financial constraints of the Kenyan Government, it would be realistic to assume that the governmental funding towards MOTI would not increase significantly in the near future. Yet the funding volume is not necessarily a hindrance to viability of ministerial activities. For example, the Ministry of Information and Communications (MOIC), which received only 0.2 % of the total budget in 2006/07 has been making significant contribution towards ICT development in Kenya by forming good partnership with the private sector and the development partners. Implementation of the ICT Strategy (2006) is in progress with participation of various stakeholders. What is more important than the governmental funding is sharing the visions among the stakeholders and commitment from the ministry to realise the vision. While MOTI recognises well the importance of collaboration with the development partners, it also needs to increase efforts in promoting PPP by attracting more involvement from the private sector.

#### (4) Operational issues

##### 1) Poor networking

Weak communication with the private sector blurs consciousness towards effectiveness of the policy. Sessional Paper No 2 of 2007 encouraged formation of the Strategic Consultative Group for specific sub-sectors. Consequently, some sectoral consultative groups were formed such as Motor Vehicle Sectoral Consultative Group with the participation of the motor vehicle assemblers, Numerical Machining Complex (NMC), MOF, the Ministry of Roads and Public Works (MRPW), and MOTI. However, lack of commitment from the public sector caused the loss of enthusiasm of the manufacturers who needed to sacrifice their busy time to attend the meetings.

MOTI occasionally tries to collect information from the manufacturers by undertaking surveys. However, distributing questionnaires is not enough to identify the needs of the private sector. It is necessary to revive the regular meetings with the manufacturers in a more effective manner. The meetings will allow proper identification of key issues and faster response to areas of concern by both parties.

The manufacturers represented by KAM presently negotiate directly with each relevant ministry. Yet, other ministries do not consider the manufacturers as their target beneficiaries, and the manufacturers

often learn about new policies affecting their operations after the decisions are made. Such a situation is very frustrating for the manufacturers since they feel that their interests are ignored. In a recent effort, KAM has started round-table discussions by inviting top officials from the Government. In the first Round Table session, which took place in July 2007, KAM requested MOTI to coordinate the ministries in matters affecting industry.

## 2) Weakness in implementation

It is observed that the execution level of the planned activities is not as expected. The expenditure level of the development budget of MOTI has been significantly low in the last few fiscal years. The percentage of used funds was limited to 22.4 % and 22.3 % of the revised budget 2003/04 and 2004/05, respectively, whereas the recurrent expenditure absorbs approximately 90 % of what was allocated by the revised budget.<sup>29</sup> Delay in the procurement process explains one of the bottlenecks.

As noted earlier, another reason for weak implementation is the lack of an institutional framework, which enables cooperation with other ministries and related agencies. Industrial development requires both the horizontal relation among the ministries and agencies and the vertical relation among the concerned authorities. Yet, it has been difficult to create substantial cooperation. For example, NES and its action plans were developed in 2003. However, not much progress has been made in its implementation so far. This is because implementation of actions relies on other ministries and agencies while MOTI works as a secretariat. ICAP developed in 2005 is another example. It was observed that some ministries involved in the plan did not have specific work plans for ICAP. Moreover, license reform, infrastructure, and insecurity components in ICAP require active involvement by the local authorities and outreach of other institutions. However, DIDOs and DTOs were not fully informed about ICAP.<sup>30</sup>

## (5) On-going reforms

As a part of the public sector reform (See Box 3-1), MOTI has been implementing some reform measures, namely, introduction of performance contracts, developing the strategic plan, and activities under the SWG for MTEF. Introduction of the performance contracts is expected to improve efficiency of public administration. The Strategic Plan proposes filling the vacancies to retain capacity. However, all these reform efforts themselves require proper planning and implementation arrangements. MTEF budgeting system binds the Government budget to the national development goals. It is expected that the MTEF process combined with the introduction of performance contracts will ensure implementation of the targeted activities. The sector-wide working groups also provide fora to discuss and adjust the budget and administrative matters among relevant ministries. One concern here is whether this SWG is flexible and effective for coordinating with other ministries, which are in different SWGs. For example, the key ministries for agro-processing are in the Agricultural and Rural Sector and those for infrastructure are in the

---

<sup>29</sup> MOTI, Strategic Plan 2006-2011, pp.16-17

<sup>30</sup> Mid-Term Review of Investment Climate Action Plan (ICAP) Final Report, December 2006, pp.20-21

## Physical Infrastructure Sector.

### **Box 3-1: Public sector reform and the efforts of capacity building**

The institutional problems of the Government have been recognised since the previous administration. Under the current administration, governance is one of the important policy agendas as defined in ERS. ERS recognises the importance of public service reform in order to enhance efficiency and effectiveness of the Government. This calls for the civil service and public expenditure reforms. Policy administration and implementation are being affected by these reform processes both positively and negatively.

#### 1) Civil service reform

The major component of the civil service reform was actually envisaged in the 1990s aiming at leaner and more focused government activities. Deepening ministerial rationalisation, pay and benefit reform, capacity building of public administration, performance improvement programmes, and reform of statutory organisations are the important elements.<sup>31</sup> The on-going activities are i) ministerial strategic plans, ii) result oriented management and performance contract, and iii) civil service retrenchment. At the same time, within the public sector reform process, reforms for the parastatal and statutory organisations have been carried out.

#### A) Ministerial strategic plan

In order to identify the core functions and strategic objectives for the ministry, each ministry formulates a Strategic Plan. Each government agency reviews its functions and structure in order to rationalise the size and institutional structure and to tie the functions with the performance contracts of the senior management. The Strategic Plan is an indispensable factor to rectify the negative impact caused in the course of civil service reform.

#### B) Result oriented management and performance contract

To improve the performance of the civil service, various measures were planned under the Strategy for Performance Improvement in the Public Sector. After piloting on 16 state corporations, the performance contract was introduced to the ministers and permanent secretaries in the year 2005. This will be expanded to the heads of department and chief executives of state corporations. The result-based management obliges the senior management of the Government agencies to have performance contracts. Though the introduction of the system is still new, it is expected to ensure the actual implementation of the planned activities. A major issue that may affect the effectiveness of the performance contract system is the reward and punishment mechanism. Since the performance contract is not equal to the employment contract, reward and punishment control the compliance. Directorate of Personnel Management (DPM) is drafting a paper for the reward and punishment system, but this has not been yet discussed with the wider

---

<sup>31</sup> Republic of Kenya, DPM, Office of President, Strategy for Performance Improvement in the Public Service, July 2001.

public.

### C) Civil service retrenchment

Under the on-going civil service reform, civil service retrenchment has been implemented in a few phases since 1993. ERS set the goal of retrenchment so as to reduce the wage bill in the GDP from 8.5 % in 2003/04 to 7.2 % by 2005/06.<sup>32</sup> For deepening ministerial rationalisation, civil service retrenchment was exercised through employment freeze and encouragement of early retirement. The employment freeze caused the vacancies and left without replacements, and this has affected operational capacity of the ministries. The employment freeze was done without any clear rationalised roadmap of the staff composition and has simply shrunk the capacity of some ministries including MOTI.<sup>33</sup> Fortunately, this employment freeze was lifted recently and MOTI was able to recruit a few officers.

It is required to be analysed further with the administrative capacity, procurement, and other procedural problems. The designated procedure of recruitment of officers does not allow prompt hiring. Another issue is the difficulty of adequate skill development and succession issues that may arise as a result of difficulty in prompt filling of vacancies. Hiring and procurement are regulated and supervised by DPM and MOF respectively. The needs for further reforms have been called upon.

### 2) Parastatal and statutory organisations' reform, budgeting process, and administration mechanism

Some contradiction of reform and existing management structure of parastatals and statutory organisations may cause some critical problems of efficiency and effectiveness of the parastatal service provision. The basic strategy for parastatal reform was developed during the previous administration. In 1992, the Public Enterprise Reform Strategy was launched, and privatisation of non-strategic public commercial enterprises was embarked on. On the other hand, it was recognised that some statutory organisations were facing the problem of inability to cater for the services which they were meant to and that their focuses of services no longer fit to the current circumstances.<sup>34</sup> The Strategy further analysed that one of the reasons of the poor performance and irrelevancy of the services provided by statutory organisations was confused supervision mechanisms where the line ministries, the Inspector of State Corporation of the Office of President, and the Treasury put influences from their own interests. The Strategy listed the reform comprising the review of roles and functions and developing implementation of action plans.<sup>35</sup>

---

<sup>32</sup> Republic of Kenya, Draft Annual Progress Report 2003/04 Investment Programme for the Economic Recovery Strategy for Wealth and Employment Creation 2003-07, p.51

<sup>33</sup> According to the MOTI's Draft Strategic Plan 2006-2011, the adequate operation of MOTI requires 584 professional staff, whereas the current size is 327.

<sup>34</sup> It categorised the statutory organisations as i) regulatory bodies; 2) development agencies; iii) research institutes; iv) educational institutions; and v) culture and social service providers.

<sup>35</sup> Office of President DPM, Republic of Kenya, 2001, A strategy for Performance Improvement in the Public Services, pp. 39-42

---

However, the Strategy did not go further to streamline policy guidance and supervision mechanism, which it pointed out as the root cause of the ineffectiveness of statutory organisations.

In the current Civil Service Reform process, parastatals and statutory organisations are also mandated to develop strategic plans. Management is obliged to have performance contracts. The Board members who make decisions on the strategic and managerial issues of these entities include the line ministries, usually represented by the permanent secretaries. However, their performance contracts are made with the Inspectorate of State Corporation. Therefore, unless explicit efforts to have coordination are made, the statutory organisations and parastatals are less bound to the development goals of the line ministries. This situation of two reporting authorities makes coordination difficult.

### **3.2 Institutional Capacity Development of MOTI**

It is considered extremely important to reinforce MOTI's capacity to lead industrial development. This section discusses the institutional capacity of MOTI, especially the Department of Industry.

#### **(1) Clarifying the role of the Department of Industry**

##### **1) Delivering the service for the target beneficiaries**

Activities of the Department of Industry should be geared towards the benefits of the manufacturers. Any policies which affect the performance of the manufacturers, the Department of Industry should represent the interests of the industry and negotiate with other ministries to find the optimal solution. Yet, among the category of beneficiaries, the micro- and small-scale manufacturers have many overlaps with other ministries. The Presidential Circular No. 1/2006 assigns MOTI the task of developing MSEs while MLHRD is to promote self employment in MSEs. Within MLHRD, Department of MSE Development is responsible for MSE related policy development and coordination and is undertaking the task in the four sections, namely Policy Development and Coordination, Business and Jua Kali Development Services, Field and Support Services, and National Jua Kali Demonstration and Training Centres.<sup>36</sup> Moreover, the Ministry of State for Youth Affairs, which was established in December 2005, is providing the Youth Enterprise Development Fund to promote self-employment of the Youth. MOA and MOLF are also trying to promote agro-processing activities in the rural areas.

Although it is difficult to draw the lines of the target beneficiaries among the micro and small-scale manufacturers, it is desirable that some clear demarcation is made among the ministries to effectively utilise the limited financial and human resources. One reasonable demarcation could be identified by focusing MOTI's emphasis and approach on assisting the enterprises to become capable enough to compete in the global markets. MOTI could concentrate on areas of “competitiveness creations”, which contributes to the economic growth such as value addition, technological upgrade, market development, and productivity improvement. Accordingly, it is expected that scopes of activities

---

<sup>36</sup> MLHRD homepage <[www.labour.go.ke](http://www.labour.go.ke)>

which do not fall into the above classification be redefined.<sup>37</sup>

## 2) Facilitating the service provision by the private sector

MOTI needs to acknowledge the various services offered by the private sector including those provided by the training institutions and the Business Development Services (BDS) providers. Duplication of the service provision means not only losing the opportunities to divert the limited resources into other important activities but also invading market opportunities of the private sector. Moreover, the competition mechanism surrounding the private sector enables better service provision than the public sector in economically viable areas. Especially, the consultation and training services targeted directly to the private sector are better provided by the private sector since the working experience in the field makes it easier to offer much relevant service that responds to the needs of the markets. As for the role of MOTI, it is more important to facilitate linkage creations between the BDS providers and the manufacturers than if MOTI itself provides the services. This is not to deny the necessity of supporting BDS providers, including provision of subsidies and trainers' trainings.

On the other hand, MOTI needs to particularly take responsibility in offering services in the areas where the market viability is low such as gathering and disclosing industrial information. Lack of commitment in such areas will lead to duplication of efforts by various agencies and deprive those institutions of opportunities to concentrate in areas of their competency. (See Chapter 4.3)

### (2) Operational Strategies

#### 1) Shifting the manpower to implementation of action plans

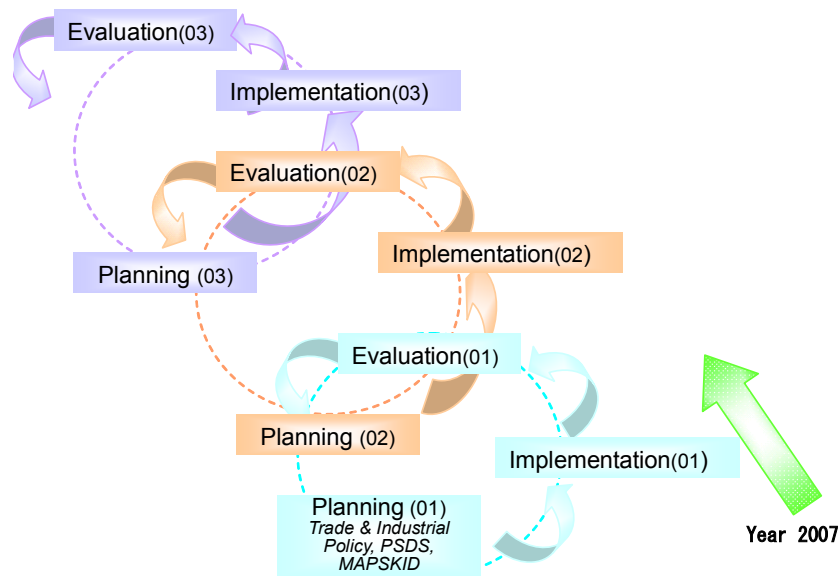
Performance of MOTI needs to be monitored along the process of "planning", "implementation", and "evaluation". Currently, much of MOTI's manpower is allocated to the basic planning. In year 2006/07, three major planning teams were running simultaneously, namely Trade and Industrial Policy, PSDS, and MAPSKID. It is observed that similar recommendations have been repeatedly presented to MOTI as a result of various studies although they may have been focused on specific issues. MOTI needs to avoid repeating similar basic studies that have already been conducted and to give more emphasis on the implementation of action plans, which are set forth by PSDS and MAPSKID.

The performance of the implementation should not be evaluated by the number of projects but by creation of sustainable impacts, which are assured by financial and personnel availability. Then during and after implementation, monitoring and evaluation are conducted, and that leads to the next phase of more concrete planning.

---

<sup>37</sup> Due to the continuous restructuring of the ministries and changes of their mandates, some confusion is observed. For example, trainings at KITI have emphasis on getting "hand-on" skills for the artisans similar to the trainings for the craftsmen conducted by the training institutions under MLHRD.

---



Source: The JICA Study Team  
**Figure 3-7 Workflow**

In implementation of recommended action plans, it is important that the purpose of the actions is shared among the stakeholders. Implementation often requires some adjustment to make it more effective since it is not usually possible to have the complete designing in the initial planning phase. Without sharing the vision and the project purpose among the stakeholders, such modification is not possible and will not produce expected outcome.

Shifting to implementation phase will stimulate minds of the MOTI officers to be passionate enough to become the driving force towards industrial development. On the contrary, being stagnated in the basic planning may turn MOTI officers into "administrators", whose minds tend to have a wide gap from those of the private sector and will not be able to become the driving force towards innovation. Since MOTI officers have to negotiate with multiple stakeholders to lead the industrial development path, creating a passionate atmosphere inside MOTI is very important. After the Sessional Paper No.2 was produced, such passionate atmosphere was shared among MOTI, the manufacturers, and supporting agencies. However, the passion phased away as they witnessed difficulties in implementation of the Sessional Paper. To implement the recommendations from this master plan, a stronger commitment of MOTI is needed than ever.

## 2) Specialisation

There are a few areas where MOTI can make decisions by itself while many other issues are inter-ministerial. For the MOTI officers to become responsible and reliable in handling matters that are outside the jurisdiction of MOTI, each officer needs to be specialised so that the officer becomes fully knowledgeable and competent enough to negotiate with other ministries. There are complicated issues such as taxation, which needs to be balanced and fair with many economic entities. Only understanding one-sided view, i.e. importer or exporter, can be counterproductive for the other economic entities. Such thorough knowledge cannot be accumulated through ad-hoc assignments.

Specialisation will also make the MOTI officers feel responsible for outcomes. Currently, job

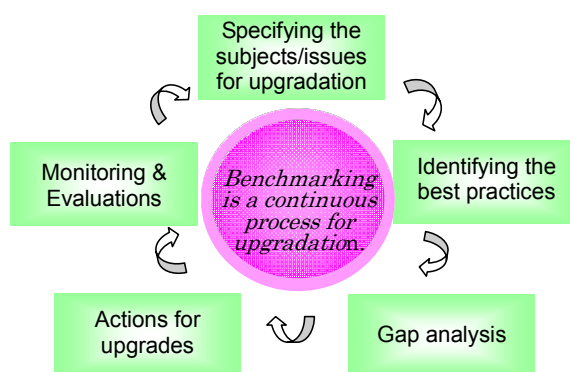
allocations to industrial development officers are on an ad-hoc basis. In this way, it is difficult to accumulate knowledge or to be responsible for implementation since it is unclear who is responsible for certain matters. Current staff shortage has made the Department of Industry shift to "flexible" assignments; however, too much flexibility is bringing confusion, inconsistency, and inability to accumulate knowledge. The current status of the limited manpower calls for the officers to spend more time in the field and office than attending seminars and trainings. Without specialisation, the trainings bring out very limited effects on the capacity building of MOTI. On the other hand, specialisation would make limited training still effective since the knowledge can be accumulated on the job through exchanging information with the beneficiaries and relevant authorities. Additionally, it is also inevitable that one industrial development officer holds multiple assignments under the current staff shortage. The double assignments need to be allocated with consideration for the core knowledge of each officer and for the workload management. With the abolishment of Industrial Registration Act,<sup>38</sup> it is the best time to consider reallocation of assignments to officers within the Department of Industry.

**Box 3-2: Utilising benchmarking**

The term, benchmarking, has become so popular that the MOTI officers are urged to undertake the benchmarking studies. However, this has been done without proper training of MOTI officers. It is important to clearly define and clarify the purpose and the methodologies of the benchmarking before conducting studies.

Benchmark methods are popularly practiced in the private sector. One of the acknowledged definitions of benchmarking is continuous search for the best practices in order to lead to the superior performance. Among various benchmark methods, one popular method is process benchmark, which identifies the critical process that would lead the company towards innovation. The new methods of the operating process are learned from the best practices within or across the sectors.

The definition of benchmarking implies that it needs to be accompanied by actions towards innovation; yet, people tend to mistakenly put emphasis on studies and identifying measurement. While the benchmarking study is useful, it needs to be designed in an action-oriented manner.



Source: The JICA Study Team  
**Figure 3-8 Benchmarking Process**

The best practices can be drawn within and outside Kenya. Benchmarking does not necessarily

---

<sup>38</sup> The Licensing Laws (Repeals and Amendment) Bill, 2006



accompany surveys. Once the critical issue for upgrading is identified, the study can be conducted on selective partners who seem to be superior in the particular subject or in the process. For example, Kenya has some awards such as Energy Efficiency Awards provided by CEEC and the Company of the Year Awards by KIM. These awards benchmark the best practices and encourage other companies to adopt the "process" taken by the awarded companies. Promotion of benchmarking is an ideal tool to motivate the internal upgradation of the manufacturers. Moreover, whichever the policy to be constructed, lessons from the best practices need to be captured. In this sense, benchmarking studies needs to become common practice in the work of MOTI.

Observing the success of the benchmark methods, the public sector has also adopted the methodologies. Benchmarks in the public sector are usually measurable developmental goals, which can be monitored by the citizens. The origins of benchmarking in the public sector were observed in Oregon State and Florida State in the United States. In both cases, the benchmarks were developed with the citizens so that the developmental goals were formulated in a participatory manner. Then the States would be committed to realise the goals. The purpose of the benchmarking in the public sector is not setting the indicators but taking actions towards the better performance as is the case in the private sector. In 1996, Oregon State reduced the number of the benchmarks under the criteria of result-oriented, measurable, flexible to changes, understandable, and comparable to outside standards.

Kenya is unofficially experiencing similar benchmarking activities with reference to the "Doing Business" indicators by WB. Using that data, KAM has published a report, *Kenya Competitiveness 2006*, which highlights the Kenyan positions against 14 selected competitors.<sup>39</sup> Topics of the indicators include Non-Tariff Barriers, taxes, labourers, infrastructure, security, and corruption. KAM has been holding a series of meetings with high-officials in the Government to discuss about possible actions.<sup>40</sup> What is lacking more in this benchmarking process is commitment from the Government in adopting the indicators to the development goals of each ministry rather than identifying the indicators.

Reference:

- Camp C. Robert (1989) *Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance*, Quality Resources.
- The State Government of Oregon (1997) *Oregon Shines II*

### (3) Institutional setting

#### 1) Establishment of sub-sectoral and district committees

It is highly recommended to re-activate sub-sectoral and district committees comprised of inter-ministerial and private stakeholders. The committees will provide MOTI with the opportunities to hear the direct voices of the manufacturers as well as responses from the officers in other ministries in charge. In holding the meetings, MOTI needs to be conscious of productivity of the meetings since the private sector would not keep attending the meeting unless the gains from the meeting would pay for its opportunity cost.<sup>41</sup> Productivity of the meetings can be improved through time management, focusing the subjects which represent the common interest of the members, and commitment of officers in implementation. To make sure that recommendations are followed up, the

---

<sup>39</sup> Two from EAC (Uganda and Tanzania), three from other African countries (South Africa, Egypt, and Mauritius), three from Newly Industrialised Countries (Malaysia, Thailand, and Indonesia), two from emerging countries (Bangladesh and Vietnam), and four of BRICs (Brazil, Russia, India and China)

<sup>40</sup> The recent discussion took place in July 2007 in the round-table style inviting 15 officers including PSs of Trade and Industry, Finance, and Transport.

<sup>41</sup> As for the guideline, refer to Herzberg, B & Wright, A (2006) *The Public-Private Dialogue Handbook: A Took Kit for Business Environment Performers*, WB Group.

tasks of the MOTI officers need to be clarified based on their specialisation, or predetermined area of their accumulating knowledge. At the same time, MOTI is recommended to collaborate in increasing the membership of KAM since it is the only association which is specifically devoted to strengthening the competitiveness of the Kenyan manufacturers as a whole. These activities are expected to lead to strengthening sub-sectoral activities by the private sector as well, since many of the leading industrial countries are strengthening their competitiveness through the activities of sub-sectoral associations, which are the driving force towards development of technological capacity of the sub-sector. (See Chapter 5.2.1)

## 2) Strengthening capacity of the regional offices

As it will be discussed in Chapter 5.5, currently, industrial activities are heavily concentrated in the Nairobi Metropolitan Area, and even the coastal area where it is usually considered advantageous for industrial production has not developed much. Such heavy concentration not only deteriorates the social and environment conditions in Nairobi but also leaves the rural areas devoid of viable economic activities. Vision 2030 notes the importance of industrial promotion outside Nairobi. However, there are no effective policy measures that attract investment outside Nairobi. Therefore, Chapter 5.5 shall discuss some policy measures to attract investment outside Nairobi including creation of industrial corridors, setting up the investment incentive schemes in rural areas, and improving industrial supporting system.

The role of DIDOs is critical in improving industrial supporting system. Yet, it is unlikely that the staffing level will increase rapidly in the field offices under the fiscal constraints of the Government. Instead, some practical recommendations are made as follows. First, it is inefficient that the central officers and DIDOs make frequent trips to each other since it is unlikely that the other officers do take over their tasks during their absence. Alternatively, it is recommended that usage of ICT is promoted to exchange information and to process administrative work, irrespective of the distance. Secondly, DIDOs are recommended to make regular reports to the central office on their contribution to the manufacturers with identified problems and possible solutions during the reporting period. Then, the officers in the central office receive the reports by E-mail and identify how the central office can assist in solving the reported problems. In this process, MOTI is expected to produce guidelines for DIDOs. Thirdly, the BDS providers need to be mobilised more instead of DIDOs directly providing the consultation services to the manufacturers. The headquarters is recommended to instruct DIDOs to compile the data on the available local BDS providers in their districts and that this information is uploaded on the information system of MOTI. (See discussion on Kenya Industrial Development Platform in Chapter 5.1) Fourthly, the human and financial resources need to be gradually increased in the strategic locations along the developmental phase. (See Chapter 5.5)

## 3) Strengthening capacity of the foreign missions

Strengthening capacity of the foreign missions is very important since they are the contact windows of foreign investors and the source of the technological and market information. This is the area that is needed to be discussed in the SWG of the GESS in the MTEF. Strengthening the capacity of the foreign missions would be beneficial not only for activities of MOTI but also those of the Ministry of

Tourism and Wildlife. Approaching potential business partners while also introducing Kenya as a tourist destination will increase attractiveness of Kenya. It is needed that a long-term deployment plan be made with the targets for industrial and trade promotion. It is also necessary that the counterpart officers are properly assigned in MOTI, EPC, KenInvest, and EPZA so that the responses are given immediately when the inquiry is made from the commercial attaches. Quick response is very important in building trustable relationships with potential business partners abroad.

## **Chapter 4 Institutional Framework Relating to Public Administration**

### **4.1 Public Institutional Framework**

#### **4.1.1 Economic and Business-related Legal System**

Legal framework is expected to facilitate industrial development and promotion of trade. However, existing legislative instruments have been barriers to the industry and trade, such as excessive licensing requirements, outdated laws, too much government regulation in business activities, and numerous amendments to laws and regulations creating confusions.

In Blue Book on Best Practice in Investment Promotion and Facilitation prepared by Japan Bank for International Cooperation (JBIC) and UNCTAD, introducing flexibility into Foreign Direct Investment (FDI) entry provisions in the Investment Promotion Act was proposed as one of the measures to improve investment climate. Thus key Acts as the Investment Promotion Act, the Privatisation Act and the Trade Licensing Act among others are expected to be amended or introduced. Policy statements and guidelines are also required on work and residence permits, allocation of undeveloped agricultural land and government land, and so on.

In order to accelerate reform to improve legal framework WB, with the request by MOTI and in collaboration with UK Department for International Development (DFID), has been working on the project called “Accelerating Reforms to Improve the Commercial Legal Frame and Remove Administrative and regulatory Barriers to Investment”. Focused areas of the project are commercial legal framework, company registration, business sector and activity licensing, access to land and property rights, construction and utilities hook-up, tax administration and custom procedures.

MOTI is currently spearheading efforts to review the business-licensing regime through the Working Committee on Regulatory Reforms for Business Activity in Kenya<sup>42</sup>. This Working Committee is required to fast track the streamlining of business licences through the budgetary process. The enactment of the Investment Promotion Act in 2004 was the culmination of an earlier attempt to cut the red tape in licensing of investors, both local and foreign. KenInvest was established through the Act basically as a one-stop shop with a primary mandate to issue investment certificates and assist investors in obtaining any necessary licenses and permits. Further, the Kenya Law Reform Commission is currently overseeing the process of reviewing the all important Companies Act, Cap 486 Laws of Kenya which is a statute enacted in 1948 by the colonial government.

The main and important items relating to industrial development in terms of legal framework are as follows;

- i) Registration and regulation of business

---

<sup>42</sup> This Working Committee established by the Government through Gazette Notice No. 7521 of 23<sup>rd</sup> September, 2005 is required to seek public comments on 1,300+ licenses affecting business operations in Kenya.

---

- ii) Investment promotion and facilitation
- iii) Trade licensing
- iv) Public divestiture and privatisation
- v) Trading in the capital market
- vi) Taxation of industry and trade
- vii) EPZs
- viii) Public procurement
- ix) Regulation and protection of IPR
- x) Issuance of work permits
- xi) Requirement of an Environmental Impact Assessment (EIA)
- xii) Dispute settlement mechanism
- xiii) Regulation of employment
- xiv) Regulation of conditions of employment under the Factories Act
- xv) Regime of land ownership and transfer
- xvi) Control of restrictive trade practices and monopolies

#### **4.1.2 Facilitating Establishment of Regulatory Framework for MSME Development**

MSMEs cut across all sectors of the country's economy and provide one of the most prolific sources of employment, not to mention the breeding ground for large industries, which are critical for industrialization. Today, these enterprises are found in every corner of Kenya and have great potential for creating a variety of jobs, while generating widespread economic benefits. Given the importance of MSMEs and their potential to greatly contribute to future economy, a broad overview of main legislative instruments surrounding MSMEs is presented below.

Whereas the concept of MSME is not novel to Kenya, the development of a dedicated legal framework for its regulation, development and sustenance is still evolving. Largely, much of the legal regime is derived from already existing legislation. Essentially, an MSME enterprise operating within the Kenyan legal framework may take following three forms:

- i) Sole proprietorship
- ii) Sharing (Partnership)
- iii) Company

An MSME venture may operate as a limited liability company. Ordinarily, this operates to the advantage of the investors due to the limited liability nature of a company.

Another issue to be noted here on MSME before going to the discussion on facilitating regulatory

framework is that many of micro enterprises belong to informal sector. In order to extend appropriate support to MSME, it is a prerequisite step for beneficial enterprises to register because the registration is the only way to provide officially the basic data, which is indispensable for MOTI to grasp their current situation and to take official actions. It is expected, therefore, that the formalisation of informal sector enterprises by official registration will be promoted.

#### (1) Issues relating to the limitation of liability

Ordinarily, MSME ventures aim at empowering persons with minimum capital to commence business and remain sustainable and profitable. But most of these businesses involve risk; as well as the need to mobilize more capital especially through debt. The question of limitation of liability remains pertinent. There is thus need to address the following issues:

- i) Harmonize and simplify the process of incorporation of companies to remove the monopoly on lawyers to incorporate, hence lowering the overall costs
- ii) Streamline and reduce the reporting requirements especially for small businesses
- iii) Possibly develop a new type of Limited Liability Company with the principal features of an MSME venture. This would cushion the investors from liability where they act in good faith, but also give sufficient legal status to facilitate access to financing and other incentives, and reduced capital requirements

#### (2) Licensing requirements for MSME ventures

There have been attempts at reducing the number of licences that are required of businesses in Kenya annually. There is however some principal licensing requirements required generally of any trading venture in Kenya. The main licensing systems that have a bearing on the MSME sectors are:

##### 1) Licensing under the Trade Licensing Act

This licensing regime is administered by the Department of Internal Trade, MOTI. Under section 2 of the Trade Licensing Act, the following businesses require trading licences;

- i) A regulated trade,
  - ii) Importing or exporting goods,
  - iii) Commission agent or indent agent,
  - iv) Manufacturer's representative,
  - v) Produce dealer or produce broker,
  - vi) Business broker or management,
  - vii) Insurance agent,
  - viii) Estate agent,
  - ix) Any other occupation, which the Minister may by order, declares to be an occupation for the purposes of this definition.
-

## 2) Licensing under the Local Government Act

The Local Government Act, Cap 265 Laws of Kenya empowers local authorities in Kenya to impose licenses on businesses. Pursuant to this, local authorities in Kenya require listed business operating within their jurisdiction to obtain a SBP at the commencement of every calendar year. The SBP has no set qualification criteria or requirements and it is effectively a business levy collected by local authorities. The amount levied for a SBP depends on, among others, the annual turnover of a business as well as the nature of the business. The accurate information on the amounts may not be obtained from the Kenya Gazette or from the offices of individual local authorities around the country.

There is need for KenInvest to undertake a major publicity exercise to let the public and potential investors be aware of the critical role it plays in advising on the process of setting up business in Kenya. It is also critical that the investment certificate granted under the Investment Promotion Act is well publicized so that potential investors may utilize it .

## (3) Tax regime of MSME

Trade taxes still account for 13 % of total revenue in Kenya. EAC common external tariff is 25 % although the three partner states are allowed to levy higher duties on a “sensitive” list of products. Items on which duties are levied include alcoholic beverages, tobacco products, petroleum products, motor vehicles, carbonated drinks, mineral water, cosmetics, jewellery and cell phone airtime.

Many manufacturers raise their concern that current tax structure and delay in tax clearance deteriorate the business environment. Moreover, the tax structure needs to be accommodative of the tax clearance capacity of MSMEs. It is necessary for MOTI to set up a unit, which works with MOF and KRA to make the tax structure rational for the manufacturing sector.

The tax regime in Kenya is administered by KRA established under the KRA Act. KRA administers the tax regime set out under the Customs and Excise Act, the Income Tax Act and the Value Added Tax (VAT) Act, among others. Depending on the nature of their incorporation, MSMEs can be subject to all or some of the taxation requirements set out below.

Without exception, taxes levied on companies and individuals generally vary every 12 months from around the month of July after the annual budget. Up to date information may be obtained from the KRA Offices at Times Tower in Nairobi, their website: [www.kra.go.ke](http://www.kra.go.ke) or from the Government Printer along Haile Selasie Avenue in Nairobi.

## 1) The Income Tax Act, Cap 470 Laws of Kenya

This statute levies a tax known as income tax for each year of income according to all the income of a person (resident and non-resident) derived from Kenya. The term ‘person’ includes natural as well as incorporated legal entities. This system is guided by pre-determined tax brackets. Incorporated entities such as companies pay their income tax through the instrument of corporation tax. The rates vary with non-resident companies being charged at the rate of 37.5 % of the income. Resident companies are charged at the rate of 30 % of their income.

Withholdings tax is also levied on payments made to individuals on dividends earned, or professional

---

services levied on a consultancy basis. For residents, withholding tax rates for professional services are currently fixed at 5 % of the amount received. This amount is deducted and retained by the payer, at the point of payment.

Capital gains tax has been revived by the Finance Bill 2006 and commenced in January 2007. The tax will be charged on gains derived from the sale of capital items. It will be levied at the rate of 10 % as income tax. In the case of companies in business, the Act has set out a series of capital allowances to such companies, as incentives. For instance, companies receive capital allowances of the expenditure incurred in setting up a facility, from the computation of gains derived from an industrial facility (where the owner is user or lessee is owner of machinery) for any year during which the building is used. Further, when a person owns and uses machinery for business during a year of income for business purposes, a wear and tear deduction is to be made in computing his gains for any year of income.

## 2) Customs and Excise Act, Cap 472 Laws of Kenya

Customs and excise taxes are governed by the Customs and Excise Act, which is an Act of parliament enacted to provide for the management and administration of the customs, for the assessment, charge and collection of customs and excise duties and for related matters. This law covers excisable goods manufactured locally, and imported goods that are subject to the payment of import duty.

Excise duties are charged on the so-called 'sin' goods, which include alcohol, cigarettes and the rates are contained in the fifth schedule to the Act. Import duties are chargeable on all goods being imported into Kenya, unless there is an express exemption. The list and tariff rates for import duty are fixed and varied yearly and are contained in the first schedule to the Act. There is also a schedule of Kenyan goods that are subject to the payment of export duties, as well as those goods whose importation into Kenya is prohibited.

## 3) The VAT Act, Cap 476 Laws of Kenya

This statute levies a tax known as the VAT on all goods produced in or imported into Kenya, and all services supplied in or imported into Kenya. Like the other statutes above, it also employs a scheduler approach, which sets out all the taxable goods and services, as well as any legal exemptions. The current VAT rate is fixed at 16 % and is chargeable when the goods and/or services are supplied to a taxable person. However, restaurant services and hotel accommodation are levied at the rate of 14 %. The second and third schedules to the Act set out goods and services respectively, which are exempt from the payment of VAT. Such goods include live animals while the services include medical as well as insurance services.

In order to refine the payment of VAT, there is a turnover limit on those people that are subject to the payment of the tax. Currently, the turnover limit is fixed at an annual turnover of five million shillings. KRA has introduced Electronic Tax Registers (ETR) in an attempt to curb evasion from the payment of VAT. It is now mandatory that only those VAT returns made using ETR generated receipts can be acceptable.



#### (4) Regulation of the working environment for MSME

Currently, conditions of work are regulated under the Factories Act. It applies the generic term factory to all places of work. Essentially thus, a factory means any premises in which, or within precincts of which, persons are employed in manual labour in any process. This law sets out standards of safety and sanitation that are necessary for the maintenance of a safe working environment.

Currently, the Minister for Labour has published the Occupational Safety and Health Bill, 2007, which is intended to consolidate and review the law relating to the safety, health and welfare of workers and all persons lawfully present at workplaces. It is notable that the bill attempts to redefine a workplace, as well as impose duties on both employees and employers while engaged at a workplace.

#### (5) The role of anti-trust law in MSME regulation and protection

The Restrictive Trade Practices, Monopolies and Price Control, Cap 504 Laws of Kenya establishes the office of the Commissioner of Monopolies to deal with issues arising. The Act defines a restrictive trade practice to include practices, which unfairly prevent others in the same industry from practicing their trade on level ground. This law is important since it works to prevent creation of monopolies that would essentially lock out MSMEs from the business market.

#### (6) Necessity to improve legal framework for MSMEs

The legal framework for MSME may not be functionally prudent since application of a single legislation cannot traverse all these aspects. It is imperative that aspects of the different laws relating to MSMEs should be reviewed to harmonize and make them conducive for business. Such a drive would for instance involve streamlining company law to factor in the interests of MSME, taxation, licensing and other requirements to factor in MSME requirements. However, the most critical would be a framework legislation governing incorporation of a business as an MSME and setting out incentives and unique regulatory features.

It is imperative to point out that whereas MSMEs would ordinarily require special/unique legal framework to foster their development, such a framework will never operate in isolation. It will always operate within the general framework of industrial development. There is thus the need to consider the legal provisions addressing different components of industrial development generally.

### **4.1.3 Protecting IPR**

#### (1) Intellectual property in Kenya

Intellectual property is generally classified into two categories; industrial property and copyrights. Industrial property consists of four classes: i) patents; ii) utility models; iii) industrial designs; iv) trademarks. A summary of them is shown in the next table. The Kenya Industrial Property Institute (KIPI) is responsible for administering and promoting industrial property rights.

**Table 4-1 IPRs**

Objects	Description	Duration of protection
Patents	A patent is a certificate or a document granted to the inventor to give him temporary exclusive rights over his invention, which covers a process, device, substance or method, including originality. The right offers a monopoly which prevents unauthorised selling, marketing, or use of intellectual property assets.	20 years from application, not renewable.
Utility models	Utility model certificates cover innovations that allow better or different functioning, use or manufacture of appliances, instruments on the existing inventions.	10 years from registration, not renewable.
Industrial designs	An industrial design relates to the outward appearance of a product, which makes a product attractive or appealing to customers.	5 years from application, extendable every 5 years, up to two times.
Trademarks	A trademark is a distinctive sign which distinguishes the goods or services produced or provided by one enterprise from those of another. A mark includes any distinctive word, letter, slogan, device, brand, heading, label, ticket, name, signature or numeral or any combination whether in two dimensional or three dimensional form.	10 years from application, extendable for another 10 years.
Copyrights	Literary, musical, artistic or audiovisual works; sound recordings and broadcasts; programmes carrying signals; and computer software are protected in Kenya	50 years. The date from which protection begins varies depending on the kinds of works

Source: The JICA Study Team based on KIPI documents

## (2) Number of registration of industrial property

The number of registration of industrial property rights in Kenya is moderate, especially for patents and industrial designs. It seems that one of the reasons for such a small number of applications for patents would be the costly fee structure for registration and other related fees. Looking at nature of applicants of patents, around 95 % of the applications are from individuals or private companies, while the number of applications from universities and national R & D institutions is quite limited. As for the fields of patents granted, there is a tendency that applications regarding agriculture-related and pharmaceutical-related inventions are main areas in recent years although exact figures of classification are not available.

**Table 4-2 Number of Industrial Property Registration in Kenya**

	Patents 1990 to May 2007	Utility Models 1990 to May 2007	Trademarks 1990 to May 2007	Industrial Designs 1990 to May 2007
Application	1,003	102	64,575	811
Granted	239	34	47,021	461

Source: KIPI

## (3) International membership

Apart from a membership to WTO, which Kenya joined in 1988, the country is a signatory to various international treaties on intellectual property, as listed below.

- i) WIPO Convention: October 1971

- ii) Paris Convention (Industrial Property): June 1883
- iii) Bern Convention (Literary and Artistic Works): June 1993
- iv) Patent Cooperation Treaty: June 1994
- v) Trade Related Intellectual Property Rights (TRIPs) Agreement: January 1995
- vi) Madrid Agreement and Madrid Protocol Agreement (International Registration of Marks): June 1998
- vii) Geneva Convention (Unauthorized Duplication of Phonograms): April 1976
- viii) Brussels Convention (Distribution of Programme Carrying Signals transmitted by Satellite): August 1979
- ix) Nairobi Treaty (Olympic Symbol): September 1982
- x) WIPO Copyright Treaty: December 1996
- xi) African Regional Intellectual Property Organization (ARIPO): February 1978
- xii) Universal Copyright Convention: June 1966
- xiii) Union for Protection of Plant Varieties: May 1999

#### (4) Legislation

A number of laws and regulations expound on issues concerning IPRs in Kenya, of which prime bills are as follows:

- i) The Industry Property Act, 2001
- ii) The Trade Mark Act, 2002
- iii) The Copyright Act, 2001

#### (5) Procedure of registration

##### 1) Industrial property

All industry property rights, i.e. patents, utility models, trademarks and industrial designs are registered by KIPi.

The application for patents must include the inventor's claims (the object to be patented), an abstract, including technical information and the title of the object to be patented. After KIPi officials formally examine the application, and if they accept it, a patent will be issued, which is published in the local gazette. KIPi may also issue foreign patents according to the rules by WIPO and ARIPO, both of which Kenya is a member country.

The application process of utility models is essentially the same as that for a patent. It is possible for patent applicant to switch his/her application to a utility model or vice versa. The application for registration of industrial design requires two identical specimens of the design and some graphic representation of the design to attest to its novelty, apart from fees.

An application to register a trademark can be made by individuals, companies, co-operatives and partnerships. Foreign applicants must apply through local agents. Before formal applications, a records search and advisory service by KIPi is available on a fee basis. Formal applications must be accompanied by seven representations of the item to be trademarked. Applications that pass the examination are gazetted for 60 days and if there is no opposition to the registration, the trademark will be formally entered into registry. The international registration of trademarks is facilitated through two treaties: Madrid Agreement and Madrid Protocol, for which Kenya is a signatory.

## 2) Copyrights

Copyrights do not need to be registered. Issues related to copyright are handled by the Kenyan Copyright Board, which was established in 2003.

### (6) Counterfeit goods

#### 1) Current situation

Kenya is one of the countries where counterfeit products<sup>43</sup> are widely found in the market. Counterfeit goods, including pirated materials, both imported and locally produced, are readily available in all major towns. It is estimated that counterfeit products cost the Kenyan economy Kshs. 20 to 30 billion and employment opportunities every year. Goods that are commonly counterfeited are: pharmaceuticals; clothing; electronics; stationery; vehicle parts; chemicals; DVDs; CDs; and pre-recorded audiocassette tapes.

The flooding of counterfeit products in the local market reduces the entry of genuine products, making fair competition impossible. While manufactures spend a huge amount of money in advertising in the bid to market their products, the presence of counterfeit goods in the market is a great impediment to the time and efforts by genuine manufacturers. Therefore counterfeit trade discourages innovation efforts at firm level. To the government, inflow of counterfeit products has a huge negative impact, through tax evasion, on the country's revenue. On the other hand, the presence of substandard and counterfeited goods in the market has adverse effects upon the lives of unsuspecting consumers. Its magnitude can never be established, as some of the effects are immediate while others are a long term. These may include loss of agricultural produce through use

---

<sup>43</sup> According to the definition of draft Counterfeit Goods Bill 2006, "counterfeit goods" means goods that are the result of counterfeiting, and includes any means used for purpose of counterfeiting; and "counterfeiting" means without the authority of the owner of any IPR subsisting in Kenya or elsewhere in respect of protect goods-

The manufacturing, producing, packaging, re-packaging, labelling or making, whether in Kenya or elsewhere, of any goods whereby those protected goods are imitated in such manner and to such a degree that those other goods are identical or substantially similar copies the protected goods;

The manufacturing, producing or making, whether in Kenya or elsewhere, the subject matter of that intellectual property, or a colourable imitation thereof so the other goods are calculated to be confused with or to be taken as being the protected goods of the said owner or any goods manufactured, produced or made under his licence; and

The manufacturing, producing or making of copies, in Kenya or elsewhere, in violation of authors rights or related rights.

---

of counterfeit fertilisers, chemicals and seeds; health hazards as a result of counterfeit goods in the market, which could have adverse effects on unsuspecting consumers. These negative factors put together, will deteriorate the economy as a whole with low innovation, low consumption, and an unfavourable environment for FDI inflow.

However, it seems that anti counterfeit measures in Kenya are not effective enough by international standards. For one, the government, including its agencies concerned, cannot afford to have human resources who are fully equipped with knowledge of the matter. International Intellectual Property Alliance (IIPA), an international business advocacy organisation based in USA, specially mentions Kenya's infringement of IPRs as remarkable<sup>44</sup>.

## 2) Agencies concerned

While there is no particular section to handle counterfeit and piracy issues, KIPi has a section that handles counterfeits issues, following high prevalence of cases to do with trademarks piracy and infringement. The government has established a committee on anti-dumping and counterfeiting measures, the members include: KRA, KEBS, Department of Weights and Measures, Customs and Police. KRA also has a department specialised to handle the counterfeit issue.

KEBS is an agency under the purview of MOTI responsible for metrology, standardisation, testing and qualification of the country. The responsibility for the control of imports lies with KEBS, as specified in the Quality Inspection of Imports Order and all imported products must comply with Kenyan standards. Accordingly, the prime concern for KEBS is whether the product meets the standard or not, rather than whether the product is counterfeit or not. However, because in actuality imported counterfeit goods are very often substandard, KEBS are largely involved in anti counterfeit measures, by setting up a specialised section in its Import-Export Department. Functions of the section are:

- i) To co-ordinate the fight against counterfeits both internally and externally,
- ii) To receive and respond to alerts, complaints and reports on counterfeit products in the market,
- iii) To cooperate with relevant government bodies such as Department of Weights and Measures, KRA, KIPi and other relevant stakeholders such as KAM in activities relevant and related to the counterfeit menace,
- iv) To investigate sources of counterfeits and carry out raids and inspection at suspect entry points,
- v) To work in collaboration with relevant stakeholders in sensitising and educating the consuming public, and
- vi) To establish and maintain a database on the fight against counterfeit menace.

---

<sup>44</sup> According to a report of 2006, Kenya is specially mentioned because of "rampant piracy for all sectors, and a Kenyan Government system that is unwilling to address the problem."

---

### 3) Counterfeit Goods Bill

As mentioned above, “The Counterfeit Goods Bill 2006” has been published by the government and the Bill, aimed at prohibiting trade in goods that infringe upon protected IPRs, would be tabled in Parliament in the year 2007<sup>45</sup>. The Bill proposes: i) to impose harsher penalties of at least three times the value of the goods and/or three years imprisonment for first time offenders of the law and penalties of at least five times the value of the goods and/or five years imprisonment for repeated offenders; ii) to empower the Customs to seize counterfeit products; and iii) to create a special agency named Counterfeit Goods Agency which is mandated to enlighten and inform the public on matters relating to counterfeiting and will conduct training programmes on combating counterfeiting, and coordinate its work with national, regional or international organizations.

#### (7) Future direction

##### 1) Procedural issues

Although KIPi has a computerised database of industrial property, it is only for internal use and closed to the general public and applicants for registration. Open and free access to the database, including its search system of registered rights, and the facilitation of electronic application of industrial properties, would encourage application of patents, utility models, trademarks and industrial designs by individuals, private companies, universities and other R&D institutions. Further, the reduction of registration fees and other fees may also be effective in increasing applications.

##### 2) Anti-counterfeit measures

It is observed that laws and regulations on IPRs in Kenya are generally well prepared and comply with TRIPs Agreement, whereas enforcement of anti-counterfeit measures is still weak. With new Counterfeit Goods Bill coming into effect, in the near future, the situation would be improved. However, it is true that the organizations concerned, such as Customs and Police, do not have sufficient human resources to deal with the matter. It is necessary to train staff specialized in the issues in the field of IPRs, in both juridical knowledge and practical measures. Actually, in its “Strategic Plan 2004-2010”, KIPi has strategy of promotion of training facility and capacity development activities in the field of intellectual property. However, lack of fund prevents full implementation of the plan.

On the other hand, public awareness of protection of IPRs is also quite important to prevent and decrease infringement of the rights. It is desired that the government should promote a nation wide campaign to raise public awareness.

## 4.2 Infrastructure Relating to Industry

Sessional Paper No.2 of 1997 pointed out the infrastructure in Kenya as follows: the current inadequate state of Kenya’s infrastructure acts as a major disincentive to potential investors and threatens the realization of the goal of industrialization. For last several decades, the efforts have

---

<sup>45</sup> The Parliament in the 2007 was dissolved before the bill could be debated and enacted into law.

been made to improve the infrastructure very often in the form of international cooperation through aids from donor countries and agencies. However, much improvement is still required to take measures and investments into infrastructural development to suffice the need of industrial sector. Central Bank of Kenya (CBK) in its Annual Report for 2005/6 pointed out that growth in the manufacturing sector continues to be hampered by high costs of production, including power, poor infrastructure and lengthy clearance procedures at the port of Mombasa. The availability of infrastructure and its efficient operation are essential for promotion of industrial sector. Major infrastructure sectors are reviewed hereunder.

#### **4.2.1 Financing in Infrastructure Development**

Infrastructure development requires a lot of funds. While many development partners provide funds, sometimes there is a lack of coordination among relevant parties though industry related infrastructure projects are inter-related. Coordination and collaboration among relevant parties are needed for effective financing and allocating funds as well as for effective implementation of projects. It means the coordinating facility to cover not only one specific sector but also relevant sectors concerned in terms of the infrastructure relating to industry development.

#### **4.2.2 Providing Stable and Cost Efficient Energy**

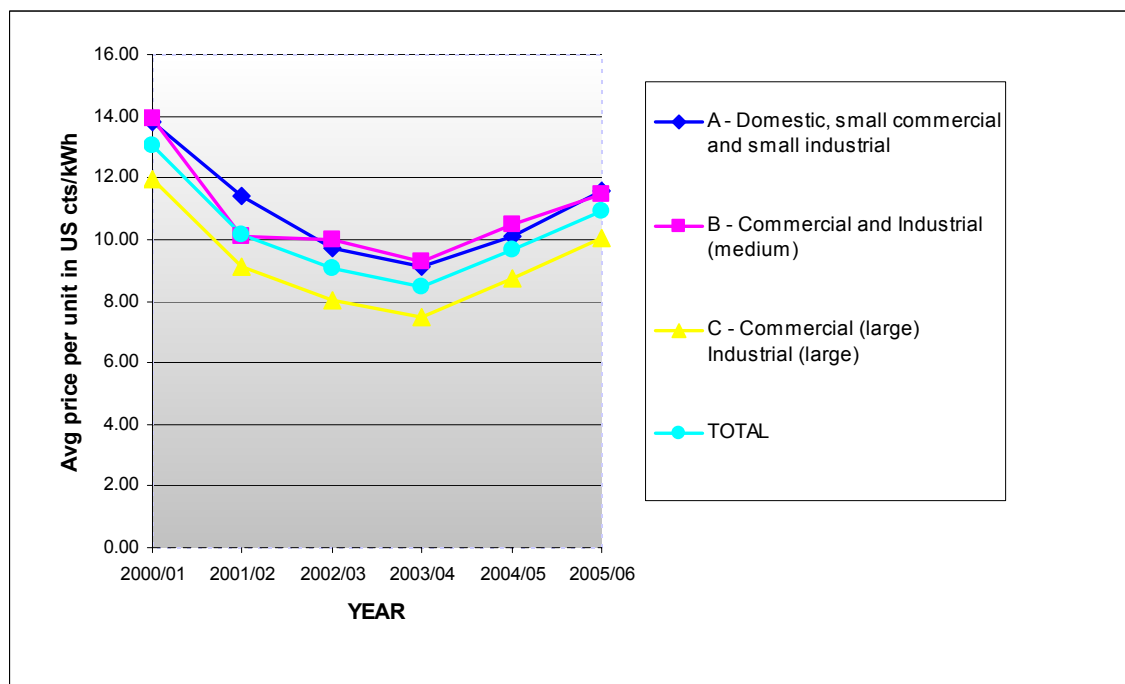
##### **(1) Electricity prices**

As part of the reforms undertaken from 1994, basic electricity tariffs were adjusted in phases to their long run marginal costs by 1999 to reflect the cost of supply. In addition to the basic electricity tariff the customers pay the following charges, levies and taxes:

- i) Foreign exchange adjustment to compensate the Electricity provider for changes in operational costs resulting from fluctuations in exchange rates from the assumed base equivalent rate of US\$ 1=Kshs. 65 (assumed in computation of base tariff rates)
- ii) Fuel cost adjustment to compensate the Electricity provider for the extra running costs of thermal generation over and above that originally assumed in computation of tariff rates
- iii) VAT at 16 % of the tariff charges
- iv) Electricity Regulatory Board (ERB) levies at K Cts 4 per unit to partly finance the operations of ERB

The substantial effect of these additional charges is that the nominal price for electricity changes from time to time depending on hydrology, fuel prices and growth in electricity demand.

Figure 4-1 below shows the average price per unit in USA Cts/kWh based on an exchange rate of US\$ 1= Kshs. 70, over the 2000/01 to 2005/06 period.



Source: KPLC

**Figure 4-1 Average price per unit in USA Cts/kWh**

According to Energy Policy as stipulated in Sessional Paper No 4 of 2004 on Energy, where the market structure permits, energy prices will be determined by the market mechanism. However, in the case that electric rate needs to be adjusted for electric services such as transmission and distribution network virtually in a monopolistic form, pricing based on efficiency and fair return on investments will be ensured.

The electricity prices are designed to recover the cost of power supply. The main cost components include cost of power purchases from KenGen and Independent Power Producers (IPPs), transmission and distribution networks costs, user service including billing costs, debt service, some contribution to system capacity development costs and a reasonable return to the shareholders. In addition various taxes and levies are paid as part of electricity bill. Although the price paid in Kenya is comparable to that paid by users within the East African countries it is relatively higher than many of COMESA countries and South Africa.

The higher price can be attributed to many factors including higher generation cost on account of required investments for expansion of facility capacity, and debt service obligations as well as high IPP availability costs; high operational costs and system losses, among other factors. South Africa has in the past enjoyed the lowest prices in the world due to the availability of surplus capacity from facilities that were long amortized. However with the excess capacity wiped out by the demand growth and need to add new capacity, there is a strong upward pressure to raise tariffs to finance capacity expansion, even in that country.

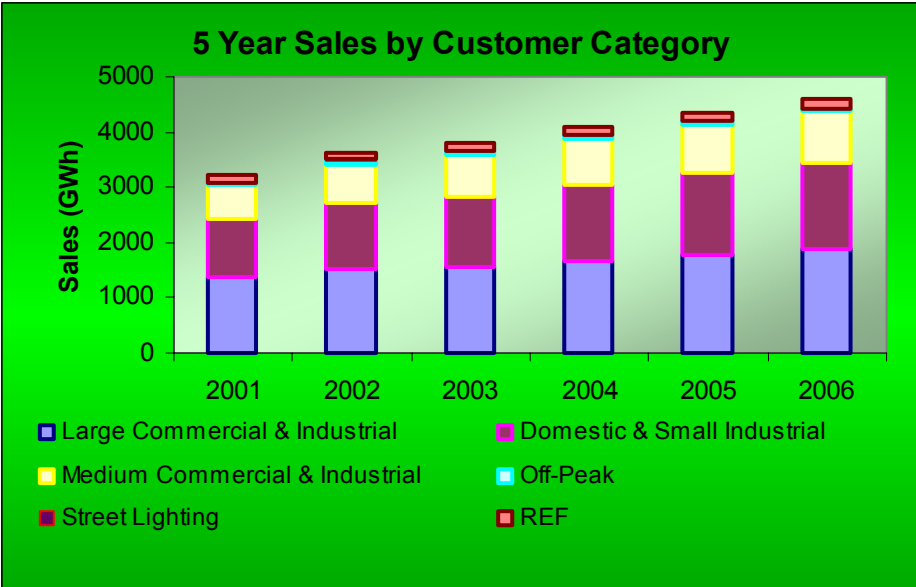
Kenya Power and Lighting Company (KPLC) is undertaking distribution reinforcement and upgrade project to reduce losses and outages as well as improve supply delivery efficiency. However the



savings will be more than offset by financial requirements for capacity expansion (key to improving reliability of supply) and fuel (increased thermal generation production in the medium term).

(2) Electricity demand

The electricity sales, and hence power demand, continued to register positive growth over the last five years as indicated in the figure below:



Source: KPLC  
 Figure 4-2 Five Year Sales Growth

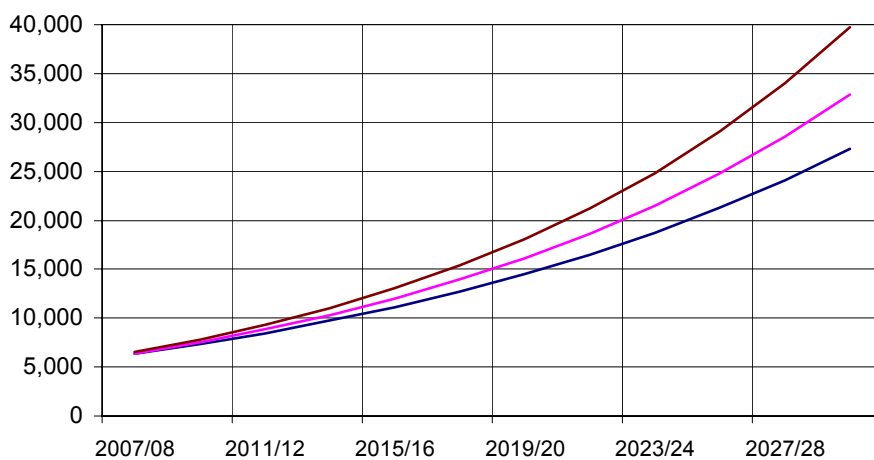
The projected electricity demand is estimated using econometric models that correlate electricity consumption for a category such as large commercial/industrial to sectoral GDP (non-agricultural) and applicable tariffs. Based on different projections of GDP growths, projected electricity demands under different economic scenario assumptions are prepared. Table 4-3 shows the projected power and energy demands as forecast in 2006 for use in the annual update of LCPDP in that year.

The methodology adopted fails to capture the effect of un-met demand (uses actual historical consumption), thereby under-estimating future consumption. This is however taken care of by preparing a higher and lower growth scenarios based on optimistic and pessimistic economic conditions. This, the annual updates and long gestation period of power projects allows adjustments in required additional capacity.

**Table 4-3 Power and Energy Forecasts**

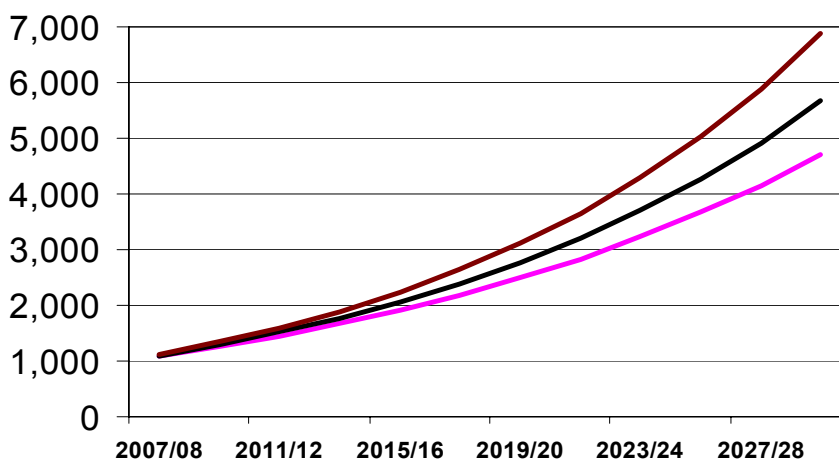
Fiscal Year	Low		Reference		High	
	Net Energy (GWh)	System Peak (MW)	Net Energy (GWh)	System Peak (MW)	Net Energy (GWh)	System Peak (MW)
2006/07	5,864	1,003	5,916	1,012	5,994	1,026
2009/10	7,312	1,252	7,527	1,290	7,810	1,339
2014/15	10,398	1,785	11,126	1,911	11,998	2,063
2019/20	14,490	2,492	16,107	2,773	18,049	3,110
2024/25	19,963	3,439	23,059	3,977	26,864	4,638
2029/30	27,320	4,713	32,808	5,667	39,768	6,876

Source: KPLC



Unit: GWh      Source: KPLC

**Figure 4-3 Projected Electricity Energy Demand**



Unit: MW      Source: KPLC

**Figure 4-4 Projected Electricity Peak Demand**

**(3) System losses**

Transmission and distribution's overall system losses rose from a level of 15.2 % in mid-1994 (FY

1993/94) to a peak of 21.5 % during the power crisis resulting from drought in mid-2000 (FY 1999/2000).

Subsequently, the losses have been reducing gradually to the level of 18.6 % recorded June 2006. KPLC targets to progressively reduce system losses to about 15 %.

#### (4) Electricity access

It is estimated that only around 15.3 % of the total population has access to electricity with the rural areas registering only 3.8 % of access.

According to KPLC annual report, as of 30th June 2006, there were 802,249 customers, of which domestic and small commercial consumers accounted for 796,082 customers or 99 % of the total. The medium and large commercial/industrial customers accounted for less than 1 %, respectively. However, in terms of consumption, the domestic and small commercial accounted for approx. 40 % while the medium and large commercial/industrial customers accounted for approx. 60 % of total energy sales in that year.

#### (5) Challenges

The challenge facing the power sector is improvement of reliability and quality of electricity supplies and to its delivery cost to the customers. The latter is of particular concern to the industrial and commercial sector as electricity is a critical input in the manufacture of goods and delivery of services. The cost of electricity therefore can render the products uncompetitive in the regional markets, with adverse effects on employment opportunities and rate of improvement in the quality of life of Kenya citizens.

The measures the industry is putting to address these challenges, such as adding new capacity, reducing system losses, rehabilitation/upgrade of existing facilities and operational efficiency improvement are summarized in later pages.

#### (6) Measures to address the challenges in the power sector

In order to improve the reliability and quality, the power sector institutions and the government are undertaking rehabilitation/upgrade of existing generation, distribution and system operation facilities; For one thing, implementation of predetermined new projects in the medium term to meet the load growth; for another, annual updating of both power master plan (LCPDP: Least Cost Power Development Plan) based on diversified energy sources (hydro, non-hydro, renewable energy) and ranked on least cost selection criteria; and undertaking project preparation activities such as geothermal and coal exploration and feasibility studies for high priority projects in the Master Plan.

Equally important in addressing system reliability problems is for the customers especially the industrial sector customers to continuously undertake demand side management including conservation and efficiency improvements in use of electricity in their respective premises.

To assure sustainability the reliability measures need to be environmentally benign thereby favouring renewable options over conventional fossil fuel sources where economically viable.

(7) Medium term (committed and rehabilitation/upgrade projects)

In response to the recovery in economic growth, an increasing growth in the electricity demand is being recorded rendering the supply margin inadequate despite the availability of the leased emergency power capacity. GOK, KenGen and KPLC are implementing a medium term capacity expansion program aimed at boosting power production and network capacity to meet the increasing demand, as shown in the tables below:

**Table 4-4 Generation Capacity Additions**

Project	Type	Capacity (MW)	Cost US\$	Comment	In service Date
Kiambere Rehabilitation	Hydro	20	10.1	Rehab	2007/08
Redevelopment of Tana	Hydro	10	33.04	Rehab	2009/10
Raising of Masinga			12		2008/10
Kindaruma 3 <sup>rd</sup> unit	Hydro	20	20	Rehab	2009/10
Kipevu Combined Cycle	CC	30	39	Rehab	2008/09
Sondu Miriu	Hydro	60	181.94	New	2007/08
Sang'oro	Hydro	20	54	New	2009/10
Olkaria II 3 <sup>rd</sup> Unit	Geothermal	35	76.3	New	2008/09
Rabai IPP	MSD	80	IPP	New	2008/09
New Kipevu GT	Gas Turbine	80	50	New	2007/08
OrPower 4 (Olkaria III)	Geothermal	35	IPP	New	
Eburru	Geothermal	2.5	6	New	2008/09
KenGen/EcoGen Joint Venture	Wind Turbine	30	23	New	2008/09
Total		423.5			

Source: KPLC

**Table 4-5 Transmission Line Additions**

Description	Line Voltage	In Service Date
Sondu-Kisumu	132kV Single Circuit	2007/08
Chemosit-Kisii	132kV Single Circuit	
Rabai-Diani	132kV Single Circuit	
Kamburu – Meru	132kV Single Circuit	
Mombasa-Nairobi	330kV Single Circuit	
Lessos-Olkaria	220kV Double Circuit	

Source: KPLC

**Table 4-6 Distribution and System Reinforcements**

Description	Reinforcements
Distribution System upgrade project	Rehabilitation/upgrade of distribution substations and lines throughout the country to improve quality of supply, reduce outages and blackouts emanating from operations of distribution system and reduce system losses. The project is part of Energy Sector Recovery Project financed by GOK and multi-donor support under WB. Project is ongoing
SCADA/EMS Upgrade project	Same as above but with an objective of improving operational management of the power system thereby reducing the length of outages, have faster breakdown attendance and repair response times and optimise system operation thereby reducing system losses

Source: KPLC

#### (8) Annual update and implementation of power master plan (LCPDP)

The LCPDP is updated annually, taking account of changes in projected demand and fuel prices, and new generation plant candidates as a result of new project feasibility studies. In the LCPDP update undertaken by the Ministry of Energy (MOEN) in 2006, geothermal, coal and power imports supplemented by thermal plant fired by heavy fuel oil (HFO) are proposed to meet the projected load over the next 20 year planning horizon. However, the medium speed diesels proposed for Ruiru, Lanet and Eldoret (240 megawatt (MW)) and re-commissioning of Westmont power plant (43 MW) in 2006 and 2007 have been replaced on the short term (including mitigation of drought) by Emergency Power Supply (120 MW), Lanet and on the longer term by KenGen GT power plant (80 MW), Rabai GT power plant IPP (80 MW), Kinangop Wind farm (30 MW). The next update will adjust the subsequent investment on the long term.

The LCPDP requires enhanced geothermal exploration to facilitate planned geothermal capacity additions to the system. Hence the establishment of a geothermal development companies to undertake this work and develop/manage the steam fields is planned for the prospective power plants.

In order to lower the cost of electricity, the LCPDP has recognized the role that power interconnection with neighbouring countries can play in lowering the electricity prices. The LCPDP has provided for power imports from Uganda, Tanzania or indeed other neighbouring countries such as Ethiopia subject to purchase prices being competitive with domestic production prices,

The inclusion of high proportion of non-hydro power plants in LCPDP, when implemented, will diversify the power sources from current heavy reliance on hydro sources thereby minimize the impacts of droughts on electricity supply in future.

#### (9) Demand side management

The impact given by well implementation of a comprehensive Demand-Side Management (DSM) Plan on power supply side, leads to reduction in the peak demand, energy consumption and carbon dioxide emissions, while also reducing investment requirement in the sector. Customers, on the bother hand, realize significant savings in their electricity bills besides an improved electricity supply delivery. The DSM programs include: switching to energy saving bulbs and use of compact fluorescent lamps instead of incandescent lamps; carrying out energy audit, design, and retrofitting of electrical systems to comply with the energy efficiency requirements; replacement of fluorescent lamps for rural street lighting with sodium vapour lamps; a campaign to test refrigerators and air-conditioners for efficiency and thereafter replacement with efficient units and encouraging importers of electric motors to import high-efficiency motors, and industrial entrepreneurs to utilize high-efficiency motors. Other programs could cover encouraging design and building of energy efficient homes, buildings and commercial/industrial premises and retrofitting where financially viable.

These programs would require availability of credit financing (at low interest) to encourage the various players to embrace and implement DSM measures for the benefit, not only of those

employing the measures, but also for all customers through improved reliability and reduced investment in the sector.

KAM/GEF Project has been undertaking energy audits for the industry and giving advice to KAM members on energy conservation and efficiency. KPLC also runs safe and conservation/efficient electricity use campaigns in the media for its customers in the country.

#### (10) Other renewable energy sources

Apart from Geothermal, Kenya has a number of sugar milling factories in Western Kenya and coast regions. These have potential for cogeneration power plants utilizing waste heat generated as a by product of the process. Mumias currently export into the grid a non-firm 2 MW under a contract with KPLC and further plans to install other cogeneration facilities.

Currently KenGen operates 2 wind power plants connected to the grid, installed in 1995 as prototype with a total capacity of 350KW by Turbo Wind of Finland, at Ngong. At the same time KPLC, operates on behalf of MOEN, a hybrid diesel/wind power plant at Marsabit, including a wind power unit. Private sector, too, has shown interest and have been conducting wind measurements for power wind farm developments in Kinangop, Ngong and Marsabit.

Other renewable with power production potential include solar, bio-fuel and mini hydro. The new Energy Act creates a favourable environment for development of renewable energy sources for power generation.

#### **4.2.3 Providing Stable Water Supply**

Water is a critical component in agriculture, processing and overall manufacturing activities. The existence of infrastructure facilities for catchments, purification / treatment and distribution of water as well as removal of wastewater are major prerequisites for urbanization and industrial development.

In Kenya, availability of clean water in the required quantities as well as adequate sanitation facilities remains a major constraint to industrial development and economic growth. The access to safe water is estimated at 60 % in urban and 40 % in rural areas while sewerage systems cover only 14 % of the population (National Water Services Strategy (NWSS) 2007:1). The key problems regarding water supply and sanitation include;

- i) Inadequate supply due to old infrastructure facilities,
- ii) Inadequate management and maintenance of existing facilities results in loss through unaccounted for water estimated at 60 %,
- iii) Insufficient revenues from low tariffs lead to unsustainable supply,
- iv) Inadequate investment funds constrain expansion of supply capacity,
- v) Presence of informal service providers operating outside the regulatory regime results in further losses.

**(1) Institutions for Water and Sewerage Services (WSS)**

GOK acting through the Ministry of Water and Irrigation (MOWI) has systematically implemented the Sessional Paper No 1 of 1999 on the National Water Policy and adopted a water sector reform programme to promote pro-poor interventions and improve overall access to water and sanitation services. It has factored the recommendations of ERS and Kenya Vision 2030 into the reform programme and adopted Sector Wide Approach to Planning (SWAP) in the sector. This has resulted in a new legal and institutional framework as outlined in the table below. Key changes include:

- i) Presence of a regulator for WSS,
- ii) Transfer of government schemes to Water Services Board (WSB), Communities and lower level actors,
- iii) Promotion of commercialisation of the financing and management of WSS,
- iv) Promotion of improved access to WSS for the poor in urban / rural areas through the Water Services Trust Fund (WSTF).

**Table 4-7 New Institutional Arrangements for the WSS**

Institution		Roles and Responsibilities
1	MOWI	Policy, legislation, strategy and programming
2	Water Services Regulatory Board (WSRB)	Regulation, licensing, quality control, monitoring and evaluation.
3	WSBs	Provision of water, investment programme implementation, procuring and leasing of water / sewerage facilities.
4	Water Services Providers (WSPs)	Provision of water and sanitation services, customer relations and maintenance of facilities.
5	WSTF	Financing pro-poor water and sanitation interventions.
6	Water Appeals Board (WAB)	Disputes and conflicts resolution.
7	National Water Conservation and Pipeline Corporation (NWCPC)	Drilling bore holes and dams construction.
8	Kenya Water Institute (KEWI)	Training and research.

Source: NWSS 2007-15

The Government has also adopted NWSS in line with the Water Act 2002. NWSS which covers the period 2007-15 is anchored on the Millennium Development Goals (MDGs) and has the goal of ensuring sustainable access to safe water and basic sanitation to all Kenyans. In order to implement the strategy, the country has been divided into seven basins and each basin has been assigned to a WSB. The seven WSBs have been given the mandate of improving the quality of service and contributing to the attainment of the relevant targets in the MDGs by 2015.

**(2) Institutions for water resource management**

Kenya has a renewable fresh water capacity of 650 cubic meters per capita, which is below the threshold of 1,000 cubic meters per capita the level that is used to classify countries as water scarce. This level of endowment is projected to fall to 235 cubic meters by 2025 (National Water Resource Management Strategy (NWRMS) 2006). Being a water scarce country, Kenya currently develops

between 13-19 % of the assessed safe water potential of 1.6 billion cubic meters (ibid). In order for the country cope with the water deficit situation, the Government adopted an integrated (NWRMS 2006) which has accorded priority to water resource development.

The main objective of NWRMS is to promote equitable access to water resources for all Kenyans.

The intents of the strategy is to specify the roles of the main players with a view to making service delivery to be market / demand led. It also advocates the collaboration of the new institutions with local authorities, Non-Governmental Organisations (NGOs), community-based organisations, and the private sector in the implementation of the strategy.

**Table 4-8 New Institutional Arrangements for NWRMS**

Institution		Roles and Responsibilities
1	MOWI	Policy, legislation, programmes monitoring and evaluation.
2	Water Resource Management Authority (WRMA)	Water resource planning, management, quality monitoring, conservation, abstraction permits, user rights issue and control of water use.
3	Catchment Area Advisory Committees	Advising WRMA on water resource issues at catchment level.
4	Water Resource User Association	Water users registration, catchment management, water monitoring, information gathering and conflicts resolution.
5	WSRB	Regulation / licensing WSBs, tariff setting and quality control.
6	WSBs	Provision of water, investment programme implementation, procuring / leasing of water / sewerage facilities and contracting WSPs.
7	WSPs	Provision of water / sanitation services.
8	WSTF	Financing pro-poor water and sanitation interventions.
9	WAB	Arbitration / disputes resolution.
10	NWCPC	Drilling Bore Holes and dams construction.
11	KEWI	Training and Research.
12	National Irrigation Board	Development / maintenance of irrigation infrastructure.

Source: National Water Resources Management Strategy 2006-08 (NWRMS)

### (3) NWRMS proposing financing arrangements for the water sector

The Strategy also proposes to wean the sector from unhealthy dependence on exchequer financing which has other competing uses leading to inadequate funding. In order for the sector to fully address its core obligations in respect of conservation, monitoring, protection and exploration of water resources, the sector needs access to sustainable sources of finances. Water sector financing requirements are expected to meet licensing fees, charging actual levies, and mobilizing resources from the Government, consumers, capital markets and development partners. Nevertheless the diversity of relevant institutes requires supervision of implementation of fund-injection projects or coordination with other relevant sectors. Especially in the case that they are supported by development partners, it will be necessary to lay out the system for communication, coordination and supervision.



#### (4) Implementation of water sector strategies

NWSS and NWRMS provide the framework for the implementing sector policies. The various institutions and service providers will be required to elaborate three (3) year action plans that will be updated annually. The action plans outline the business and investment priorities that will be agreed upon during the annual SWAP conference. The annual budgets of the water sector institutions will reflect the updated action plans which will form part of the performance contracts that they will sign with MOWI.

#### 4.2.4 Providing Efficient Transportation System

##### (1) Roads

The national road transport in Kenya accounts for 90 % of the land freight and passenger traffic in the country. In 2005 the Road Condition Survey was undertaken, and it revealed that only 18 % of the classified road network,<sup>46</sup> covering 63,572Km of total road network of approx. 194,000Km, is in good condition and that 33 % is in poor or failed condition. Classified roads are under MRPW, and remaining local authority roads except special purpose roads are the District Roads Committees (DRC) and Urban Councils. Reflecting the heaviest concentration of transport facilities along the so called “Northern Transport Corridor” from the Mombasa port to Western region and the border to Uganda through Nairobi, WB with various development partners started the “Northern Corridor Transport Improvement Project”, which includes the Rehabilitation of the Northern Road Corridor and Road Safety Improvement. The road from Mombasa to Malaba on the border with Uganda runs more or less in parallel with the railway lines, but it carries more than three times the volume of freight and passengers that is handled by the railway.

At the same time, the East African Countries have identified five corridors and several road connections for rehabilitation, reconstruction and upgrading as the East African Road Network Project, and the African Development Bank (AfDB) has been financing for the Project. Moreover, the donors such as the Kreditanstalt fur Wiederaufbau (KfW), AfDB, Swedish International Development Cooperation Agency (SIDA) and EC have been committed to the Road 2000 Programme for the improvement and maintenance of the country’s road network.

In 2007, the implementation of “Arusha-Namanga-Athi River Road Development Project” supported by co-financing of AfDB and JBIC, was committed. This aims at supporting economic vitalization in EAC for improvement of the international highway between Tanzania and Kenya, of which Tanzanian part will be financed by JBIC, and Kenyan part by AfDB.

As well as domestic main roads and international highways, there is room for improvement of urban road network. As for the total number of vehicles registered in 2005 is more than forty five thousand and it shows approximately 1.7 times increase compared with the figure in 2001. Especially in urban areas such as Nairobi and Mombassa, traffic is becoming heavier from year to year. There are also

---

<sup>46</sup> Classified roads are A(International), B(National) and C(Primary).

many parts of the road damaged heavily and sometimes subsided in the above cities and their suburbs. Thus, it is required to formulate and implement concrete and effective measures against such issues as alleviation of traffic jams and operation and maintenance of roads. From the viewpoint of industrial development, in particular, the roads around industrial area in Nairobi, for instance, shows that severe damages of the roads are left without repair, often causing troubles over traffic and much more travelling time required, and thus regarded as obstacle for industry. Prompt implementation of road maintenance and improvement is therefore required as one of the basic and essential infrastructure to support the industry with cooperation and coordination among relevant ministries.

**Table 4-9 Number of Vehicles Registered**

Vehicle Type	2001	2002	2003	2004	2005
Saloons /Wagons	12,990	17,280	17,740	21,490	24,370
Pickup / Vans	4,750	5,800	6,800	7,000	6,300
Lorries / Trucks	1,280	1,920	2,070	2,460	3,110
Trailers	600	500	860	1,110	1,350
Buses / Coaches	490	400	670	870	890
Minibuses	3,600	4,000	2,850	4,400	4,080
Tractors wheeled	570	680	660	830	860
Motor Cycles	1,560	1,900	2,080	4,140	3,760
Other vehicles	180	110	160	280	930
<b>Total</b>	<b>26,024</b>	<b>32,527</b>	<b>33,768</b>	<b>42,482</b>	<b>45,653</b>

Source: Economic Survey 2006, KNBS

## (2) Railway

The railway handles about 20 % of the inland freight of imports and exports that pass through the port of Mombasa. It is an important link between Kenya and land locked countries of Uganda, Rwanda, Burundi, DR Congo and Southern Sudan. Its key advantage over road transport is the ability to handle bulk freight over long distances. The railway transport in Kenya is under Kenya Railway Corporation (KR) and the railway network is 2,778 Km running from Mombasa through Nairobi to the border with Uganda. It has branch lines to Tanzania via Taveta, Magadi, Nanyuki, Nyahururu, Kitale and Butere via Kisumu. The entire network was built around the turn of the 20<sup>th</sup> century and has not been expanded since construction. The detailed breakdown of the link is as follows;

**Table 4-10 Kenya Railway Line System**

Network / Line Description	Distance in km
Main line Mombasa to Malaba	1,083
Principle lines	346
Branch / Minor lines	490
Private lines / Sidings	859
<b>Total</b>	<b>2,778</b>

Source: EU, Kenya Transport Sector Policy and Strategy Study 2004

The tonnage of freight handled by railway has slightly increased to 2.0 million tons in 2005 compared with the previous year of 1.9 million tons though it is still below 2.3 million tons recorded in 2001. KR is mainly a freight railway deriving 95 % of its income from freight haulage. It used to handle over 3.6 million tons of freight per year in 1990s. At present, KR has 120 locomotives out of

which 80 are in use and 6,463 wagons (including 175 passenger and 1 wagon ferry) out of which 2,600 are in use. [Kenya Railways: Sep. 2006] The volume of freight and passengers are as shown in the following table.

**Table 4-11 KR Volume of Freight and Passengers**

Traffic	2001	2002	2003	2004	2005
Freight ('000 tons)	2,330	2,227	1,999	1,890	2,000
Passenger Journeys ('000)	5,517	4,794	4,401	5,657	4,796
Revenues (Kshs. Million)	4,862	4,667	4,005	4,133	4,243

Source: Economic Survey 2006, KNBS

The system consists of a narrow gauge configuration and old locomotives which limits the speed and travel time that it can achieve. As a transport mode, it has been experiencing serious competition from road transport as trucks and trailers, making the capacity utilization of railway barely 50 %. The railway transport has been under KR. However, given deterioration of their own locomotives, passenger cargo trains and other facilities, operation/management issues, and financial issues, it was decided in November 2006 that they would go through the hands of Rift Valley Railways (RVR), consortium mainly of South African capitals for 25 years afterward. Railways play an important role in the transportation sector and further improvement of their operation is expected.

### (3) Port

The port of Mombasa is the main international seaport which services Kenya, Uganda, Rwanda, Burundi, Southern Sudan and DR Congo. It handled approx. 11 million tons of import / export freight per year by 2003, with 25 % of that volume being transit traffic. In 2005 the volume handled was 13.3 million tons, 3.1 % increase of that of 2004. The Mombasa port is managed by the Kenya Ports Authority (KPA) and the volume of freight handled by KPA is as shown in Table 4-12.

**Table 4-12 Summary: Volume of Freight Handled by KPA 2001-05**

Traffic	Units	2001	2002	2003	2004	2005
Imports ('000)	DWT	8,299	7,844	9,332	10,018	10,700
Exports ('000)	DWT	1,999	2,380	1,994	2,494	2,278
Imp + Exp ('000)	DWT	10,298	10,224	11,326	12,511	12,978
Trans-shipment		303	340	605	409	303
Total		10,600	10,560	11,930	12,920	13,280

Note: DWT: Dead Weight Tonnage

Source: KPA Data Bulletin 2006

When Mombasa port comes to international hub port, there is a growing call for expanding the port facilities of the Port of Dar es Salaam. However, comparing this to the extension project of the Port of Mombasa and taking into consideration the processing capacities of the two ports, the Port of Mombasa has a far greater comparative advantage than the former.

As above, the Port of Mombasa is by far the largest in the Eastern African region and has facilities that support the following port services: Containers handling, Bulk grain handling, Ship repairs, bunkering and marine salvage. It has the port infrastructure which includes; quays (3,004 meters), wharves / berths (16 No.), jetties, container stacking yards, storage tanks and related piping, goods

sheds (KR), warehouses, navigation guides / light houses, buoys, security walls / fences, housing and administration buildings and access roads with drainage and water piping system. KPA carries out maintenance of the infrastructure facilities that are located within the security fence. The roads that lead to and from the port are generally maintained by the Mombasa Municipal Council with occasional input from KPA. The flow of traffic to and from the port can affect the rate at which the freight is actually removed from the port to avoid congestion and build up of backlog in clearing the yards and goods sheds. In this regard the design, construction, and maintenance of the following critical district roads is of considerable importance; Makande, Shimanzi, Makupa causeway, Zanzibar and Mogadishu. The weight of the trucks that handle port freight is far in excess of the design specification of the municipal roads which easily caves in quickly after repairs due to the intensity of use. The flow of traffic is impaired once the road surface deteriorates with the effect that the above roads tend to clog the western part of the island with slow moving traffic. The need for maintenance is more frequent than the council is able to programme and to finance thus always giving these roads the appearance of a permanent state of disrepair.

During 2004-05, KPA conducted a comprehensive port planning exercise which drew on the combined expertise of Dutch and Kenyan consulting companies. The Master Plan Study of the Port of Mombasa projected the growth of its facilities over the next twenty five years to 2028. The main components that were recommended for implementation included;

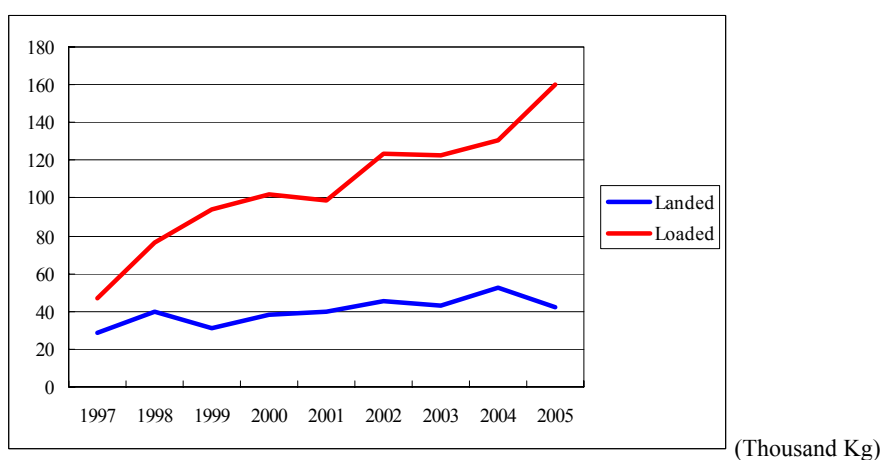
- i) Free Trade Zone in Dongo Kundu area to the south west,
- ii) Cruise Passenger Terminal,
- iii) Expanded Container Terminals (Kilindini),
- iv) Improved Oil Terminals (Kipevu),
- v) Bulk cargo handling Terminals,
- vi) Kilindini Water Front Project aimed at achieving e-port status for KPA,
- vii) Automation of planning and management information systems for cargo handling yards and the water front and
- viii) Institutional reforms, private sector participation, independent corporatization of KPA and related capacity building.

The cost estimate for all the works in the Master Plan was US\$ 491.0 million which is expected to be raised from international lenders. As for the requirement to expand container terminals the Government of Japan is expected to finance the expansion project through JBIC.

(4) Airport

1) Advantage and performance of the Nairobi (Jomo Kenyatta) International Airport (JKIA) --- Maximising the function of JKIA as a regional hub

From an international perspective, the biggest comparative advantage Kenya boasts is its airport facilities in concert mainly with the expansion of Kenya Airways.<sup>47</sup> The Nairobi (Jomo Kenyatta) International Airport is the largest and busiest airport in East and Central Africa. Its network of passenger and air cargo services goes beyond the African Continent. In 2005, commercial cargo loading at the Jomo Kenyatta International Airport amounted to 160.4 million Kg, and the trend for the last several years has been increasing. As the largest and most functionally advanced facility in the region, it will surely remain the leading airport for years to come.



Source: Economic Survey, KNBS

Figure 4-5 Commercial Cargo Traffic at the Jomo Kenyatta International Airport

The country has five hundred seventy (570) Aerodromes of varying size and facilities for use by aircrafts, of which one fifty nine (159) are public and the following nine (9) airports are managed directly by the Kenya Airports Authority (KAA).

- i) Nairobi (JKIA),
- ii) Mombasa (Moi International Airport (MIA)),
- iii) Eldoret,
- iv) Kisumu,
- v) Wilson,
- vi) Malindi,
- vii) Manda,
- viii) Ukunda and
- ix) Lokichoggio.

---

<sup>47</sup> Some earnings history can be seen from the annual reports of Kenya Airways for financial year ending March 31, 2006 as follows (as comparison of previous year): i) Ksh 52.8 billion turnover (approximately 25 % up from previous year), ii) Ksh 6.9 billion pre-tax profit, iii) Ksh 4.8 million after-tax profit, iv) Passenger growth up by 17 % to 2.4 million, v) 20 % increase in European passengers, vi) 26 % increase in West and Central African passengers, vii) 22 % growth for Kenyan domestic network and viii) 24 % growth of cargo volumes.

JKIA, MIA and Eldoret are the main international airports which handle the bulk of the air traffic in the country. Here is placed, at the three airports, most of air control infrastructure in Kenya. Besides passengers, the airports handle a large volume of import and export cargo including mail, foodstuff, flowers, horticulture, pharmaceutical products, humanitarian relief and assorted spare parts. The other six are important domestic airports that handle air passenger traffic within the country and also to neighbouring countries through air charter services. The other aerodromes are mainly small airstrips that are located in district headquarters, national parks, game reserves, hotels and large scale farms.

JKIA is by far the largest facility which is a regional hub of air traffic with regular connections for passengers to Tanzania (Dar Es Salaam and Mwanza), Uganda, Rwanda, Burundi, DR Congo, and Ethiopia, western and southern Africa. It is a competitive hub of air traffic in Africa whose main competitors are the airports in Addis Ababa, Entebbe, Harare, Johannesburg and Abidjan. Moreover, JKIA has many passenger and cargo airline routes to Europe, Mid-east, Asia as well as inside Africa.

## 2) Functionalising logistic system

Volume of cargo handled in these airports has increased by 70.7 % in 5 years from 159.6 million Kg in 2001 to 272.4 million Kg in 2005. As for passenger traffic the number of passengers has increased by 36.4 % from 4.3 million in 2001 to 5.9 million in 2005.

**Table 4-13 Freight Traffic Handled by Airports**

Freight (kg million)	1999	2000	2001*	2002	2003	2004	2005
JKIA	126.6	140.6	139.2	169.0	166.0	183.0	202.6
MIA	2.4	2.7	3.5	3.0	4.8	6.5	8.0
Eldoret	4.2	5.0					
Others	23.9	28.9	49.0	50.5	46.6	51.7	61.8
Total	157.1	177.2	159.6	222.5	217.4	241.2	272.4
JKIA % of total	80.6	79.4	87.2	75.9	76.4	75.9	74.4
JKIA/MIA % of total	82.1	80.9	89.4	77.3	78.5	78.6	77.3

Note: The total for other airports from 2001 onwards include the data for Eldoret airport.

Source: Economic Survey 2003, 2006, KNBS

**Table 4-14 Passenger Traffic Handled by Airports**

Passenger Traffic	1999	2000	2001*	2002	2003	2004	2005
JKIA ('000)	2,668	2,945	2,969	3,057	3,451	4,000	4,239
MIA ('000)	890	901	851	891	823	975	1,066
Eldoret ('000)	23	42					
Others ('000)	421	496	509	526	473	475	600
Total ('000)	4,002	4,384	4,329	4,474	4,747	5,450	5,905
JKIA % of total	66.7	67.2	68.6	68.3	72.7	73.4	71.8
JKIA/MIA % of total	88.9	87.7	88.2	88.2	90.04	91.3	89.8

Note: The total for other airports from 2001 onwards include the data for Eldoret airport.

Source: Economic Survey 2003, 2006, KNBS

The Kenya Civil Aviation Authority (KCAA) developed a 5 year plan (2005/6 – 2009/10) and a 15 year Kenya Air Space Master Plan (2005 – 2020) to improve communication, navigation surveillance and air traffic management systems. In Northern Corridor Transport Improvement Project the components of “Support to KAA” and “Support to KCAA” are included, and these components are expected to contribute to the improvement of facilities of leading airports as well as training systems.

As for the JKIA, the busiest airport in the country, its terminal buildings were last expanded in 1978 when it was built to design capacity of 2.5 million passengers per year. At the moment the facility is handling 4.5 million per year thus exceeding the design capacity by nearly 100 %. It is also handling an increasing volume of flowers / horticulture exports mainly to European markets which stood at over 202,600 tons of cargo in 2005.

KAA commissioned a feasibility study of JKIA which was completed in February 2005. They aim at expanding capacity and modernizing the terminal facilities to meet demand to the year 2024 presented in the study. KAA has embarked on the implementation of the modernisation programme that will take three years (2005-08) to full completion. The whole program is expected to cost about ten (10) billion shillings spread over three phases.

**Table 4-15 Modernisation Programme by KAA (2005-08)**

Phase	Facilities to be Constructed
Phase one	Expanding of: Taxi-ways and an additional runway, Apron, Fuelling systems, Lighting and aircraft guiding systems and, Increasing the aircrafts usable area from 200,000 to 350,000 meter square.
Phase two	Modernise the terminal buildings by: Constructing a new unit 4 with six (6) additional gates, Relocating domestic flights to the old terminal at Embakasi, Facelift to JKIA main building and increasing the building space by one additional floor, Enhancing security by separating arrival from departure traffic, and Increasing shopping / catering facilities and beautifying the approaches to the airport.
Phase three	Reorganizing / expanding of: Existing terminals, Support services, Access roads and vehicular traffic management, Bus link between JKIA and Embakasi, and Parking by 1,500 spaces to realize a capacity of 3,000 vehicle spaces.

At the completion of the modernisation programme the facility will be able to handle up to 9.0 million passengers per year and a much larger volume of cargo freight.

### **4.3 Statistical Data on Trade and Industry**

#### **4.3.1 Available Industrial Information**

Industrial information is important both for policy makers and the private sector dealing with industry. The former uses industrial information for policy formulation and evaluating the impact of the measures while the latter uses it for identifying marketing and investment strategies as well as improving business operations. Two sets of national statistics, the Economic Survey and the Statistical Abstract, provide basis for the longitudinal analysis and cross-sectoral analysis and are

considered very important for constructing the policy framework. In the views of the private sector, availability of industrial information is fundamental in facilitating investment since the private sector would not make investment into the markets of uncertainty. It is also important to construct marketing strategies that enable productivity improvement.

The type of industrial information includes quantitative and qualitative. Some of the major industrial information available in Kenya is listed on the table below.

**Table 4-16 Major Industrial Information Open to the Public**

Information Category	Source	Updating Period
<b>Statistics</b>		
<ul style="list-style-type: none"> <li>Production values with sub-sectoral breakdown</li> </ul>	<i>Economic Survey,</i> KNBS	Annually
<ul style="list-style-type: none"> <li>Number of firms, labourers, input, output, labour compensation, and value addition of the large-scale manufacturers with sub-sectoral breakdown</li> <li>Input, output, labour fees, and value addition of all manufacturers with sub-sectoral breakdown</li> <li>Production and consumption volume of major excisable commodities</li> </ul>	<i>Statistical Abstract,</i> KNBS	Annually
<ul style="list-style-type: none"> <li>Performance of each EPZ (e.g. zone investment, total area of occupancy, number of firms, local compensation, export values, and local input values)</li> <li>Sectoral performance of EPZ companies (no. of firms, sales values, export values, local labourers, local input, investment)</li> </ul>	<i>Annual Report,</i> EPZA	Annually
<ul style="list-style-type: none"> <li>Export and import data (values and quantity) classified by commodities and by trading countries</li> </ul>	<i>UN Comtrade</i>	Annually
<b>Report</b>		
<ul style="list-style-type: none"> <li>Kenya's Manufacturing Industry</li> </ul>	KAM	Annually
<ul style="list-style-type: none"> <li>Sub-sectoral Profiles</li> </ul>	EPZA	last updated in 2005
<b>Directory</b>		
<ul style="list-style-type: none"> <li>KAM members (address, tel, fax, product, contact person, E-mail, and homepage)</li> </ul>	<i>KAM Directory,</i> KAM	Annually
<ul style="list-style-type: none"> <li>Registered Manufacturers (address, tel, fax, ISIC No.)</li> </ul>	MOTI	

Source: The JICA Study Team

In spite of various industrial information collected by various institutions, Kenya has yet to overcome weaknesses in the industrial information as explained below.

**(1) Lack of comprehensive data**

The most serious problem with the industrial information is that there is no single set of data covering the whole industry. Since the Industrial Registration Act of 1988, the Department of Industry had been responsible for data collection from all operational manufacturers. MOTI has been sending out a 15-page questionnaire (Form MOTI/RI/91) annually. Data items in the questionnaire are extensive including ownership, capital formation, human resource, production capacity, utility and raw



material consumption, sales and exports, R & D expenditure, and planned investment. However, MOTI has been keying in very limited data set from the questionnaire into the personal database and the comprehensive analysis has not been conducted. Without knowing the use, manufacturers would not have incentives in filling in the complicated questionnaire annually. The response rate has dropped to 15.5 % in 2004 and 9.9 % in 2005 against the estimated total population of 2,155 manufacturers<sup>48</sup>. In an aim to simplify the administrative procedures in doing business, the Industrial Registration Act was repealed by the Licensing Laws (Repeals and Amendment) Bill, 2006.

## (2) Low credibility

Even the two sets of national statistics, that is, *the Economic Survey* and *Statistical Abstract*, which are widely used, have a fundamental problem. The base data for industrial statistics reported in these two documents is the Census of Industrial Production, last conducted in 1977. The master file is from the labour database updated annually by the Labour Division of KNBS. Monthly Survey of Industrial Production is conducted on 20 % of the manufacturers drawn from the large-scale enterprises, which were estimated to represent 80 % of the total value addition at the time of sampling. Although the master file on population is updated annually, the samples have been fixed since 2002. Therefore, contribution to the industry by the new comers and potential dynamism created by the MSMEs are not captured in the statistics. Moreover, the Monthly Survey of Industrial Production only includes questions on the values and quantities of the output. Intermediate consumption is calculated on estimate basis, using various conversions and weights depending on the sub-sectors that are derived from the results of other researches, which are not explained in a published document. This makes cross-sub-sectoral analysis on value addition unreliable.

Considering that informal manufactures employ 5.5 times more labourers than the formal manufacturers, what is reported in the national statistics is far from the total picture of the manufacturing sector as a whole. The current coverage of statistics misguides the policy makers by providing an impartial picture. For example, the argument on high labour cost in the manufacturing sector tends to ignore potential availability of low-wage workers currently employed in the informal sector.

## (3) Lack of harmonisation

Various organisations try to collect industrial information with their own efforts to compensate the incomplete picture of industrial statistics; however, they do this without harmonisation. Consequently, each set of data becomes partial and not suitable for cross reference. For example, variables that EPZA provides are different from those reported on the manufacturers outside EPZs by KNBS such as classification of sub-sector and calculation of value addition. Therefore, comparing the performance between the manufacturers inside and outside EPZs is difficult. Although contribution from EPZ companies in terms of the exports and employment is quite significant, this is

---

<sup>48</sup> Ecotech Consultants (2007) Final Report on Management Information System and Statistical Data Analysis, p. 16, presented to MOTI

not well captured due to the inconsistent presentation in statistics. Likewise, many organisations ignore the use of the international coding. For example, Horticultural Crops Development Authority (HCDA) is not using the international trading codes such as Harmonised System (HS), and its data is not incorporated into the international data.

#### (4) Unknown players

Information on each manufacturer can be a powerful marketing tool. Although KAM has a comprehensive directory of its members, it is estimated that less than quarter of operational manufacturers have joined KAM. The directory on the MOTI Web is not user friendly: it is not classified by the sub-sector; the product name cannot be identified without checking International Standard of Industrial Code (ISIC); and there is no link to the website of the individual company. The most frequently used tool for identifying the non-KAM manufacturers is through the telephone directory, *Yellow Page*. The lack of information on the manufacturers is one of the causes for weak industrial linkages within Kenya. Improved directory on the Web is recommended to be developed.

### 4.3.2 Improving Availability of the Industrial Information

There are two sets of major initiatives undertaken for improving availability of industrial information. The first initiative is the Statistical Capacity Building Project (STATCAP), supported by WB. The STATCAP project includes organisational restructuring of KNBS, human resource development, development of statistical infrastructure, data development, and provision of physical infrastructure and equipment. This project envisages strengthening the system where relevant line ministries collect and administer the necessary statistics and enable each ministry to access various data collected by other Ministries. KNBS was established with the enactment of the Statistical Act, No.4 of 2006 in order to coordinate all relevant activities, stakeholders, and statistical methodology. One of the major components is harmonisation of the registration of the establishment at KRA for VAT, National Social Security Fund, and company registration at the Attorney General's office. While the KNBS is the major beneficiary of the project, MOTI is also a key member with regard to industrial and trade statistics.

Another initiative is through the E-Government under the Office of the President. The E-Government Strategy formulated in 2004 pushes forward a plan to build Trade, Industry, and Tourism Information Systems, which are to generate and share information for strategic planning<sup>49</sup>. MOTI has an ICT Unit whose personnel is dispatched from the Information Technology Service of MOF and is working on implementation of the E-Government Strategy. It is therefore the best time to quickly construct the strategy for improving industrial information and put it into actions. MOTI recently received a set of recommendations for constructing a Management Information System and Statistical Data Analysis from Ecotech Consultants.<sup>50</sup>

---

<sup>49</sup> Office of the President (2004) E-Government Strategy: The Strategic Framework, Administration, Structure, Training Requirements and Standardization Framework, p.8

<sup>50</sup> Ecotech Consultants (2007) Final Report on Management Information System and Statistical Data Analysis, presented to MOTI

Following all above initiatives, basic principles for collection and dissemination of industrial information are reviewed below.

### (1) Industrial statistics

Industrial statistics must be reliable and compatible with international comparison. *International Recommendations for Industrial Statistics* by United Nations (UN) in 1983 provides the guidelines for improvement. While the Recommendations recognise the financial constraints among the developing countries, they do not show a specific time frame for improvement. The development strategy for industrial statistics needs to be formulated on the basis of the existing statistical framework of each country. Therefore, with reference to the Recommendations, MOTI and KNBS are recommended to develop the plan for improving industrial statistics. In constructing strategies three things should be considered. Firstly, the importance of the data needs to be assessed in determining the data items for collection. There is no need of collecting data without commitment to analysis. Secondly, the items which try to cover the whole industry need to be selective in a way that enables business owners without enough education to understand. Thirdly, the questionnaire design needs to be simple and articulate, leaving no ambiguity or feelings of cumbersomeness in filling in. Changing variables and assumptions would create problems in the longitudinal analysis. It is expected that the questionnaire design is well constructed so that it can maintain consistency in the long-term. The results of the data should be analysed by the size of manufacturers, sub-sector, and by area. After formulating the strategy, it is necessary for MOTI and KNBS to produce guidelines for collection of the industrial statistics in order to harmonise and share the data with other organisations undertaking industrial statistics on their own.

### (2) Report

It should be the responsibility of MOTI to analyse the industrial status of the Kenyan industry and produce a report annually. In the process of writing the report, MOTI officers would accumulate knowledge in analysing the industry and identifying problems and possible actions. This is something that MOTI officers themselves need to do, instead of outsourcing. Currently, KAM is producing comprehensive annual report on the Kenyan industry. Because of the limited manpower within MOTI, it may be realistic that the industrial report be made in collaboration between KAM and MOTI. Moreover, the industrial report is expected to be uploaded on the Web since disclosure of the industrial information would increase transparency of the Kenyan industry and attract potential investors.

### (3) Directory and websites

Availability of the directory and websites of the manufacturers is an effective tool of marketing. MOTI is responsible for managing the manufacturers' directory on the Web. The current directory under the MOTI website needs to be improved. First, the data needs to be updated when changes occur. The design of the directory is required to have proactive interface so that the manufacturers can notify the website manager of any changes through the Web. Secondly, the directory should contain information on address, telephone, fax, product, and contact person. If the company has a

---

website, it should also have the URL of the website with the link. Thirdly, the directory should be classified by area and by sub-sector and products. Fourthly, MOTI is expected to make a prototype website for the manufacturers with user-friendly design so that it becomes easier and cheaper for the manufacturers to make their own website. Any efforts by other organisations in making company directories should be harmonised and integrated in order to make one most reliable and comprehensive directory like the printed *Yellow Pages*.

#### (4) Disclosure of the industrial information

There are many types of industrial information, which the Government has to disseminate to the public for industrial development, such as Acts, Regulations, Standards, and Patents. However, it has been found that the public agencies charge high price to obtain or search such information for example, 1000 Kshs. for one piece of printed regulations or standards. Some reasons for the high charge are that the public agencies have the mandate to generate some income by themselves and that printed matters become expensive when they sell in small quantity. E-Government Strategy under the Office of President has a policy to set up a Trade, Industry, and Tourism Information System and to promote disclosure of information over the Web. In line with the E-Government Strategy, the cost of obtaining industrial information from the public has to be reduced while uploading information to the Web is to be encouraged.

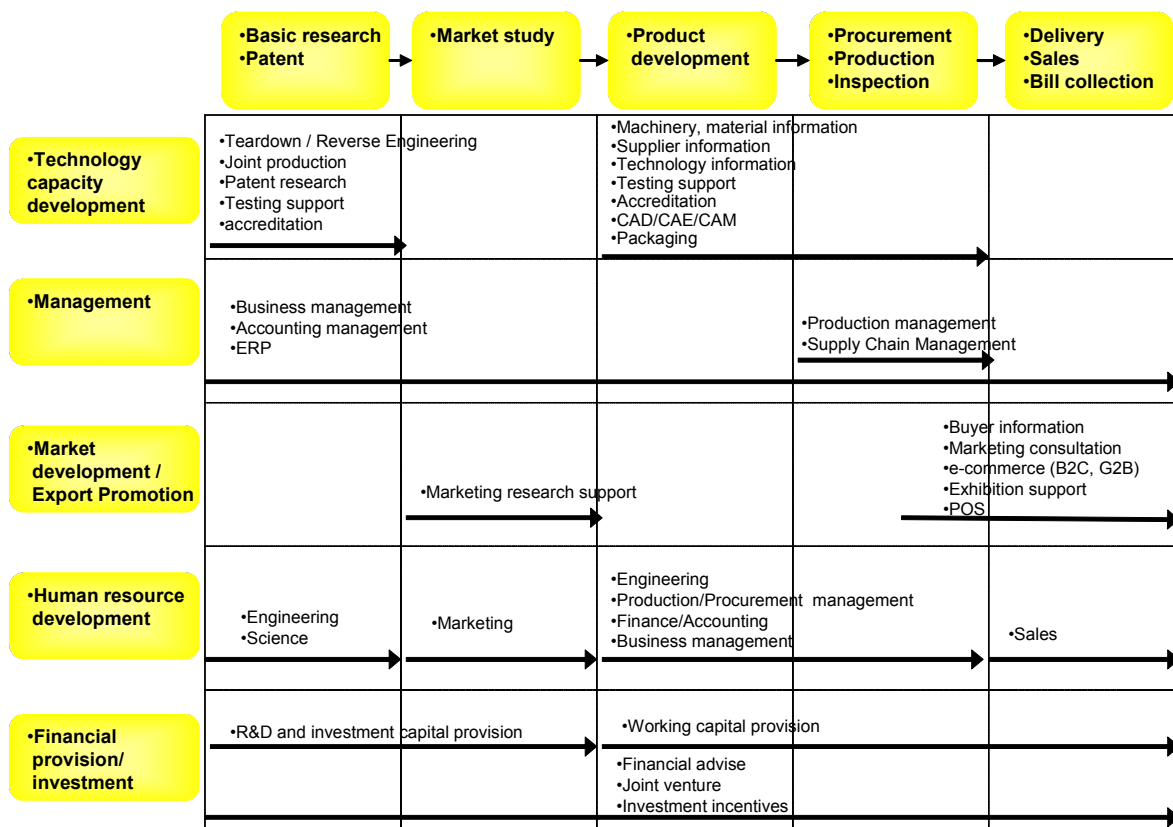
## Chapter 5 Contents of Industrial Development Support

Activities of enterprises require many different aspects along with the business growth. The key elements include i) technological development, ii) management and marketing, iii) export, iv) investment promotion, v) financing, vi) capacity building of human resources, and vii) networking in the industry. There are also many different means to contribute to such elements. In this Chapter, the framework of supporting system for industrial development and possible ways for supporting such items are discussed.

### 5.1 Framework of the Support System

#### 5.1.1 Identifying the Framework

The government should be geared towards policies which promote internal innovations by the manufacturers so that they can attain improvement in quality and productivity for their sustainable growth and survive in the global competition. Various supporting services are necessary alongside the production cycle of the manufacturers.



Source: The JICA Study Team

Figure 5-1 Supporting Platform alongside the Production Cycle

#### 5.1.2 Supporting Services under MOTI at Present

There are many initiatives and services offered by BDS providers, the financial sector, universities, R & D institutes, associations, and parastatals. MOTI oversees the operations of thirteen parastatals

detailed below<sup>51</sup>:

- i) Industrial Development Bank Capital (IDBC): It has the mandate to provide medium and long-term finance and accompanying financial and corporate advisory services to medium and large-scale industrial enterprises; and provision of working capital, machinery and finance.
- ii) KenInvest: It is charged with the responsibility of promoting local and foreign investments in Kenya by providing information on opportunities, policies, incentives, and procedures.
- iii) Kenya Industrial Research and Development Institute (KIRDI): It has with the mandate of conducting R & D in all industrial and allied technologies, including mechanical, civil, electronics, chemical engineering, energy, environment, and commodity technologies.
- iv) Kenya Industrial Estates Limited (KIEL): It has the mandate to provide finances, technical services and training to MSMEs.
- v) Industrial and Commercial Development Corporation (ICDC): It has the mandate of providing finance and equity capital for expansion and development of new and existing medium size private-sector industrial and commercial enterprises in Kenya.
- vi) KEBS: It has the mandate to develop and enforce the standards of industrial products.
- vii) EPC: It has the mandate to promote and diversify Kenyan exports and provide information of potential market opportunities.
- viii) EPZA: It is mandated to promote investments in the EPZs.
- ix) KIPi: It has the mandate to administer industrial property rights, provide technological information and training in industrial property rights; and promote inventiveness and innovativeness.
- x) NMC: It has the mandate to manufacture metallic components and other industrial products.
- xi) Kenya National Trading Corporation (KNTC): It has the mandate to distribute essential goods across the country.
- xii) Kenya Wine Agencies Limited (KWAL): It is mandated to produce and distribute wines and spirits in Kenya and beyond.
- xiii) East African Portland Cement Company (EAPCC): It has the mandate to manufacture and market cement and cement-based products.

In creating more efficient and effective mechanism in delivering the services, three issues need to be taken into consideration. Firstly, the government needs to acknowledge and facilitate initiatives for service provision from the private sector because direct intervention by the government is limited due to budgetary constraints. Moreover, some services are better fitted to be provided by the private

---

<sup>51</sup> Strategic Plan 2006 - 2011, pp. 11,12, MOTI

sector because competition in the private sector often brings about better service than the public sector in economically viable fields. It is necessary to identify which services the government needs to reinforce and, at the same time, which ones to streamline in order to avoid redundancy. Secondly, the duplications of the services among the public agencies have to be avoided while each agency focuses on the service delivery of its core competence. Duplication not only makes the service delivery economically inefficient but also prevents the agency from concentrating its resource on specialised area whose service level should be improved. Thirdly, coordination among the service providers is very weak, and it is very difficult to know which service is available from where.

### **5.1.3 Creation of the Kenya Industrial Development Platform (KIDEP)**

There are many initiatives and services offered by BDS providers, the financial sector, universities, R & D institutes, and associations. Yet, Kenyan manufacturers do not have one particular place where they can consult on various operational problems since each agency operates separately based on its own mandate. The current isolated status makes it difficult for the manufacturers to know where to go to solve their problems.

There are already various "one-stop-shop (OSS)" initiatives on going for respective target groups such as KenInvest for investors, EPC for exports, and EPZA for EPZ enterprises. Donor agencies also support creating OSS; i.e. the Small and Medium Enterprise (SME) Solutions Centre<sup>52</sup> (SSC) in Nairobi by International Finance Corporation (IFC) and the District Information Centres and the Business Solution Centres<sup>53</sup> by UNDP. In spite of all these initiatives, there is no general consultation point, open to any manufacturer during office hours in a location easily accessible for MSMEs in Nairobi.

Recognition of the issues mentioned above calls for creation of a platform for comprehensive one-stop service centre, which would create effective networks with various supporting institutions and become the practical contact window for the manufacturers. MAPSKID names this platform "the Kenya Industrial Development Platform" (KIDEP), where all the services geared towards strengthening internal innovation of the industry. This is the concept of providing the services on one platform that is coordinated and streamlined while each service is expected to be upgraded to meet the needs of the manufacturers.

In order to create KIDEP, MOTI needs to appoint or set up one agency or section that integrates all service information into one platform, which is connected to the ICT network so that information can be shared among stakeholders and beneficiaries regardless of their locations. KIDEP is expected to function and be open to all traders and manufacturers regardless of their sizes and accept visits during office hours without prior appointments.

The features required under KIDEP will include the following:

---

<sup>52</sup> The supporting areas of SSC are i) business enabling environment, ii) access to information, iii) access to finance, and iv) capacity building.

<sup>53</sup> under the Youth Employment Scheme - Micro and Small Enterprise Programme

---

- i) Facility: equipped with a library and computers, which link to various databases and Internet and can be searched by the visitors by themselves
- ii) Target beneficiaries: manufacturers and traders
- iii) Visitors: anyone can come in after registration at the reception
- iv) Location: easy and friendly access within Nairobi
- v) Scope of Work:
- vi) Construction and maintenance of a portal site, which connects to various databases and homepages of other supporting agencies. The portal site should also connect to the Trade and Industrial Information System, which is planned to be set up under the initiative of e-Government. The portal site and the Information System will be shared with other OSS initiatives.
- vii) Creation and maintenance of the manufacturer and trader directory (See Chapter 4.3.2-(3))
- viii) General consultation services on technology, management, marketing, and finance including introductions to the relevant specialised agencies
- ix) Introducing and dispatching BDS providers
- x) Consultations: allocation of officers who are knowledgeable in supporting schemes and institutions for industrial development and have wide human networks
- xi) Monitoring: the visitors are requested to fill in an evaluation form on the service quality of KIDEP so the services can be reviewed for improvement constantly.

ICT development has made networking with other OSS initiatives easier and less costly. Since the infrastructural conditions of ICT will be improved rapidly, the information contents which support industrial development need to be urgently constructed in order for the industry to benefit from the ICT development. It should be designed to show the competitive edge of the Kenyan industry and the quality of the service needs to be maintained through listening to the voices of the users. Success in the KIDEP would be beneficial not only for the existing manufacturers but also for potential new investors.

## **5.2 Technological Development**

### **5.2.1 Current status of technological capacity**

Technological capacity is a reflection of the industrialisation level in Kenya. Its growth is the source of creating industrial competitiveness to survive in the global markets. Industrial technological capacity of the nation can be analysed by both internal and external factors of manufacturers; the former comprises engineering and management technologies, and the latter comprises effectiveness



of supporting institutions and policy measures.<sup>54</sup>

- i) Internal technological capacity
  - Equipment capacity
  - Element technologies
  - Procurement availability
  - Management technology
- ii) External technological capacity
  - Capacity of sub-sectoral organisations
  - Capacity of supporting institutions
  - Effectiveness of policy measures

(1) Internal technological capacity

1) Equipment capacity

Equipment technology is one of the weakest characteristics of the Kenyan industry. Equipment technology can be assessed by the machine utilisation rate and capital productivity. Since most manufacturers are not adopting production management, exact figures are unknown; however, Kenya is known for low rate of machine utilisation and it has been pointed out.<sup>55</sup> The high idle rate is explained by four reasons. Firstly, weak industrial linkage tempts the manufacturers to produce more parts internally instead of outsourcing. This makes the factories to have various machineries. Secondly, weak industrial linkages also cause delay in procurement of necessary inputs and leave machinery idle until the inputs are delivered. Thirdly, the small market size tends to make the manufacturers opt for the horizontal growth rather than specialisation. The manufacturers acquire machinery more and more when they find market opportunities, but deterioration of the macro environment between the late 1990's and mid 2000's did not provide enough volume of jobs to make machinery fully operational. Fourthly, lack of maintenance capacity and replacement parts have left broken machinery unrepaired.

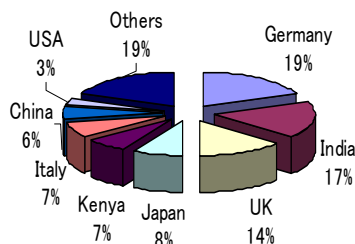
On the other hand, Kenya has some capacities in supplying domestic machinery as long as required technology is basics, particularly in agro-machinery sub-sector (See Chapter 10.2). According to the survey on the KAM members, majority of the machinery is imported from Germany, India, and UK while Kenyan machinery occupies the share of 7 % (Figure 5-2). While a few leading manufactures are equipped with the new models, the rest are using old machinery, which were mostly imported in the '80s and '90s. The weakest nature of equipment capacity is lack of design capacity, placing limitations not only on development but also on modification of machinery. In terms of maintenance

---

<sup>54</sup> Theoretical framework of this chapter relies on JICA, Mitsubishi UFJ Research and Consulting, IMG Inc. (2006) "Chuusho Kigyo Shinko ni okeru Hatten teki Dankaibetsu Shien Approach" (Phased Approach to the SME promotion), JICA. Original text is available in Japanese only. Some modifications are made in the course of analysis to adjust to the context of the Kenyan industry.

<sup>55</sup> For example, see MOTI (2007) Draft National Industrial Policy as of 26<sup>th</sup> October 2007, p. 9

capacity, Kenya is capable of fixing machinery as long as the required technology is basic. Some middle and large-scale factories have maintenance sections to keep the machinery running.



Source: KAM (2006) Kenya's Manufacturing Industry: A Survey of the Sector 2005, p.21

**Figure 5-2** Origins of Plant and Equipments among KAM members in 2005

## 2) Element technologies

Element technologies are defined as technologies that are necessary to design and process parts, modules, assemblies, or whole products. Element technologies used in the global industry are both wide and deep. Competitive industrial products are made out of interdisciplinary technological elements with each element having some innovative invention. This is why networking among the enterprises such as joint ventures, subcontracting, and the public-private-academia partnership is getting more and more important while each company pursues competency in specialised technological elements. Kenyan industry has not developed such a network. Instead, it attempts to do everything internally as it seeks for imported parts which they cannot produce by themselves.

### **Box 5-1: "Only one" company**

Japanese MSM manufacturers have been suffering from increasing global competitions since '90s. Due to the high cost of production in Japan, they cannot compete by price particularly with the Chinese products. To cope with the changing business environment, the Japanese MSM manufactures started to take a strategy of becoming "only one". Each manufacturer now tries to identify one speciality, in which it becomes the "only one" to provide specialised service/product that no other companies can easily imitate. Becoming the "only one" is a strategy of the company to differentiate from others. To maintain such "only one" symbol, the enterprise continuously places its efforts for upgradation or modification. Manufacturers which do not pursue such paths cannot appeal themselves in rapidly changing global markets. Many of such manufacturers either became extinct or are still suffering severely.

Competency in element technologies is fundamental for producing value-added products in the global markets. It requires attitudes of the companies for continuous search towards quality improvement. Although Kenyan manufacturers show some level of competency in processing techniques, they are weak in product development and designing. According to the Enterprise Surveys by WB, Kenyan manufactures spent 0.5 % of the sales on R & D activities in contrast to 1.7 % by the Sub-Saharan African average in 2003.<sup>56</sup> Many Kenyan manufacturers rely on basic technology derived from machinery with very limited innovative and product development activities. Without capacity in element technologies, companies will not be able to capture the demand of the markets and, instead, tend to operate in a supply-driven manner. Such companies typically complain about increasing global competition and dwindling market share. On the contrary, a few leading

---

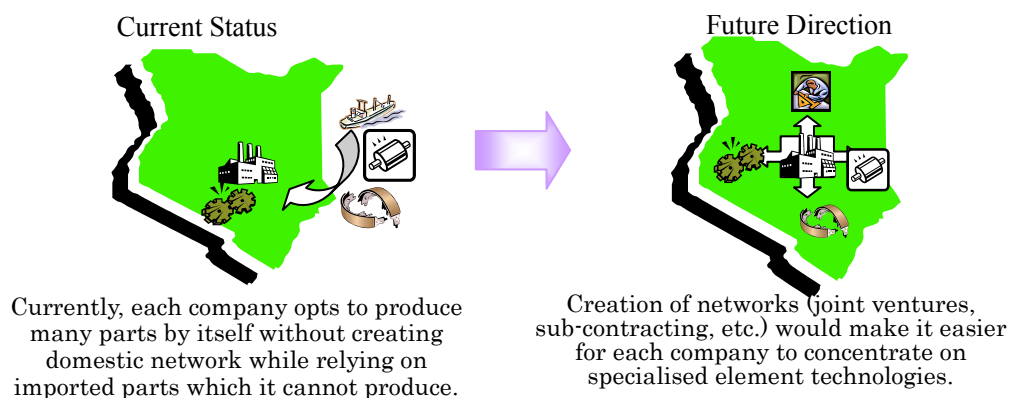
<sup>56</sup> WB, Enterprise Surveys <<http://www.enterprisesurveys.org/>>

export companies demonstrate relatively high capacity. They are conscious of the market trends, customer's preference, and competitors' products and try to adjust their products accordingly. (See Box 5-1)

### 3) Procurement availability

Procurement availability means the level of domestic sourcing of materials and parts. This is another very weak area of the Kenya industry. Usage of imported materials and parts increases the cost of the production and makes the Kenyan products less competitive. Local procurement is also vital in increasing technological capacity because proximity of the suppliers would enable close negotiations and adjustment in ordering and developing products.

Kenyan industry has developed some level of procurement networks. In terms of raw materials, agro products are used in various sub-sectors including food, beverages, chemical, textile, leather, furniture, and paper. In terms of industrial parts, automotive sub-sector and food sub-sector have various suppliers. In the automotive sub-sector, suppliers include tyres, harnesses, frames, seats, exhaust pipes, glasses, batteries, and springs. In the food processing, they include paper, plastics, containers, bottle cases, glue, and ink. However, the supplier network in the automotive sub-sector is weakening after the original equipment makers stopped production of passenger vehicles. In other sub-sectors, supplier networks are very limited, mostly relying on imported inputs. Strategies for expansion of the local sourcing and sub-contracting need to be reinforced.



**Figure 5-3      Networking for Technological Capacity Development**

### 4) Management technology

Management technology is becoming increasingly important in competitiveness creation of manufacturers. Kenyan manufactures started to recognise the importance of management technology in the aspect of cost cutting, whose practice was introduced through consultations on *Kaizen*, energy efficiency, and cleaner production activities (See Chapter 6.1). Yet, a few manufacturers have internalised management methodologies including those basic ones like 5S and visual controls (Box 5-2). Moreover, Kenyan industry has not been exposed to the best management technology in the world. The best practice in management technology in manufacturing is a philosophy of each company, which include pursuing infinite innovation and eliminating wastes with methodologies such as *Kaizen*, total quality control, total production management, just-in-time, etc.

Existing sources of management technology information can be found either from a few multinational companies which are practicing production management adopted throughout their global group companies or from some programs organised by KAM and donors. The Productivity Centre of Kenya launched in 2002 under MLHRD conducts seminars and trainings on the basics of production management, but its mandate is wider than the manufacturing sector. As such, some intermediaries are needed to provide consultancy and trainings on the production management.

The level of management can be evaluated based on Quality, Cost, and Cycle Time (QCT) standards. The leading manufacturers require that their subcontractors keep high QCT standards; i.e. producing high quality products with low cost in short cycle time. In an endeavour to meet the required standards, local subcontractors can learn and adopt the best management system internally. In Kenya, the concept of QCT is lacking although this is the key to productivity improvement for the manufacturing sector. Improvement in capacity in management technology is the area where awareness of the whole industry and supporting institutions has to be quickly raised. Inviting top multinational manufactures to Kenya is considered the most effective way to quickly disseminate the management technology since the way to internalise the management techniques is unique, which is difficult to learn by theory. (See Chap 5.3 and 5.5)

**Box 5-2 5S and Visual Control**

5S is the basic methodology of production management. 5S stands for five Japanese words which start with the letter "S"; i.e. *Seiri, Seiton, Seisou, Seiketsu, and Shitsuke*. As 5S activities became practiced globally, the five words are interpreted in many ways such as *Separating, Sorting, Shining, Standardising, and Sustaining*. Although these wordings seem to mention only about standardisation of cleaning, its practice is actually the source of productivity improvement in manufacturing. The leading manufacturers often screen the MSM manufacturers from the subcontractor's list if 5S is unpractised. Since absence of 5S instantly means that the company is unconscious of QCT standards.

Visual Control is often implemented together with 5S. Visualisation enables sharing of problems or performance instantly with the workers and involving them in improving performance. The level of usage in Visual Control demonstrates the management capacity of the manufacturers for attaining higher QCT standards. Thus, the leading companies take notice of the use of visual control when identifying their sub-contractors.



5S signs: 5S is adopted worldwide with some modification made by each company. (Left: 6S in English. Middle: 3K in Indonesian. Right: 5S in Thai.)



Example of Visual Control: Issues arising from production process is analysed and being showed on the wall. This helps raising awareness of issues and motivating workers towards improvement.

(2) External technological capacity

1) Capacity of sub-sectoral organisations

Top industrialised countries have sub-sectoral organisations that undertake activities to upgrade technological capacity of their sub-sectors. Their activities include trainings, seminars, collaborative researches, and collection and dissemination of technological information. Although KAM has

sub-sectoral committees, they have not been very active.

Cluster approach, which is nowadays promoted in many nations, tries to create both horizontal and vertical networks. Cluster is interconnected companies and institutions through horizontal and vertical networks relating to a particular sub-sector, and it is often the case that the formalisation of the networks subsequently leads to establishment of sub-sectoral organisations. Initially, it takes time for the enterprises in the sub-sector to come together since they see each other as competitors. However, they gradually understand that cooperation is indispensable to raise competitiveness. Such conceptual transition usually takes a year even with facilitation by a talented agent.

In Kenya, the cluster approach is being tried out among MSEs with the support of donors and NGOs under the value-chain approach, which emphasises creation of vertical and horizontal linkages that connect stakeholders from suppliers to the markets. Since existing programs are likely to be designed to empower the poor, it has not been undertaken with the leading manufacturers as the main players. The recommendation for creating sub-sectoral committees (Chapter 3.2; Action Plan 1.3.1) is expected to eventually lead to the formation of the sub-sectoral organisations.

## 2) Capacity of supporting institutions

R & D activities are carried out in public R & D institutions, international R & D institutions, and universities. All the public research institutions have mandates to disseminate research findings effectively. Under the recent public sector reforms, more public research institutions including universities are interested in the technology transfer of their research findings and incubation activities albeit only a few successful cases have been observed so far.

KIRDI, established by the Science & Technology Act (Cap.250 in 1979), is the national R & D institution under MOTI. KIRDI is mandated to carry out R & D in industrial and allied technologies. KIRDI has six departments, namely engineering, food processing, leather and textile, mineral, environment, and ICT. It has a regional office in Kisumu. KIRDI manufactures and sells some prototype agro-processing machinery. Yet, production technology of the prototype machinery has not been successfully transferred to the manufacturers. Recognising the importance of strengthening technological transfer from KIRDI to the private sector, KIRDI has changed its approach from the supply-driven to the demand-driven through identifying the technological needs of their target manufacturers.

KIRDI's unsatisfactory performance is partly attributable to low funding. Among four major public R & D institutions, funding towards KIRDI is the lowest while Kenya Agricultural Research Institute (KARI) receives the highest (Table 5-1). These government institutions are also required to generate their own funds by undertaking consultancy services, tailor-made researches, and so forth. It has been suggested that funding towards the industrial R & D activities should be increased.

**Table 5-1 Estimated Expenditures of the National Research Institutions**  
(million Kshs., %)

	2006/7 Estimated Expenditure				Ratio to total expenditure of the line ministry		
	Recurrent	Development	Total	Share	Recurrent	Development	ministry
KARI	1,370	1,397	2,767	65.2%	23.4%	31.5%	MOA
KEMRI	852	22	874	20.6%	–	0.2%	MOH
KMFRI	353	5	358	8.4%	–	0.3%	MOLFD
KIRDI	206	42	248	5.8%	9.6%	6.8%	MOTI
	2,781	1,466	4,246	100.0%			

Note: KARI; Kenya Medical Research Institute; Kenya Marine and Fisheries Research Institute (KMFRI), above covers financial resources from the line ministries only.

Source: 2006/07 Estimates of Development Expenditure

Although the Kenyan government does not directly allocate much funding to industrial R & D activities nowadays, there was a time when Kenya put enormous inputs in bringing up her industrial technological capacity. Most illustrative event was production of local cars called Nyayo Pioneers between mid 1980's and early 1990's. As a project in the University of Nairobi (UON), two models of sedans and three models of light trucks were produced. 60 % of inputs were locally produced together with approx. 100 suppliers. In 1994, the project ended and transformed into NMC as a parastatal under MOTI. Yet, the Project has never been transformed into commercial production of Nyayo Pioneers. Having produced many components internally, NMC is equipped with a variety of computer numerical control (CNC) machines and milling machines as well as the largest foundry in East and Central Africa with a capacity of producing 160 blocks per hour at precision of  $\pm 0.01\text{mm}$ .<sup>57</sup> NMC now manufactures various parts for automobiles and agro-machineries. Although NMC is trying to find markets by itself, it cannot find demand large enough to make their equipment fully operational. The machine utilisation rate was said to be only 10 % at the time of interviews in September 2006. Lack of an aggressive market strategy also has kept its technological capacity unknown to the surrounding manufactures.

Kenyan universities also try to transfer their R & D outcomes to the industry. For example, UON has recently set up Science and Technology Park, which at its initial stage focuses on bio-chemical technology. The Science and Technology Park has an office floor kept for the graduates of UON who are willing to incubate business with their R & D seeds. The Park plans to support them in identifying business partners in the industry.

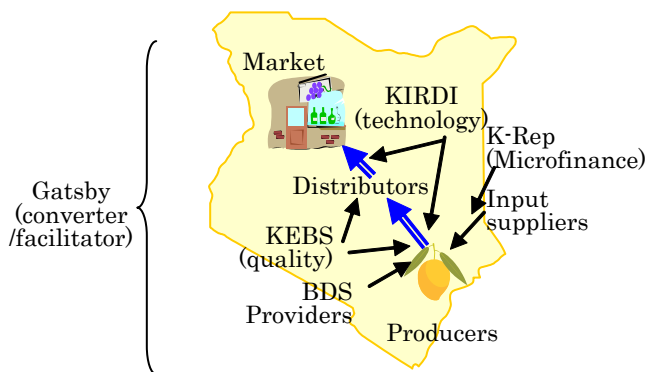
While the Science and Technology Park is the type of technology transfer targeting at higher level of the industry, the example from the Research, Production, and Extension Division at the Jomo Kenyatta University of Agriculture and Technology (JKUAT) has demonstrated some achievements, targeting at MSEs through training, students attachment, and consultancy services. One successful example is its collaboration with an NGO called Kenya Gatsby Trust (KGT). In the “Integrated Market Development Initiatives for Mango”, KGT tried to create forward linkages of mango juice processing from the mango producers in Malindi District. Identifying the needs to have

<sup>57</sup> Based on interview memo in September 2006

agro-processing machinery, KGT requested JKUAT to produce fresh fruit pulpers and trolleys that satisfy the quality demand of the buyers as well as technological capacity of the villagers.

In addition to the national R & D institutions, Kenya has several international R & D organisations including International Centre of Insect Physiology and Ecology (ICIPE), International Livestock Research Institute (ILRI), and International Centre for Research in Agroforestry (ICRAF). Although these research institutions have produced many R & D outcomes, only a few have been commercialised so far. The reasons for low commercialisation include a wide conceptual gap between the budget-oriented researchers and the profit-oriented manufacturers; difference in the research level; and a few ventures willing to take risks. To overcome these constraints, some instruments are necessary in both financial and human resources. In terms of the human resource, an experienced "converter" or "facilitator" is needed, who is specialised in business development and mobilises the stakeholders to work in the same project. (See Box 5-3)

Above mentioned KGT in “Integrated Market Development Initiatives for Mango” is one good example. In trying to develop the value chain by linking the mango producers in Malindi, KGT has involved many players including JKUAT for production of agro-processing machinery, KEBS for quality assurance, and the Kenya Rural Enterprise Programme (K-REP) for microfinance, buyers, BDS providers, etc. This type of converter work, which mobilises necessary resources, is essential for developing commercially viable products accompanying technological upgrades.



Source: Modified from presentation paper by KGT, Promoting Agro Processing in Rural Areas, Presented at the Agro-Processing/Agro-Machinery Sector Forum of MAPSKID on 14<sup>th</sup> February, 2007

**Figure 5-4      Creating Value Chains for Mango Producers in Malindi**



### Box 5-3 An Example of Converters

An example of converters is a Swiss-based venture capital firm called Bridgeworks, which established an office in Nairobi in 2004. Bridgeworks has tied up with ICIPE in commercialising R & D outcomes from ICIPE. One of the major on-going projects is commercialisation of Neem products under the brand name of Biop. Made out of herbal trees called Neem, the products of Biop range from tea, cake powder, soap, shampoo, hair treatment, skin cream, skin oil, to fertiliser. While recognising good responses from the markets, Bridgeworks is making a business plan and trying to identify the partners which have production capacity well enough for exports in terms of quality and volume. Thus Bridgeworks' function is not only financing the start-up business but also identifying strategies and partners for successful commercialisation.



### 3) Effectiveness of policy measures

Policies for technological upgrades are formulated by the Ministry of Science and Technology (MOST) in the areas of science, technology and innovation (STI) and technical, industrial, vocational and entrepreneurship training (TIVET). MOST recognises that the current national activities in science and technological development spread across various actors including those in the government, semi-government, private, non-government, and universities. Without coordination, such fragmented and duplicated activities have made very limited accomplishments.<sup>58</sup>

With a back up by the Vision 2030, which considers that enhancing STI is fundamental for economic transformation, MOST is developing an STI policy and the National TIVET Strategy. In formulating STI policy, setting up R & D funds for promoting commercialisation of R & D outcomes have been examined by MOST. In addition, the draft National TIVET Strategy is proposing setting up an inter-ministerial committee called TIVET Authority, in which the Permanent Secretary of MOTI shall be a member, and developing TIVET National Qualification Framework. These policies are expected to improve effectiveness of commercialisation of R & D outcomes and upgradation of industrial human resources. (See Chapter 5.7 for TIVET)

MOTI, on the other hand, is in charge of standardisation and accreditation that are practiced by KEBS and Kenya Accreditation Service (KENAS). KEBS was established to promote standardisation in industry and commerce under Chapter 496 of 1974. KEBS covers all standards except those of drug and medicine which are covered by the Pharmaceutical and Poison Board, phytosanitary by the Kenya Plant Health Institute, and pesticides by the Pest Control Board. KEBS undertakes the policy formulation on standard and metrology, provision of information and advisory services, and certification and accreditation. It has regional offices in seven cities, namely Nairobi, Kisumu, Mombasa, Nakuru, Eldoret, Nyeri, and Garissa. Yet, Nairobi office is the only one equipped with a complete laboratory testing facilities while Kisumu and Mombasa have testing capacity only

<sup>58</sup> MOST, Strategic Plan 2007-2012, p. 5

for food and chemicals.

KEBS creates both mandatory and voluntary standards through close consultation with the stakeholders. While the mandatory standards are for consumer protection, the voluntary standards aim to lead competitiveness creation. Standardisation also needs to ensure conformity and harmonisation with the international agreement and obligation as designated by bodies such as WTO process. Therefore, optimisation of the level of both mandatory and voluntary standards is necessary in order to contribute to more comprehensive competitiveness improvement.

The problem of KEBS has been lack of international recognition of its standards. Accordingly, KENAS was established in 2005 so as to be developed into accreditation of conformity assessment and service provision for inspection, testing, and certification. The main aim of KENAS is to become an internationally recognised accreditation body that will offer cost effective accreditation to its customers. KENAS is expected to benefit the exporters, which are currently paying high cost for receiving accreditation from overseas consultants. However, KENAS is still at the infant stage as an institution and is highly dependent on KEBS in terms of financial resource and facilities. Strengthening the public support towards KENAS is required.

## **5.2.2 Future Directions of Development of Technological Capacity**

### **(1) Assessment of technological capacity levels**

In order to depict the technological development paths, Table 5-2 shows analysed development statuses of Kenya industrial technologies with a break down of the seven components discussed in the previous section.

**Table 5-2 Development Levels of the Industrial Technological Capacity**

	Level 1	Level 2	Level 3	Level 4	Level 5
Equipment Capacity	<ul style="list-style-type: none"> <li>• Operation only</li> <li>• Lacks in maintenance capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of simple maintenance</li> <li>• Existence of some MSMEs, which can provide maintenance services</li> </ul>	<ul style="list-style-type: none"> <li>• Planned operation of machinery</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of modifying and upgrading machinery</li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturing fully designed and exportable machinery</li> </ul>
Element Technologies	<ul style="list-style-type: none"> <li>• Simple production processes</li> <li>• Serving the needs of limited markets</li> </ul>	<ul style="list-style-type: none"> <li>• Mainly light industry</li> <li>• Existence of some MSMEs with sound technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of developing original, exportable products</li> <li>• Some companies are equipped with fundamental technologies that can compete in the global markets.</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of developing original designs</li> <li>• Emergence of early phase of supporting industries</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of designing and developing precision products</li> </ul>
Procurement Availability	<ul style="list-style-type: none"> <li>• Most inputs are imported.</li> </ul>	<ul style="list-style-type: none"> <li>• A small portion of inputs are produced domestically.</li> </ul>	<ul style="list-style-type: none"> <li>• Major inputs can be procured domestically in spite of lack of supply chain management.</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of horizontal and vertical linkages in production of inputs albeit low QCT standards</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of horizontal and vertical linkages in production of inputs with high QCT standards</li> </ul>
Management Technology	<ul style="list-style-type: none"> <li>• Management technologies are hardly practiced.</li> </ul>	<ul style="list-style-type: none"> <li>• Basic methods of production management are practiced such as 5S, visual controls, and standardisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Some enterprises are practicing standardisation methodologies with quality assurance such as total production management</li> </ul>	<ul style="list-style-type: none"> <li>• Strict production control is practiced in the areas of quality management, inventory reduction, and SCM.</li> </ul>	<ul style="list-style-type: none"> <li>• Strict production control is practiced with support of ICT</li> </ul>
Sub-sectoral Organisational Capacity	<ul style="list-style-type: none"> <li>• Sub-sectoral organisations do not exist.</li> </ul>	<ul style="list-style-type: none"> <li>• Some sub-sectoral organisations exist albeit inactive.</li> </ul>	<ul style="list-style-type: none"> <li>• Some sub-sectoral organisations are actively involved in collecting and disseminating R &amp; D information.</li> </ul>	<ul style="list-style-type: none"> <li>• Many sub-sectoral organisations are actively involved in collecting and disseminating R &amp; D information.</li> </ul>	<ul style="list-style-type: none"> <li>• Most sub-sectors have sub-sectoral organisations that are actively involved in collecting and disseminating R &amp; D information.</li> </ul>
Capacity of Supporting Institutions	<ul style="list-style-type: none"> <li>• Inexistence of public R &amp; D institutions</li> </ul>	<ul style="list-style-type: none"> <li>• A few public R &amp; D institutions exist.</li> <li>• Existence of technological development policy</li> </ul>	<ul style="list-style-type: none"> <li>• Activities of the R &amp; D institutions cover nationwide.</li> <li>• Existence of effective technological development policy</li> </ul>	<ul style="list-style-type: none"> <li>• Supporting institutions are closely collaborating horizontally.</li> </ul>	<ul style="list-style-type: none"> <li>• Existence of leading private R &amp; D institutions that are acknowledged globally</li> </ul>
Effectiveness of Policy Measures	<ul style="list-style-type: none"> <li>• Inexistence of qualification system and standardisation, and accreditation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Limited practice of qualification system and standardisation, and accreditation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Qualification system, standardisation, and accreditation measures exist albeit limited impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualification system, standardisation, and accreditation measures exist with some impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualification system, standardisation, and accreditation measures are effectively functioning.</li> </ul>
Overall Assessment	<ul style="list-style-type: none"> <li>• Very early stage of industrialisation with simple processing technology</li> </ul>	<ul style="list-style-type: none"> <li>• Primarily relying on agro-processing</li> <li>• existence of small subcontracting network</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement in production management, which enables mass production mainly in the light-industry</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement in equipment maintenance and modification that enables assembling work despite low value addition</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrating manufacturing competencies in all the components; assembling work with high value addition</li> </ul>

Note: The current technological level of the Kenyan industry is highlighted.

Source: With reference to JICA, Mitsubishi UFJ Research and Consulting, IMG Inc. (2006) "Chuusho Kigyo Shinko ni okeru Hatten teki Dankaibetsu Shien Approach" (Phased Approach to the SME promotion), JICA, some modifications are made by the JICA Study Team.

Assessment of internal technological capacities is difficult due to variations in technological level among the manufacturers. Yet, it can be observed that the Kenyan manufactures are generally in the level 2 except the management technology, which is in level 1. In reference to the above analysis, the following eleven measures are considered effective in upgrading into the next levels.

- i) Improvement in business environment, which motivates the manufacturers to invest into R & D activities (discussed in Chapter 2),,
- ii) Promoting local production of agro-processing machineries to lead the capacity development of equipment technology (discussed in Chapter 10.2),
- iii) Promoting use of local agro products in manufacturing (discussed in Chapter 10.1),
- iv) Promoting technology transfer through inviting global leading manufactures (discussed in Chapter 5.7),
- v) Assisting in international standardisations,
- vi) Promoting vertical and horizontal linkage creations among manufacturers,
- vii) Promoting commercialisation of R & D outcomes,
- viii) Promoting sub-sectoral activities (discussed in Chapter 3),
- ix) Strengthening TIVET (discussed in Chapter 5.7) on industrial designing,
- x) Strengthening TIVET on management technology (discussed in Chapter 5.7), and
- xi) Establishment of TIVET national qualification system (discussed in Chapter 5.7).

In this section, three measures, which are strongly related to technological development, are highlighted, namely v) assisting in acquiring international standardisation, vi) creating vertical and horizontal linkages among manufacturers, and vii) promoting commercialisation of R & D outcomes while other measures are discussed in other sections specified in parentheses.

## (2) Toward action plans

### 1) Assisting in international standardisation

KEBS is one of the active supporting institutions, trying to upgrade quality of Kenyan products through standardisation. Yet, lack of acknowledgement of its standards by the global markets has left the exporting companies to have no choice but to receive accreditation from foreign organisations. Such institutional un-readiness is not only adding to the cost of production but also making it difficult for the manufactures to receive close consultations on the global standards. Accordingly, strengthening capacity of KENAS is considered crucial. KENAS is in the process of building the necessary technical capacity that enables providing accreditation services required by international best practices as enshrined in ISO/IEC 17011:2004 and other ILAC/IAF guidance documents that include the key performance indicators. Envisaged activities for capacity development of KENAS are as follows:

- i) Supplying laboratory equipment,
-

- ii) Training laboratory personnel,
- iii) Overseas trainings for the accreditation staff in the fields of calibration, testing, inspection, certification, medical laboratories, marketing of accreditation, and development of accreditation scope, and
- iv) Awareness seminars for the industry.

## 2) Creating vertical and horizontal linkages among manufacturers

As discussed in Chapter 5.2.1, increasing global competition calls for interdisciplinary technological elements while each company is specialised in certain technological element. This makes networking among the manufacturers indispensable to compete in the global markets.

One practical solution is promoting tear-down practice, which is the initial step in reverse engineering. It is a popular methodology for learning from existing technology for the purpose of modifying or developing new products. Tear-down involves a thorough breakdown of equipment followed by a detailed study on components and subassemblies of the equipment.

Tear-down forums, which invites potential suppliers, is a methodology for identifying subcontractors to the original equipment. The tear-down forum is also a good opportunity to create a horizontal network since the forum calls in manufacturers operating in the same field. Discussing technological capabilities in the forum often motivates the attendants to venture into higher value-added production through collaboration. Moreover, the forums provides opportunities for the Government, particularly MOTI, KenInvest, and EPZA officers, to learn about the technological capabilities of the suppliers. Learning about the suppliers' capabilities would help the Government to appeal to foreign assemblers to invest in Kenya because suppliers' availability is one key factor for choosing the production location for the assemblers.

The implementation of tear-down forums is divided into two stages. In the first stage, the public sectors take the initiative to hold the forums in order to motivate manufacturers to carry out tear-down. In the second stage, the manufacturers will implement tear-down forums by themselves in accordance with their detailed needs. MAPSKID team in collaboration with KIRDI held the tear-down forums to introduce the tear-down exercises to Kenya (Reported in Chapter 10.3). It is recommended that this effort be continuously undertaken in Kenya for upgrading technological capability of the Kenyan industry and producing higher value added products.

**Table 5-3 Holding Tear-down Forums**

	Activities	Purposes
1 <sup>st</sup> Stage	KIRDI and MOTI take a lead in inviting local potential suppliers to the Tear-down forum.	<ul style="list-style-type: none"> <li>• Identifying capabilities of the local manufactures</li> <li>• Creating horizontal collaboration</li> <li>• For the government to learn capabilities of the local suppliers and to promote investment to Kenya by assemblers</li> </ul>
2 <sup>nd</sup> Stage	Tear-down forums are held with full participation of the assemblers.	<ul style="list-style-type: none"> <li>• For the assemblers to identify the local suppliers</li> <li>• Creating vertical and horizontal linkages</li> </ul>

### 3) Promoting commercialisation of R & D outcomes

With presence of many leading R & D institutions in Kenya including those international ones, Kenya is considered to have many R & D outcomes, which can be commercialised, particularly in the area of agro-processing. To promote commercialisations, assistances in both financial and human resources are required. In terms of the human resource, an experienced "converter" is needed. Converter is a type of BDS provider specialised in business development and mobilises the stakeholders to work in the same project. Then availability of financial resources would stimulate activities of the converter and efforts towards commercialisation.

Commercialisation of R & D outcomes is considered a risky area; yet it requires long-term funding. Since the required funding is quite large, a combination of grant scheme, concessional loan-scheme, and mobilisation of the venture capital funding can be considered. Various measures are being considered to increase the funding mechanism including R & D fund under the STI Policy and promotion of venture capital funding.

In addition to on-going discussions, the Master Plan particularly proposes setting of concessional loan scheme with long-term and low-interest rate. A loan scheme is considered appropriate because bearing risks for repayment would induce endeavour of the private sector towards the successful return. The loan facility requires well prepared structure and system as well as securing and allocating funds. When introducing the scheme, it is necessary to involve commercial banks and/or venture capital companies while the Government sets up an advisory committee to offer necessary assistance throughout the commercialisation process.

## **5.3 Management and Market Development**

### **5.3.1 Issues for management and market development**

#### (1) Management

##### 1) Supporting institutions for management

Management techniques mean controlling and organising internal and external resources in a most effective manner. As discussed in the previous section, management technology is considered one integral component of industrial technology.

Kenya has relative strengths in the area of business administration since trainings on business administration are popular in Kenya. Many universities offer MBA courses, including UON, Moi

University, United States International University, JKUAT, Kenya Methodist University, among others. Law and accounting are also popular professions in Kenya.

KIBT under MOTI has a range of management trainings in the area of human resources, procurement, inventory, and finance. In addition, the Kenya Institute of Management (KIM), a private institution with membership of more than 4,000 individuals and about 500 corporate members, has been active since the '50s. In 2000, KIM started to provide the Company of the Year Award to the best performing companies in 10 management subjects; namely, i) corporate planning, ii) marketing, iii) human resource, iv) financial, v) information, vi) quality, vii) creativity & innovation, viii) corporate citizenship, ix) environment, and x) supply chain. After selection, participants have a chance to visit the awarded companies to witness their good practices. KIM recently announced its intention to offer an MBA course for the senior managers and executives in collaboration with JKUAT.

Supply chain management is another area, which has made some progress. The Kenya Institute of Supplies Management (KISM), a private organisation receiving support from the United States Agency for International Development (USAID), offers consultancy services and short-term trainings. KISM collaborates with Afrinet Commerce Limited, which provides an e-procurement solution called e-Sokoni.<sup>59</sup>

In spite of all these progress, the area of production management has not been fully highlighted. It is only recent that manufacturers started to appreciate production management through *Kaizen* and energy efficiency activities supported by KAM and the Kenya Cleaner Production Centre. However, it is only in the area of cost reduction (C). Management practices to improve quality (Q) and cycle time (T) have not been much appreciated.

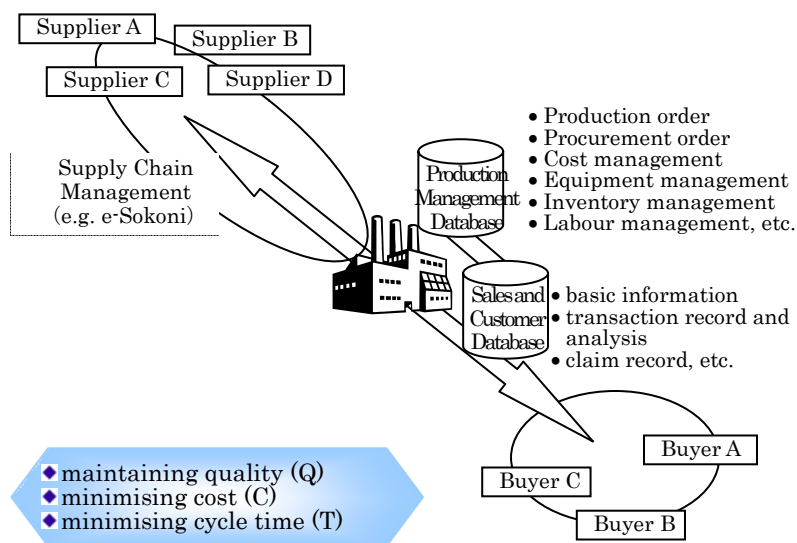
## 2) ICT for management

In maximising QCT standards, production needs to be undertaken based on the market information; i.e. planning of upstream production to be based on the estimated demand of downstream markets. Use of ICT has tremendously improved productivity of the global manufacturers and enabled to integrate upstream and downstream production. In competing in the global markets, Kenyan manufacturers also have to take advantage of ICT.

As discussed in Chapter 10.3.2, ICT is the fastest growing sector in Kenya. Many types of ICT solutions are already available through application service providers like e-Sokoni or by packaged software. In addition, there are some local software developers although they currently seem to concentrate in the areas of human resource management, financial management, and customer services. Yet, use of ICT in the manufacturing sector is still at the infant stage. MOTI is recommended to take up study on ICT solutions for the manufacturing sector in collaboration with KAM and ICT associations (See Table 10-41 for the list of ICT associations) and to identify strategies to promote usage of ICT solutions in the manufacturing sector.

---

<sup>59</sup> At the time of interviews in May 2007, 8 leading manufacturers were using e-Sokoni solution.



Source: The JICA Study Team

Figure 5-5 ICT for Management of the Manufacturing Sector

## (2) Market development

### 1) Issues of market development

One problem of the Kenyan manufacturers is a weak linkage with the domestic markets. The formal shops are small in size except for Uchumi, Nakumatt, and a few more big stores like Tuskys, Style Mattress, and Woolmarts. Moreover, payment conditions to the stores are often unfavourable for the micro, small and medium (MSM) manufacturers, who don't have bargaining powers. It is not rare that the terms of payment from the stores often exceed 90 days and that many pay only after sales are made. Such payment conditions cause problems in cash flow for the MSM manufacturers, which tend to avoid using outlet channels and venture into direct selling, albeit unstable. The situation is different for the leading manufacturers since they can bargain with the formal shops, and some have their own distribution networks. Lack of statistics also makes it difficult to estimate the market size. It is difficult to expect to the manufacturers to find an investment expansion strategy under market uncertainty. The only existing assistance in the domestic market development by the government is purchase by Uchumi, which gives preference to the local manufacturers in procurement.<sup>60</sup>

### 2) Business to Consumer (B2C) e-commerce

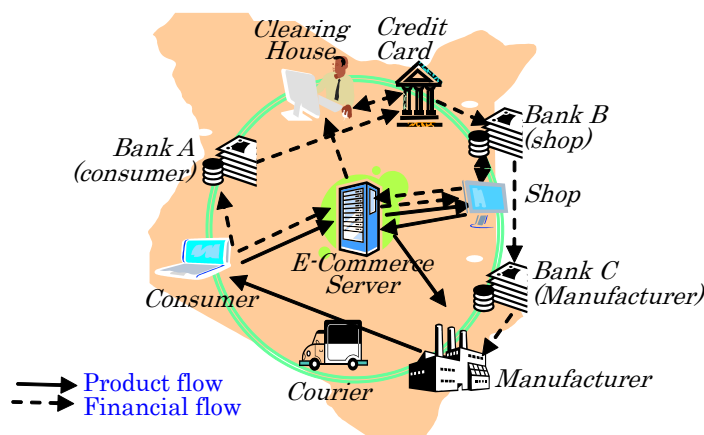
Among all the tools ICT can avail to the manufacturing sector, one that needs urgent support from the Government is B2C e-commerce because it deals with the mass that requires legal protection. B2C e-commerce tremendously reduces distance barrier, and it offers market opportunities to the rural enterprises. The developed market opportunities would be enormous for the MSMEs. The Government is now in the process of setting up the legal frameworks.

Figure 5-6 illustrates one transaction pattern of B2C e-commerce. B2C e-commerce integrates

<sup>60</sup> At the time of interviews in September 2006, Uchumi was trying to fill 70 % of the stocks with the domestic products.



information and communication, logistics, finance, and trading into one platform over the ICT network. Setting up the legal framework is a prerequisite for all the entities to play on the platform.



Note: Above illustration is one pattern, in which payment is made by credit cards, and products are delivered from the manufacturers. There are many other possible patterns.

Source: The JICA Study Team

Figure 5-6 Development of B2C E-Commerce

The most important task of the Government for developing e-commerce is consumer protection. Since e-commerce has time lags between ordering, payment, and delivery, building trust in e-commerce transaction is necessary for development of e-commerce. The Parliamentary Committee has drafted the Consumer Protection Bill, 2007. The Draft Bill proposes establishment of the Kenyan Consumers Protection Authority with various members including KEBS, KAM, National Environment Management Authority (NEMA), Kenya Medical Association, Kenya National Farmers Association, MOTI, Attorney General, among others. Although the Bill does not envisage e-commerce transaction, this Bill can be the basis for setting institutional framework for consumer protection through e-commerce.

Another issue is setting up legal framework for use of credit cards in e-commerce. Kenya has issued 1.3 million cards, of which 66,000 cards are credit cards while the rest are debit cards.<sup>61</sup> To enable the use of credit cards in e-commerce, the following actions are considered necessary.

- i) To define card frauds in the Penal Code (Chap 63),
- ii) To accept computer printouts as exhibits in court,
- iii) To include data/identity theft on card information as an offence in the Penal Code,
- iv) To criminalise possession/importation of skimming devices, and
- v) To include cyber crimes in the Penal Code e.g. fishing, card generation, data theft, system hacking, and transmission of the skimmed data.

<sup>61</sup> Mogambi, C, Chairperson for Kenya Credit and Debit Card Association, Development of Credit and Debit Cards in Kenya and Challenges due to Lack of Legal Framework, Presentation Paper at Electronic Transactions Workshop, 13 November 2006.

The first and basic framework for e-commerce is expected to be supported by the Draft Kenya Communications (Amendment) Act, 2007. The proposed regulatory framework for e-commerce is derived from the Model Law on Electronic Commerce adopted by the United Nations Commission on International Trade Law (UNCITRAL). The Bill regulates recognition of electric records and digital signature. These are considered the starting points for establishing a legal framework of e-commerce. In addition, e-government under Office of the President recently drafted an e-Transaction Bill, which covers issues of legal recognition of digital signatures, cyber crime, data protection, and privacy.

Among the players involved in B2C e-commerce, the most underdeveloped component is logistics. Houses don't have numbering address, and delivery of the goods is normally up to the post offices except for establishments in major town where delivery by courier services is available. An efficient logistics system requires a good management system, similar to the management system discussed in the previous section.

However, it should be noted that business development is usually much faster than governmental actions. Once the business entities find market opportunities, they may jump in the first stage of B2C e-commerce. The first stage of e-commerce is implementable even under the current legal framework if orders are made through the Internet; yet delivery and payment is made to trustable nearby agents.

Currently, MOTI's work in developing e-commerce is limited, with the leading role taken by the e-Government. Because the main beneficiaries of B2C e-commerce are traders, retailers, and the manufacturers, MOTI is recommended to take a more active role to set up an institutional framework for B2C e-commerce. MOTI has shown its commitment in developing B2C e-commerce in its Strategic Plan (2006-2011) and Chapter 7 of the Draft Trade Policy.

### 3) Business to Government (B2G) e-commerce

There has been an outcry from MSMEs for the Government to provide them with business opportunities. However, the current status that entails complicated purchasing procedures by the Government makes it difficult for the MSMEs to join in the bidding. Consequently, the large-scale manufacturers and traders are in a better position to benefit from Government purchasing, which is the largest buyer in Kenya. The e-Government Strategy formulated in 2004 has set up a target of establishing e-procurement in the Government, i.e., B2G e-commerce. The e-procurement will simplify and increase transparency of the Government purchases and will widen up the opportunities for the MSMEs to join in the bidding process. While the main agency for setting up the e-procurement lies with MOF, MOTI is expected to support in speeding up the process and to assist traders and manufacturers in utilising e-procurement.

## 5.3.2 Actions for management and market development

### (1) Linking BDS providers with the manufacturers

There are many initiatives and services offered by BDS providers in Kenya, and they have comparative advantages in supporting management and marketing than the government officers. The

---

competitions among the BDS providers bring a better mechanism for offering better services. Moreover, many of them have experiences in working in the manufacturing sector, so they are in a better position to know the real issues and possible solutions.

It is recommended that, the proposed One Stop Shop in the Kenya Industrial Development Platform (KIDEP) collects information on BDS providers and introduces the clients to suitable BDS providers who can guide them to solve or improve issues in management, marketing, etc. (Chapter 5.1; Action Plan 3.1.1)

## (2) Improving in production management

As discussed in Chapter 5.2, production management is one of the weakest points of Kenyan industry. Support of existing activities on production management should be strengthened including *Kaizen* by KAM and 5S by the Productivity Centre of Kenya. This should be combined with promotion of use of ICT in management. Expected improvement in ICT infrastructure would provide with the manufactures more incentives for usage of ICT in their operation. The task of MOTI is to hasten such moves through enlightening and disseminating ideas to the manufactures in collaboration with KAM and ICT associations. Activities should start from i) awareness building, ii) making model cases, and iii) dissemination of the best practices.

The One Stop Shop proposed to be established over KIDEP is recommended to hold a list of production management solutions, BDS providers, and ICT consultants who can customise software upon requests so that the One Stop Shop can properly guide the clients towards improvement. At the same time, trainer's training schemes are needed to be established since there are only a few BDS providers who can give consultancy services in production management.

## (3) Legal protection over B2B transaction by MSM manufacturers

Many MSM manufacturers prefer to sell directly to customers instead of forwarding their products to retailers. The major reason for this is that, the retailers tend to impose unfavourable payment conditions to manufacturers, resulting in cash shortage for the manufacturers. In some cases, payment is made only after the sales. In other cases, payment is made after 90 days or more after the receipt of products. Likewise, there are no legal restrictions on the payment conditions.

On the other hand, Japan, which has a notably good structure of supporting industries, has legalized payment conditions to subcontractors within 60 days of delivery of services/products.<sup>62</sup> The Japanese Act also obligates outsourcers to make a written contract at the time of order and prohibits breach of the written contract. Then enforcement of the Act is overseen by the Fair Trade Commission. Such legal protection of subcontractors since 1956 helped to establish linkages between outsourcers and subcontractors. It also contributed in part, to the high productivity in Japan because more than 30 days difference in working capital can be used for more output. This is a worthwhile lesson to explore as it relates to the Kenyan cases where a vertical linkage throughout the value chain is

---

<sup>62</sup> Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors; Law No. 120 of 1956

notably weak.

It is therefore recommended that the legal system which supports creating forward linkages of MSM manufacturers with particular attention to payment conditions be studied. Proposed legal protection is recommended to cover the sales of all the Business to Business (B2B) transactions including the sales to outsourcers and retailers since the Draft Consumer Protection Bill is designed for individuals and does not cover protecting companies. (Action Plan 3.3.1)

#### (4) Accelerating development of B2C e-commerce

For rapid expansion of market opportunities, development of B2C e-commerce is recommended to be accelerated. The Government needs to set up an institutional framework for secure and trustable transactions over the Internet to avoid any cyber crimes, which may easily happen if unprepared. It is expected that the institutional framework is set by the end of 2010.

Since the players in e-commerce include various entities, it is proposed that the task force is set up for developing B2C e-commerce so that the necessary institutional framework will be set up with the inclusion of views from various stakeholders. The task force needs to include all the main stakeholders as listed in Table 5-4. (Action Plan 3.3.2)

**Table 5-4 Main Players in Setting Institutional Framework of the B2C E-commerce**

Player	Role
<b>Government</b>	
E-Government	leading policy formulation through inter-ministerial coordination
MOIC (Communications Commission of Kenya and KICTB)	Developing ICT infrastructure and supervising ICT service providers and postal services
MOTI	Representing interests and supervising traders and manufactures
MOF	Representing interests and supervising financial sector
<b>Private</b>	
Kenya ICT Action Network (KICTAnet)	Representing voices of the private sector focusing on the ICT
KEPSA and its member associations	Representing voices of the private sector for economic development
Kenya Credit and Debit Card Association	Representing voices of the card companies
Courier Industry Association of Kenya	(Sub-sectoral organisation has not been found.)

Source: The JICA Study Team

#### (5) Accelerating development of B2G e-commerce

E-Government is also in the process of developing B2G e-commerce. The development process will involve:

- i) Reviewing the procurement process to be adopted in the e-procurement,
- ii) Drafting an amendment of the Public Procurement and Disposal Act (Act No.3 of 2005) and its regulations,

- iii) Designing the system and the programme,
- iv) Enactment of the amendment of the Act and regulations,
- v) Training Government officers in the usage of the e-procurement programme, and
- vi) Disseminating the e-procurement to the public.

Like B2C e-commerce, it is expected that necessary institutional framework would be set by the end of year 2010. (Action Plan 3.3.3)

## 5.4 Export Promotion

### 5.4.1 Kenya's Present Attitude toward Trade-related Agreements

#### (1) Regional economic integration

Kenya is a member country of WTO from January 1, 1995<sup>63</sup>. At the same time, Kenya also belongs to COMESA<sup>64</sup> as well as EAC<sup>65</sup>. As the leader of East African countries, Kenya has assumed a leading role at respective framework.

Kenya's attitudes toward trade-related agreements are highly and positively evaluated by not only other African countries but also by other developing countries. The first proof of this evaluation is that Kenya accepted the first support of Joint Integrated Technical Assistance Programme to Selected Least Developed and Other African Countries (JITAP) by joint supporting of WTO, UNCTAD and ITC because establishment of national networks of trainers and experts in WTO-related issues is a feature of JITAP. The Kenyan case became one of the most insightful examples for the following countries that receive JITAP supports. In addition, some efforts by Dr. Mukhisa Kituyi, Minister of Trade and Industry, have demonstrated some representative positions of African countries as well as developing countries all over the world in the framework of various "Group Negotiation" in the process of Doha Development Agenda.

Kenya's position in the process of negotiation of WTO can be demonstrated from the following three aspects. First, Kenya is an agricultural country, making agriculture the most important agenda in the WTO negotiations for Kenya. As one example of Kenya's response to the agricultural agenda, Kenya has had an experience of negotiation concerning damping with such countries to subsidize the sugar industry such as in Egypt. In addition, as representative of developing countries, Kenya had discussed the abolishment of EU's common agricultural policies. Furthermore, Kenya has also been very active in negotiating issues of non-agricultural market access and trade promotion.

Secondly, what Kenya promotes negotiation at WTO is the issue of Agreement on the Application of

---

<sup>63</sup> Kenya's Participation of GATT was on February 5, 1964.

<sup>64</sup> COMESA (founded in 1993) formally succeeded the Preferential Trade Area for Eastern and Southern Africa (established in 1981) in 1994.

<sup>65</sup> Discussion of reorganization of EAC was started in November 1999, and new treaty for reorganization became effective in July, 2000. Regional common customs tariff was introduced in January 2005, among Kenya, Uganda and Tanzania. Rwanda and Burundi will join EAC in July 2007.

sanitary and phytosanitary measures. This context is easily understood because Kenya's major exports have been shifted from such traditional commodities as coffee and tea to horticulture products. In the process of EU strengthening standards of importation quarantine, a functional enhancement of KEBS has been crucial to the survival of maintaining major exporting shares of horticultural products. Many exporters of the products have been trying to diversify trade partners. In this point of view, KEBS's role is increasing.

Thirdly, Kenya is in a position to approve the Agreement on TRIPs from a standpoint to promote attracting foreign direct investment, encouraging technical and managerial transfer and, as a result, accomplishing economic development. However, Kenya has expressed an opposing position against the protection of TRIPs by developed countries. This means that excessive protection of property rights discourages attracting foreign direct investment to developing countries.

## (2) Impact of regional economic integration to Kenya

The gradual reduction of internal tariffs in accordance with East African Cooperation and COMESA is expected to facilitate intraregional trade. However, in the case of Kenya, its manufacturing industries are most likely to provide FDI to member countries. In actuality, for example, Kenchic Limited Kenya, one of the leading firms in the country, has already expanded their operations into Uganda and Tanzania. At present, they supply their products to the domestic markets of both countries. However, with the expansion of a free trade market, there is a fair possibility that they will re-import their products for the Kenyan market because levels of wage among member countries are completely different as shown in the following table. Since the number of companies such as Kenchic is expected to increase in the future, it is unlikely that both the economic and industrial structures of Kenya will remain unchanged.

Table 5-5 Managers Surveyed Ranking Each Category as a Major Business Constraint in 2003<sup>66</sup>

	(%)		
	Kenya	Uganda	Tanzania
Corruption	73.8	38.2	51.1
Courts (lacking confidence in courts to uphold property rights)	51.3	30.1	55.1
Crime	69.8	26.8	25.5
Electricity	48.1	44.5	58.9
Finance	58.3	52.8	53.0
Labor regulations	22.5	10.8	12.1
Labor skills	27.6	30.8	25.0
Policy uncertainty	51.5	27.6	31.5
Tax rates	68.2	48.3	73.4

Source: WB 2006, World Development Indicators

---

<sup>66</sup> According to WB (World Development Indicators: 2006) data are based on enterprise surveys conducted by WB and its partners during 2001-05. While averages are reported, there are significant variations across firms.

## 5.4.2 Measures for Export Promotion

### (1) Improving packaging

Poor quality of packaging makes products less competitive in the global markets and shortens expiry date. For market expansion abroad, improvement in packaging quality is vital. Packaging has three functions, namely, i) protecting the contents, ii) improving convenience of handling and transport and iii) describing the contents and sales promotion. Each function requires different technological components. Accordingly, improvement in packaging involves various scientific subjects that cover designs, material, and production techniques.

In recognition of the importance of packaging, 70 countries have established packaging institutes under the World Packaging Organization. Kenya also established the Packaging Institute in 1996 and has been holding occasional seminars and exhibitions using the membership fees. Yet, packaging is one of the areas, which the Government has not established a supporting system. Due to the lack of support from the Government, presence of the Packaging Institute has not been effective enough to make an impact on industry.

While some degree courses are available in universities and packaging institutes in the USA, UK, and India, such courses are not available in Kenya. This makes it very difficult to improve the packaging quality except for a few top manufacturers who can access technical information from abroad. Yet, as discussed in Chapter 5.2, relying on foreign technical information is both expensive and has limited impacts on internalising the capacity. Therefore, it is desirable that training courses be offered at universities in collaboration with the Packaging Institute and that packaging seminars be regularly held in association with several stakeholders such as MOTI, KAM, KIRDI, EPC, and the Packaging Institute.

Moreover, improvement in packaging is required in light of environmental protection, particularly, on the use of plastics. With support from UNEP and UNDP, NEMA and KAM have set up the Plastic Environmental Action Kenya (PEAK) initiatives, in which they try to raise awareness on recycling and to develop a policy framework for plastic waste. Following that initiative, regulations and implementation framework on Reduce, Reuse, Recycle (3R) of packaging need to be established. (See Chapter 6.1)

### (2) Building brand image

With the increase in global competition, establishing brand image is important to differentiate Kenyan products from others. Yet, both Kenyan manufactures and the Government have not adopted strategies for the brand building.

Brand image starts from establishing the key concept of the products and identifying the target customers. Then marketing tools including advertisement and packaging are designed to appeal to the target customers of the brand image. Quality assurance of the products is also essential in maintaining the brand image. Since creation and maintenance of brands add to the production cost, the products need to target the customers who can pay the additional cost for the intangible value

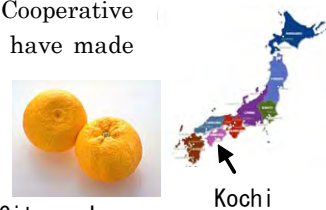
created from the brand. A pool of such affordable customers does exist in the foreign markets; therefore, brand strategies are viable particularly in exporting. In absorbing the cost and making strategies appropriate to the target markets, alliances with the foreign partners may be ideal. It is expected that seminars and consultancy services on brand promotion be provided by EPC in collaboration with KAM and relevant BDS providers. KenInvest is also recommended to search for foreign partners who would be interested in brand building of the Kenyan products.

**Box 5-4: Branding of Citrus Junos products from Umaji Village in Kochi, Japan**

Umaji Village in Kochi Prefecture is located in a mountain far from big cities in Japan. The Umaji Agricultural Cooperative started production of citrus junos in 1965. Citrus junos is a type of orange, whose peel has distinctive aroma. Similar to rural villages in Kenya, Umaji village also wanted to seek value added activities from the agro-products. So the Cooperative initiated production of citrus junos sauce in 1979. Yet, sales of sauce did not increase significantly. When the Cooperative successfully developed citrus junos juice in 1988, it took up branding strategies. The Cooperative decided that its brand image should be matched with the beautiful nature of the village. It has contracted with a local designer who makes special drawing of the village children on packages and posters. Although availability of citrus junos limits production of the juice, the Cooperative uses only the local citrus junos since the nature of the village is the integral part of the brand image. With the success of the sales in juice, the Cooperative now produces a variety of citrus junos products such as jam, jelly, seasoning, cosmetics, bath salt, etc. Although many similar products made out of citrus junos came into markets afterwards, the Umaji product is easily identifiable by the drawing on the package. This successful case, of course, did not happen without longstanding endeavour made by the key Cooperative members, but the branding strategy is one of the important factors that have made Umaji famous. Having been well known from the products, which convey the image of the beautiful nature, the village is now developing tourism as well.

Reference:

Homepage of Umaji Agricultural Cooperative <<http://www.yuzu.or.jp/>>



Citrus Junos

Kochi

**(3) Strengthening harmonization of international quality standards**

In Kenya, there are three major exporting commodities: coffee, tea and horticulture. Coffee and tea are the traditional exporting commodities and can formulate “base cargo” even though there are some fluctuations of international prices. In the case of horticulture, however, its export is historically and continuously centred on European countries, where the requirements of environmental standards are likely to be strengthened. Compliance with EurepGAP requirements is vital for the development of Kenya’s horticultural industry. However, it is evident that they have not fully established an effective system which abides by European standards. KEBS is trying very hard to swiftly implement a full-fledged system. However, several changes in the horticultural industry, especially the increase of out growers, pose a serious obstacle for ensuring compliance with environmental requirements of export countries. Claiming corporate social responsibility, major exporting companies such as Homegrown Kenya, Ltd., ensure that raw materials come from the country of origin (Kenya), but more strategic/institutional methods need to be developed. Moreover, in order to cultivate cut flowers which are competitive in an international market, employment of capital intensive farming system is a must. However, such a system might not be able to offer



employment opportunities to ‘the poor and the needy.’ In other words, the horticultural industry cannot serve as a strategic industry for pro-poor policy-makers. In addition, in order to expand the export of fruit and vegetables by out growers, it is essential to improve the social infrastructure by building refrigerated warehouses, coping with rapidly-increasing demands for water resources, and reviewing the land ownership system in Kenya. When considering these conditions, it is difficult for the horticultural industry in Kenya to constantly maintain a stable export share in the market.

#### (4) Insufficient statistics: Example of horticulture sector

According to various statistics on Kenya, the amount of horticultural export and its share has been increasing steadily. This data utilizes HCDA compilation of statistics based on exporters’ Implementation Plan Lists. The data itself does not conform to international trade statistics codes such as HS. Therefore, even though the horticultural export quantity, amount and destination can be understood by the Kenyan data, the data is inadequate to accurately grasp the international market trend and the share of Kenya’ s horticultural commodities in export countries or regions. It is also inadequate for determining which new markets to develop and cultivate.

#### (5) Textile industry: Concern after general systems of tariff preferences

In NES and its Action Plan, the textile and clothing sectors are designated as ‘strategic sectors’ . This is probably due to the General Systems of Tariff Preferences of major export countries and regions, such as AGOA or the Cotonou Agreement. At this stage, it is extremely important to analyse the comparative advantage of Kenyan products in the international market, based on a micro analysis of cost structure, in particular, a comparison of competitiveness with Chinese products. From the strategic and institutional points of view, it is generally believed that improving raw materials procurement capabilities will serve as a breakthrough for the cotton industry, given the expansion of cotton production. However, this must be studied more carefully before a strategy is implemented.

UK, USA and Netherlands are the major export markets for Kenya in addition to Uganda. While commodities exported to UK and Netherlands are mainly agro and horticultural products, Kenyan manufacturers grasp opportunities of AGOA and export to USA, especially the garments. The exports of garments from Kenya to USA increased from US\$ 44 million in 2000 to US\$ 226 in 2004, and Kenya became the second largest garment exporter to USA among the Sub-Saharan African countries after Swaziland. Just within the EPZ, 30 garment factories were operating with employment of 34,614 workers in 2004. However, the Kenyan factories cannot continue enjoying the duty free access to the USA unless their production materials are sourced either from USA or other eligible African countries after September 2007 [EPZ (2005)]. Interviews with the garment factories in EPZ revealed that most of them have no choice but to leave Kenya if they cannot enjoy duty free access to USA. This example of AGOA shows that preferential tax to the developed markets gives a big incentive for investors' decision to operate in Kenya.

#### (6) High cost in production and development assistance programmes

How to overcome the problem of ‘high cost in production,’ which is a result of many factors, is a major issue for Kenya. It is true that Kenya has fallen into a ‘vicious cycle of poverty’ even though

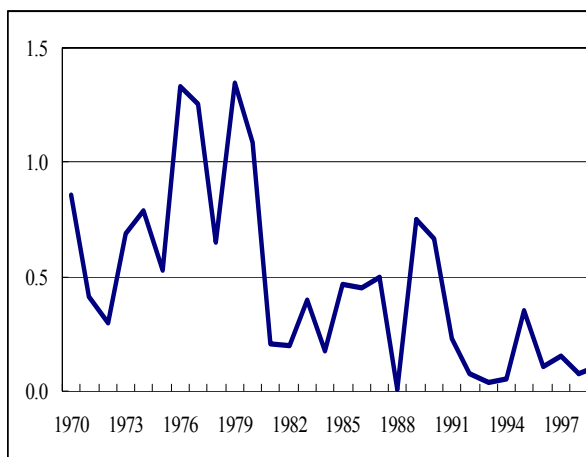
the country employs a relatively high cost of production. It is necessary to look for ‘breakthrough’ in both supply and demand aspects. So far, most of the development assistance programmes related to promotional policies and institutions of the economic and industrial sectors, which were provided by major developed countries such as European countries and USA, are highly dependent on development assistance programmes based on the typical- or standard-type development patterns of developing countries.

## 5.5 Investment Promotion

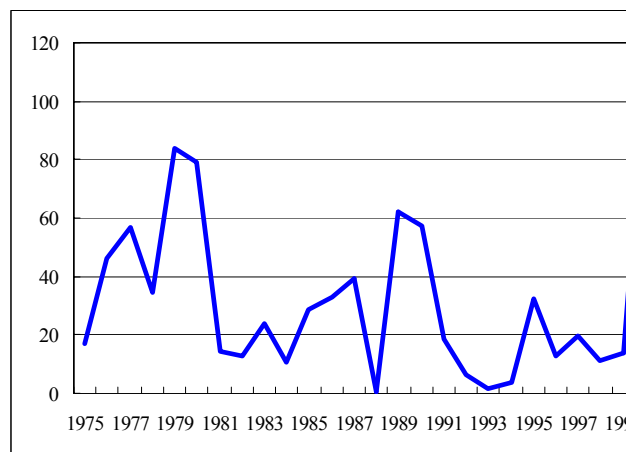
### 5.5.1 Status and Issues of Investment Promotion

#### (1) Historical trends of foreign investment

Kenya’s net inflow of foreign direct investment has been less than 0.5 % of GDP after 1981 except 1990, 1991, 2000, and 2003. This level is relatively lower than economic and industrial development in East Asian countries.



Source: WB 2006, World Development Indicators  
**Figure 5-7 FDI, Net Inflows**  
 (% of GDP)



Source: IMF 2006, Balance of Payment Statistics  
**Figure 5-8 FDI, Gross Inflows**  
 (million US\$)

As shown in the following table, China, U.S.A., India, U.K., and Germany have been the major investors to Kenya in recent years. In 2005, China became the top investor to Kenya with investment of 1.2 billion Kshs., which represents 18.6 % of the total investment.

The important aspect to be emphasised is that the average amount per investment has been declining in recent years and reached 57.2 million Kshs. in 2005. Therefore, it can be said that a small amount of investment projects have been increasing with the increase in the number of investments.

**Table 5-6 FDI by Country**

2003				2004				2005			
	Number of Investment	Amount (million Kshs.)	Share (%)		Number of Investment	Amount (million Kshs.)	Share (%)		Number of Investment	Amount (million Kshs.)	Share (%)
U.S.A.	7	2,783.7	27.9	India	6	3,255.9	39.1	China	12	1,160.4	18.6
China	11	906.8	9.1	U.K.	13	773.7	9.3	U.S.A.	3	1,011.8	16.2
U.K.	13	726.5	7.3	U.S.A.	8	713.1	8.6	India	8	819.0	13.1
India	5	637.7	6.4	China	9	574.2	6.9	Israel	1	800.0	12.8
Germany	3	192.8	1.9	Germany	8	190.7	2.3	Turkey	2	705.0	11.3
Sub-total	39	5,247.6	52.6	Sub-total	44	5,507.6	66.1	Sub-total	26	4,496.2	72.1
Others	57	4,723.9	47.4	Others	47	2,820.5	33.9	Others	83	1,742.9	27.9
Total	96	9,971.4	100.0	Total	91	8,328.1	100.0	Total	109	6,239.1	100.0
Average Amount		103.9		Average Amount		91.5		Average Amount		57.2	

Source: Economic Survey, KNBS

## (2) Policies and institutions for investment promotion

### 1) KenInvest and the Blue Book on best practice in investment promotion

Kenya has been playing a leading role in the international framework on trade and investment facilitation. However, there are some negative aspects. The biggest constraint is that the involvement of private entities is relatively weak and must be strengthened. Especially, in the case of SMEs, such regional frameworks as COMESA and EAC have had more direct impacts than those of the international ones. Discordance of speculation between government and private entities remains an issue of trade and investment facilitation. In addition, there are three aspects to be raised regarding some constraints for trade and investment facilitation to harmonise international and regional frameworks. Firstly, there is the relatively weak harmonisation between export trade control ordinance and trade policies and institutions. Secondly, legal environments tend to be inefficient and unfair in some aspects. This comes from some examples where official announcement is insufficient and that diffusion is in some cases delayed. Thirdly, discretionary power is occasionally found. From these points of view, improvement of legal systems should be appropriately promoted, and fair law enforcement should be ensured.

For enhancement of policies and institutions for investment promotion, JBIC jointly with UNCTAD formulated the "Blue Book on Best Practice in Investment Promotion and Facilitation", published in May 2005. The progress of implementation is as follows:

**Table 5-7 Contents and Implementation of the Blue Book on Best Practice in Investment Promotion and Facilitation by JBIC and UNCTAD**

	Contents	Implementation
Measure 1.	Introduce flexibility into the FDI entry provisions in the Investment Promotion Act (2004).	Completed. New ACT was effective on 2005.
Measure 2.	Review the process of awarding work permits.	In progress. MOF is now reviewing all licenses. Thirty six licenses were abolished and fifty one were revised on 2005 although there are 1,338 licenses in total on 2004. In 2006, 118 licenses were reviewed. The other licenses left are at the moment being reviewed for issuance within thirty days.
Measure 3.	Introduce deadlines and penalties for late payment of VAT refunds by KRA.	In progress. KRA is planning new trials. KRA conducted a trial calculation for refunds of Kshs. 900 million. KRA is now under negotiations with the MOF
Measure 4.	Introduce guidelines for foreign investors' applications for transactions in agricultural land.	In progress. The government started discussions of land ownership including agricultural lands. At present, land owners interview surveys are being conducted.
Measure 5.	Develop investor tracking and aftercare capacities of KenInvest.	The Government requested technical cooperation with JICA.
Measure 6.	Establish a business linkage project comprising at least 10 major TNCs.	In progress. Concrete implementation is positioned in PSDS.
Measure 7.	Establish a performance benchmarking project for domestic manufacturing businesses.	In progress. New implementation is to be conducted by KAM. Workshop will be held.
Measure 8.	Bring into force EAC double taxation treaty.	In progress. At present, the EAC's Secretariat is now preparing a Preparatory Paper.
Measure 9.	Jointly issue EAC member state business visas.	In progress. Related ministries started negotiation. In the case of Kenya, the Department of Migration, Office of the president, and Department of Registration (Attorney General Chambers) are leading negotiation.

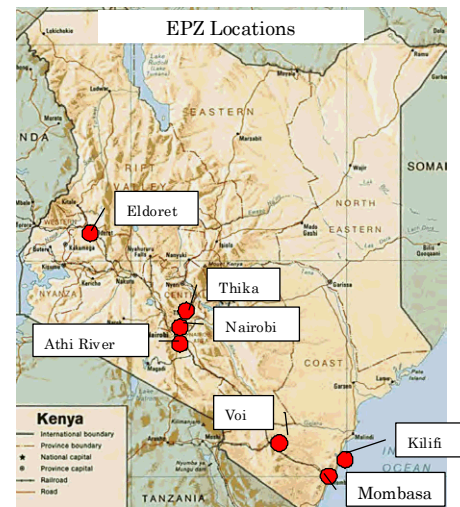
Measures in the Blue Book recognises the importance of promoting domestic and international investment for both public and private entities in Kenya. However, the predominant view is that fulfilment and accomplishment of some measures have difficulties such as in the case of the necessity for financial support.

KenInvest, which was reorganised from IPC, is in charge of investment promotion. At present, there are twenty-nine full time equivalents (in total of approximately seventy staff) with headquarters in Nairobi and a regional branch office in Eldoret. There are plans to establish additional regional branch offices in Mombasa, Kisumu, and Embu. In this case, forty full time equivalents are at least required for appropriate operations. KenInvest is now restructuring using “Tool Kit” of WB. PSDS also supports strengthening capacity of KenInvest under Key Activity 4.3.2.

## 2) EPZs

EPZ is an important policy not only for export promotion but also for investment promotion. EPZ is established under EPZ Act enacted in 1990. At the end of 2006, 32 zones with 71 enterprises were in operation. Production volume of EPZ enterprises was estimated at 4.7 % of the total production of

the formal manufacturing sector while employment by EPZ enterprises was 15.7 % in 2005. The garment sub-sector in EPZ was a major attractor of FDI in Kenya between 2001 and 2005. Garments, primarily from the EPZ, were Kenya's largest manufactured products in export. Targeted at preferential access to USA markets under AGOA, the export volume of the garment sub-sector from EPZ marked 44.9 % annual growth between 2000 and 2005. However, the fear of discontinuation of use of third country textile caused many apparel manufacturers to leave EPZs between 2004 and 2007. Moreover, sub-sectoral distribution of EPZ companies is disproportionate as 63.9 % of production is from the garment sub-sector, and investment growth from other sub-sectors is only gradual.



EPZ companies can receive the following fiscal incentives:

- i) 10-year cooperate tax holiday and 25 % tax thereafter;
- ii) 10-year withholding tax holiday on non-resident remittances;
- iii) Duty and VAT exemption on raw materials, machinery, and other business inputs;
- iv) Stamp duty exemption; and
- v) 100 % investment deduction on capital expenditure over 20 years.

In spite of ideal locations of public EPZs and fiscal incentives, most of their areas are left vacant. There are two rectifiable factors, which explain this under-developed nature.

#### A) Restrictions

There is a concern to provide a level playing field to the manufacturers outside the EPZ since the current EPZ Act imposes many restrictions on the EPZ companies. The EPZ Act requires separate registration for manufacturing, commercial, and service activities. In addition, EPZA internally sets up a rule to restrict domestic sales of EPZ companies up to 20 % of production. This restriction makes it difficult to motivate investors to join EPZ because the Kenyan markets are important for those who aim to penetrate the regional markets.

#### B) Geographical dispersal

EPZs have sought to be geographically dispersed to attract private sector investment in locations where public sector funding has not been sufficient and to facilitate a wider variety of activities including agro-processing closer to the raw materials. This has resulted in only 2 major public zones, in Athi River and in Mombasa with the remaining 30 small zones, in which between 1 and 10 enterprises operate each. This scattered set up of EPZ locations has made it difficult to strengthen infrastructure and extend assistance to EPZ companies.

What is important is to create more successful models. Accordingly, the following two major EPZs

particularly need to receive immediate attention for further development.

**a) Athi River EPZ**

Among operational 32 EPZs, Athi River EPZ is the largest, hosting 24 companies and 10,000 workers in 108 hectares out of 339 hectare fenced site. From a transport perspective, the location of Athi River is at the confluence of two major roads, the Mombasa-Nairobi highway and the Nairobi-Namanga-Arusha road, which connects to northern Tanzania. It is also next to the Nairobi-Mombasa Railway line and only 19 km from Nairobi (Jomo Kenyatta) International Airport. Due to the development of EPZ, the local Mavoko/Kitengela area has developed into a major commercial residential and industrial hub, supporting farming and residential developments along Mombasa Highway and on the Kajiado-Isenya-Kitengela axis. The fibre optic cable linking Mombasa to Nairobi passes right through EPZ. In addition, there is the Technology Development Centre managed by MLHRD adjacent to EPZ. The Centre is designed to serve the needs of EPZ companies by providing technical training at vocational level. Vision 2030 recognises the importance of Athi River and plans to set up a Business Process Outsourcing (BPO) Zone in cooperation with MOIC and first tier retail shops under MOTI. It also plans to improve the access roads to Athi River. With proper designing and infrastructure building, industrial activities in Athi River have much potential to grow rapidly.

**b) Kipevu EPZ**

Kipevu EPZ in Mombasa was leased to EPZA from the Government for 99 years with effect from January 1995, and 48.84 hectare was gazetted as an EPZ in the following year. However, majority of area has been left undeveloped due to the lack of funding from the Government. Only three private manufacturers operate in Kipevu EPZ while some areas were sub-leased to Kenya Power Lighting and Tsavo Power Company. Kipevu site is proximate to the Port, Mombasa town, the Airport, and the industrial areas of the North Mainland. Its location is ideal for attracting investors if properly developed. Vision 2030 envisages development of Mombasa as an industrial site. Kipevu remains the best location for further development as an industrial area.

**(3) Supporting System for the Local Industrial Development**

**1) Issue**

Kenya lacks measures for attracting investment in industry to the rural areas. This has resulted in heavy concentration of industry in Nairobi metropolitan area and to a lesser extent in Mombasa. Present conditions of poor infrastructure and weak supporting system outside Nairobi do not attract manufacturers to invest outside Nairobi. The only existing attraction is geographical advantage for some manufacturers seeking a close location to a specific natural resource. The industrial supporting system outside major towns is insufficient in terms of finance and human resource. Industrial concentration in one area not only causes environmental deterioration but also increases prices, especially labour costs. On the contrary, investment to the rural areas would reduce poverty through stimulating economic activity in those areas.

## 2) Local administration

While Chapter 3.1 discussed the limited resource allocated from MOTI to the districts, this section reviews the local administration system, whose mandate is supposed to include industrial development. Kenyan local administration system comprises two administrative streams. One is the local authorities and the other is the central government functions posted in districts. Local authorities refer to municipal, city, town, and county councils. The administration is governed by the Local Government Act (Cap. 265).<sup>67</sup> Local Authorities have various powers over economic development of their jurisdiction such as enforcement of license fees and land levies, approval of investment, and development of basic and economic infrastructure such as market place. Local authorities have councils with elected and appointed councillors as governing body. Under the councils, the administrative functions are established with clerks, treasurers, engineers, and medical officers, their deputies, and others.

However, in reality, the actual autonomy of the local authorities seems to be limited. Firstly, budget and important decision on development requires approval or, at least, reporting to the Minister of Local Government. Secondly, clerks, treasurers, engineer, health officers, and their deputies are appointed by the Public Service Commission. Moreover, clerks, treasurers, engineers, medical officers are paid from the central government.

Apart from the local authority system, departments of ministries in the area with local authorities have various fora for planning and coordination. Relevant local authorities and these departments hold meetings. District Development Committees spearheaded by the District Development Officers and various sub-committees are held for discussion on the specific sector development issues.

## 3) Area development plan

Local authorities with the assistance of the Department of Physical Planning of the Ministry of Lands (MOL) prepare the area development plan. However, the final decision whether or not the local authorities follow the plan is made by the local authorities. Any investment proposal submitted to the local authorities is subjected to be approved by the councils and their political functions with or without full compliance with the area development plans. In order to grasp the situation on the degree of compliance with the area plan and actual land use, MOL has been dispatched the auditing team. However, apart from this ad-hoc measure, the checking mechanism of land planning and implementation has not been followed up. This non-compliance to area development plans and decision making resting on the political function of the local authorities causes unclear and unpredictable acquisition of lands for investors that provide room for corruption and pressure on the living and natural environment.

---

<sup>67</sup> As of September 2006, there were 1 city council (Nairobi), 62 town councils, 45 municipal councils, and 67 county councils. Although a district should form one county council, due to the newness of a few districts, the number does not coincide with actual number of the district at the time of the report.

---

#### 4) Financing

Local authorities have two sources of finance: revenue generated through license fees and land reviews and transfer funds from the central government. Local Authority Transfer Fund (LATF) is one of the major fund sources for the local authorities allocated by the Central Government. The total amount allocated in the fiscal year 2005/06 was about Ksh.5 billion, which has grown 5 times more than the amount of 1999/2000. The amount allocated to each local authority is minimum Ksh. 1.5 million plus the amount depending on the size of population (e.g., the Nairobi City receives approximately Ksh. 800million). However, due to the smallness of the economic activities within the boundary and lack of human and institutional capacity in collecting revenue, the degree of self-sufficiency of local governments tend to be low. In other words, many are depending on LATF. Moreover, the majority of the budget is used for recurrent costs, and a small amount is left for the development budget.

Another financing mechanism available for rural development is Constituency Development Fund (CDF), established by the statutory law, CDF Act in 2003. CDF has been allocated to the constituencies nationwide in order to service local needs directly. The fund is to be managed by Constituency Development Committees (CDC) appointed by the area members of Parliament (MPs). Total amount provided in the fiscal year 2005/06 was approximately Kshs. 7 billion. The amount has been dramatically increased from Kshs. 1.26 billion in 2003/04 to Ksh. 5.6 billion in 2004/05. According to the Annual Report of 2004/05, the fund is used for education, health, and water projects mainly. The impact of the fund may be significantly affected by the management of the fund. Some problems pointed out are: lack of technical and managerial capacity of CDC to manage the fund; manipulation by MPs to use the fund according to their own political interest; and no proper mechanism of follow-up and ensuring accountability.<sup>68</sup>

Under the efforts of decentralisation, the budget for both LATF and CDF are secured: LATF to be 5 % of the all personal income tax collected and CDF to be 2.5 % of all ordinal revenue collected. However, the disbursement and utilisation process adds some confusion. The financial resources are managed by various functions and not really following any uniform plans. The generic problem is lack of transparency and objectivity in choice of projects and lack of capacity in implementation and management of the projects. In order to ensure the involvement of communities and grassroots in local development, the Local Authorities are now required to develop Local Authority Service Development Action Plans through a participatory approach to access LATF.

#### 5) Business environment

While the licensing and permit reforms envisage the reduction of cost of doing business, it can affect the revenue collection of local authorities. In the long-run, it is necessary for local authorities to plan area economic development and thereby increase the revenue from taxing the corporate and people

---

<sup>68</sup> Mapesa, Benson, and Kibua, Thomas, An Assessment of the Management and Utilisation of the Constituency Development Fund in Kenya, IPAR Discussion Paper No. 077/2006: CDF Annual Report 2004/05, CDF Website: [www.cdf.go.ke](http://www.cdf.go.ke).



optimally. Having multiple financing sources with no mechanism of leading all the efforts for common economic development plans may not contribute to the capacity of local authorities and, consequently, area economic development.

Although the private sector is the strongest driving force for local economies, the power is not well captured. The collective actions through various private sector organisations are taken to some extent by lobbying and attending various planning fora. Chapters and offices of KAM and Kenya National Chamber of Commerce and Industry exist in some large cities though they are not strong enough. It is often the case that these offices are functioning only as the referral points for their headquarters.

However, there are interesting initiatives observed in Nairobi and Nakuru. Nairobi Central Business District Association is a private initiative for improving the business environment. Nakuru Business Association's activities are similar to NCDBA. Unfortunately, the working relationship between these business associations and local authorities is reportedly not always in good terms. Establishing good working relationships between the two should be an important aspect of local economic development.

### **5.5.2 Recommendations for Investment Promotion**

#### **(1) Promoting FDI**

While not denying the importance of domestic investors, more attention is required to improve policy measures to call in FDI since the foreign companies are sources of technological and market information abroad. Calling in transnational companies is the most effective way to dramatically upgrade the technological capacity of the Kenyan industry to the global standards. Attracting investment is under severe global competition. Investors' satisfaction is very important to call in sustainable investment into Kenya. KenInvest and other related agencies have to be conscious of the best practices adopted in other countries and have to achieve the highest standards in providing services to the investors to win the global competition. In addition, more human and financial resources need to be allocated for the marketing activities abroad. Firstly, as discussed in Chapter 3.2, capacity of commercial attaches needs to be strengthened. Secondly, it is recommended that overseas missions to the targeted markets be jointly formed by the public and private sectors. (See Discussion on Linkage 2 in Chapter 7.2.2)

#### **(2) Establishing Special Economic Zone (SEZ)**

Present proposition, strategy, and funding resources of EPZ are not adequate enough to attract significant investment. Under such conditions, contribution from EPZ companies to the economy and the labour market is not well recognised by general public and often receive criticism of working conditions in EPZ from COTU. However, high economic target set forth by Vision 2030 calls for an urgent improvement of the EPZs to make it an attractive place for FDI.

EPZA is well aware of the necessity to revise EPZ policy and is now negotiating with MOTI to amend EPZ Act, which enables expanding activities in EPZ and relaxing restrictions to the EPZ companies. Furthermore, it is necessary to benchmark industrial zone models abroad, which integrate industrial area, commercial area, service area, residential area, and social and amenity area

in order to provide comfortable living environment to the investors. Such successful industrial areas are often constructed under PPP scheme with initiatives taken by private developers who try to make their product most attractive to generate profit. While it is well recognised that amendment of EPZ Act is necessary, EPZA is also expected to start working on reforming the areas where they have authority under the current law such as relaxing restrictions on domestic sales and strengthening amenities and facilities within EPZ.

### (3) Promoting investment outside Nairobi

Rural economic development policy has been focusing on agriculture and tourism, and there have been no systematic policy measures for industrial development outside Nairobi. Yet, investment promotion to the rural areas is vital in stimulating economic activities for poverty reduction. The Master Plan proposes that Government initiate in-depth planning for investment promotion outside Nairobi.

Firstly, spatial planning is necessary. The Government needs to produce land use map and plans for industrial corridors. Land use map is necessary so that industrial activities will harmonise with other important economic activities particularly agricultural and tourism sectors. In producing the land use map, creation of industrial corridors needs to be taken into account. In strengthening competitiveness of the Kenyan industry, the Government is recommended to pursue the strategy to reinforce the gateway function of Kenya connecting to the East and Central Africa. Therefore, the infrastructure needs to be strengthened alongside the main roads connecting to neighbouring countries. It is recommended that industrial centres be created on a step-by-step approach so that such centres are backed up with the strong infrastructure. Vision 2030 identified some important areas such as Athi River, Mombasa, Garissa, Turkana, North Nakuru, and Kisumu. These areas need to be incorporated in the spatial planning with planned industrial corridors, which need to be supported by the infrastructure development plans with a phased approach. It is considered realistic that the first flagship project is initiated from areas already endowed with sound infrastructure and supporting system, namely Athi River, then Mombasa. The phased approach is necessary for the Government to ensure that its expenditure makes economic returns. Involvement of NESC and the Ministry of Planning and National Development are expected to come up with these planning since implementation requires collaboration from multiple ministries.

Secondly, creation of an incentive system is indispensable. The manufacturers are likely to prefer investing in the area where infrastructure and supporting system are well provided. To compensate weakness, proper incentives need to be created. Many Asian countries such as Thailand, Malaysia, and India have clear local investment measures by providing better incentives to the rural areas through zoning, i.e. the further it moves away from the centre of city, the more incentive is given in terms of tax reduction, exemption from license fees, and reduction of electricity charges, etc. It is recommended that the benchmark study on foreign countries' incentive system is conducted to come up with a proper incentive system fitted for Kenya. (See Discussion on Linkage 1 in Chapter 7.2.2)

Thirdly, the supporting system outside Nairobi needs to be strengthened. As discussed in Chapter 3, the staffing level of DIDOs is very low, overseeing an average of 3.5 districts per officer. Yet, it is

difficult to expect that the staffing level will increase rapidly under the current budget constraints. In taking a realistic approach, the Master Plan proposes activating the district committees and increasing support in KAM members. However, as for target areas, if necessary, MOTI is expected to make efforts to increase allocation of human and financial resources. Moreover, development of KIDEP envisages a scenario to improve accessibility to industrial services through exchange of information over the Internet. (See Chapter 3.2 and Chapter 5.1)

## **5.6 Financing**

### **5.6.1 Improving Access to Indirect Finance**

#### (1) Overview

##### 1) Scale of financial sector

The Kenyan financial sector has been growing steadily with 11.3 % and 16.0 % increases in money supply (M3) in the fiscal years of 2004/05 and 2005/06 respectively. In 2005-06, the M3 was equivalent to about 43 % of the GDP. On the other hand, market capitalisation has risen more rapidly, reaching Ksh 800 billion in November 2006, which is equivalent to 57 % of GDP. In terms of contribution to the economy, the financial sector's share in GDP in 2005 was 3.1 %.

##### 2) Structure of financial sector

Kenya has a well developed financial system comprising of institutions shown in Table 5-8 below. Kenya's banking system is in the middle of recovery with the financial sector reforms under the present government, after weakening in the 1990s. The reforms have freed interest rates, restructured weak institutions and consolidated others; hence the number of banks has been declining in recent years with closure and acquisition of assets of institutions. As at the end of 2005, there were 41 commercial banks. Following the reforms and favourable economic conditions, profitability of banking institutions has been increasing and non performing loans are on a decreasing trend. The commercial banking sector is highly stratified as only a few banks have the capacity to serve large enterprises. The market share of the top three banks put together, that is Barclays Bank, Kenya Commercial Bank and Standard Chartered Bank, in terms of total net assets, amounts to as much as 40 % of total commercial banking sector.

Besides the commercial banking sector, Kenya has a variety of alternative financial institutions such as Savings and Credit Cooperatives (SACCOs), Development Finance Institutions (DFIs), Kenya Post Office Savings Bank and Micro Finance Institutions (MFIs). These alternative financial service providers are important sources of credit for MSMEs and low-income households, as mentioned later.

**Table 5-8 Institutions in Financial Sector**

Institutions	Number of Institutions as in 2005
CBK	1
Commercial Banks	41
Non-Bank Financial Institution	1
Foreign Exchange Bureaux	95
Building Society	1
Mortgage Finance Institutions	2
SACCOs	4,474
Insurance Companies	44
DFIs	9
Kenya Post Office Savings Bank	1
Micro-Finance Institutions (Major)	19
CMA	1
Nairobi Stock Exchange	1
Stock Brokers	10
Stock Dealers	1
Fund Management Companies	11
Investment Advisers	18
Venture Capital Companies	2

Source: Wafula Masai (2006); KNBS, Economic Survey 2007

## (2) Financial sources for MSMEs

### 1) Commercial banks

A number of commercial banks have lending schemes specially designed for MSMEs. However, many of them require borrowers to have sufficient security and immovable assets in most cases, making it difficult for MSEs to be eligible. It seems that generally banks are not interested in lending to MSEs because of the high transaction cost and low profitability.

### 2) DFIs

Although DFIs constitute only a small part of the Kenyan financial sector<sup>69</sup>, they have played a role in MSME development through provision of long-term credit with lower interest rates than the market rate. Three DFIs under MOTI are mandated to provide a specific segment of the economy with financial services. However, they continue to experience financial and operational constraints that limit their efficiency.<sup>70</sup> Their profile, functions and activities are summarised below.

#### A) ICDC

ICDC was established in 1954 as Industrial Development Corporation with the main objective to encourage Kenyan and foreign entrepreneurs to work together in promoting industrial development. Soon after independence in 1963, it changed the name to ICDC with the introduction of activities to serve the commercial sector. ICDC also started to put in place a number of small scale financing programmes to enable Kenyans to set up industrial and commercial enterprises countrywide. After a

---

<sup>69</sup> Total amount of DFIs lending accounted for just over 5 % of that of commercial banking sector in 2004.

<sup>70</sup> More information on key reforms of DFIs is provided on Box 5-5.

major restructuring from 1992 to 1994, ICDC has enhanced its effectiveness and profitability in an open market economy. Today, ICDC is mandated to facilitate the industrial development of the country by providing venture capital finance, secured long and medium term loans, and management support and consultancy services.

Long and medium term loans for the industrial and commercial sectors are classified into three categories: corporate loan; commercial loan; and industrial loan. The third one is applicable to manufacturing of MSME manufactures. The size of industrial loans ranges from Ksh 200,000 to Ksh 5 million, with a repayment period of up to 5 years. The current interest rate is 14 %, around 4 points lower than the commercial bank rate. Land collateral is required for application. Many borrowers are small enterprises with 10 to 15 employees, seeking for a minimum amount loan of, Ksh 200,000. Because of its low interest rates, this loan programmes are very popular with small enterprises. However, only around 10 % of loan applicants can succeed to be provided with credit and those which fail head towards commercial banks or microfinance institutions.

The salient feature of ICDC, together with other DFIs under MOTI, is its regional coverage with branch networks of 9 cities, while commercial banks concentrate their operations in Nairobi. ICDC receives loans from KfW of Germany.

#### B) KIEL

KIEL was established in 1967 as a subsidy of ICDC and became an independent state corporation in 1978, registered under the Companies Act (Cap.486), with the government as the sole shareholder. The mission of KIEL is to facilitate development and incubation of MSMEs throughout the country by establishing industrial estates, providing credit and business capacity building in a sustainable manner. In early 1990s KIEL passed through a difficult period where it was forced to sell all its 500 industrial sheds and provide loans to unfavourable borrowers for political reasons, which brought in a massive amount of non-performing loans. Mismanagement of the loan scheme left a huge burden on the institutional operational capacity to KIEL even today. Since 1978 the KIEL has provided loans to approximately 11,000 MSMEs, both manufactures and service sectors. Among manufacturing borrowers, food processing, oil extraction and engineering companies have shown relatively good performance while the others have caused massive non-performing loans.

At present the size of loans range from Ksh 100,000 to Ksh 14 million, with an average of approximately Ksh 500,000. The current interest rate is 15 %. The maximum repayment period is 5 years although the period is determined by the cash flow projection of the enterprises. Every loan requires collateral. A typical manufacturing client of the KIEL loan has five employees with capital of Ksh 100,000. In 2005/06 fiscal year, a total of Ksh 44,658,000 was provided to 166 enterprises. Financing preference is given to the agro-industry, building materials manufacturing, engineering, ICT and export oriented industries. KIEL admits that only 10 % of loan applicants are provided with a loan after appraisal, indicating a sizable demand for credit by MSMEs.

Apart from lending programmes KIEL sets up industrial estates which were just re-started in 2007 with the construction of 3 industrial sheds, and provides MSMEs with BDS at nominal fees. The

BDS includes i) training activities on business planning, management, accounting and marketing support, ii) establishing a linkage between MSMEs and large enterprises, iii) opening fairs and exhibition, and iv) assistance in R & D in collaboration with other government institutions like KIRDI, KIPI and KEBS.

### C) Industrial Development Bank (IDB)

The IDB was established in 1973 by the government with the assistance of WB for the purpose of promoting economic development in Kenya by providing affordable long, medium, and short-term finance to industrial and commercial enterprises. Today IDB is focusing on its core mandate of long term financing of capital projects, while its services include short term working capital financing, bridge financing and financial advisory services.

IDB has so far supported more than 300 projects for various industrial sectors countrywide, such as tourism, basic metal, food and beverage, horticulture, textiles, pharmaceuticals, tea factories and sugar factories, by disbursing Ksh 12 billion. Although in the early years IDB provided medium and long-term loans to MSMEs, now the minimum loan size for the first time borrower is Ksh 10 million, which means that only medium and large enterprises can be the Bank's clients.

#### **Box 5-5: Reforms of DFIs**

While some of DFIs in Kenya are still struggling to improve their performances, Draft Trade and Industrial Policy, released by MOTI in December 2006, announced key reforms of DFIs, as listed below:

- i) DFIs will be allowed to access funds from contractual savings institutions and channel these saving into long term industrial development lending;
- ii) Through good corporate governance, DFIs will be given requisite autonomy to operate competitively and profitably in an open economy;
- iii) Development of a national policy on access to financial services, development finance and micro finance;
- iv) Provide a framework for proper supervision of the institutions; and
- v) Designing a strategy for development financing that minimises the adverse effects on private financial intermediaries.

### 3) MFIs

There are a large number of MFIs that provide micro credit to MSMEs, as well as low-income individual borrowers. Under major umbrella organisations, i.e. Association of Microfinance Institutions (AMFI), K-REP development Agency and MicroNet, there are 128 institutions. Some basic data on MFIs is shown in Table 5-9. One of the problems faced by MFIs is the lack of appropriate legal and regulatory framework to uniformly govern their operations. To overcome this situation, the government published the Microfinance Act 2006 (yet to become effective), which is to provide a legal framework for licensing, regulating and supervising microfinance business.

---

**Table 5-9 Basic Data on MFIs**

	Number of active savers	Savings (Ksh million)	Number of active borrowers	Loan outstanding (Ksh million)	Number of outlets	Number of staff
21 AMFI Members	2,073,363	-	493,682	16,007	841	4,222
K-REP FSAs*	60,999	1,647	15,364	146	59	-
<b>Total</b>	<b>2,134,362</b>	<b>1,647</b>	<b>509,046</b>	<b>16,153</b>	<b>900</b>	<b>4,222</b>

Note: FSAs denotes Financial Services Associations  
 Source: CBK, Annual Report 2006

#### 4) Informal lenders

Informal financing is quite popular with MSEs and low-income households as they are more accessible than formal services. There is a variety of informal financial service providers in Kenya, including, Rotating Savings and Credit Associations (ROSCAs) and Accumulating Savings and Credit Associations (ASCAs). ROSCAs have roots in the traditional mutual guarantee system where all members are required to make regular contributions, which are allocated to one or two members at a time. ASCAs, a variation of ROSCAs, also require members' regular savings with an agreed minimum amount. Accumulated savings are not distributed on a rotating basis, but lent out to members at interest.

#### (3) MSME support activities by development partners and GOK

There are many donor-funded activities to support micro, medium and small enterprises, many of which have financial services, directly or indirectly to enterprises. Major programmes include the following:

- i) WB is supporting the implementation of MSME Competitiveness Project with a budget of US\$ 20 million. Among several components the project has, one is to improve access to finance through strengthening the outreach and commercialising of MFIs. See Box 5-5 for the details.
- ii) DFID has a project called Financial Sector Deepening Trust, the objective of which is to provide capacity building support in financial institutions through financial and non-financial instruments.
- iii) DANIDA formulated a 4 year US\$ 25 million Business Sector Programme Support (BSPS) which will support the implementation of PSDS. One of the sub-components of BSPS aims to increase MSE's access to financial services through capacity building and non-financial interventions in the micro-finance sub-sector.
- iv) The EC and GOK jointly promote Micro-Enterprise Support Programme Trust, which provides funds for lending to small businesses; to provide capacity building grants to MFIs and BDS providers; and to facilitate the development of BDS. The EC also has a programme to provide assistance to MSEs, at cost of 7 million Euros. One of the components of the activities is institutional and capacity building for MFIs working in rural areas.
- v) The European Investment Bank (EIB) opened its East and Central Africa Regional

Representation office in Nairobi in May 2005. The EIB's focus on lending activities in Kenya includes private industry promotion, in particular assistance to small and medium-sized enterprises. The EIB, with IFC and Business Partners International as co-sponsors, is also to invest in a MSME Fund designed to provide loans to small companies.

- vi) GOK has put in place measures geared towards the promotion and development of the MSE sector. One of the services provided to the sector through MOTI is the provision of credit through the Joint Loan Boards Scheme (JLBS). Established in 1954, JLBS's purpose is to provide credit to MSEs, especially those by African entrepreneurs, to enhance entrepreneurship, develop enterprises and stimulate income generation and employment creation in rural areas. The scheme is administered through the District Trade Development Offices. It provides credit of Ksh 20,000 to Ksh 100,000 on tangible security, with maximum loan period of two years. Current interest rate is 12 % per annum, lower than commercial rate.

#### **Box 5-6: MSMEs Competitiveness Project**

The project comprises many components reflecting diverse necessary measures of MSMEs development components. The major issues handled in the project are: access to the finance; skill development; market linkages; and business environment.

The first component is the financial deepening trust fund which was set up originally by DFID funding. A few of the components that have been launched so far are: the financial pool which is to be used to promote financial products for commercial banks, MFIs and SACCOs.

Another component is to provide a matching grant scheme that is to facilitate the collective activities by the actors within a certain value chain. Recognising the weak linkages and supporting mechanism within a sub-sector, the component is to provide the incentives for building institutional capacity of the sub-sector. Sub-sector membership associations develop the business plans and proposals needed to access the matching fund which can be utilised to solve the problems within the supply chain.

Fostering and strengthening the markets are expected to support institutions providing financial and non-financial services to MSMEs and improvement of the investment climate for MSMEs. A number of components are planned under the project. The project components are gradually implemented one by one and it is too early to analyse the adequacy of the methods. The project is coordinated and implemented by the Project Secretariat established in MOTI. So far, the actors of coffee, cotton, and pyrethrum sectors formed groups and some value-chain finance proposals were submitted.

#### **(4) Access to credit by enterprises**

##### **1) MSE survey**

As pointed out in Sessional Paper No.2 of 2005 on Development of Micro, Small and Medium Enterprises for Wealth and Employment Creation for Poverty Reduction, limited access to financial



services, often caused by a lack of tangible security, is a major constraint inhibiting the growth of the MSEs sector.

The results of National MSE Baseline Survey 1999, which is the most recent comprehensive survey on MSEs, shows that, one of the most severe constraints faced by MSEs is lack of credit, as 18.4 % of all surveyed MSEs cited access to credit as key constraint (Table 5-10). Actually, 89.6 % of surveyed MSEs had never received credit from any source. The remaining 10.4 % of MSEs which had received credit, only 5.7 % reported having received loans from formal credit institutions including NGOs. As few as 1.5 % of MSEs had access to credit provided by commercial banks.

**Table 5-10 Most Severe Constraints Faced by MSEs**

Constraints	%
Markets and competition	34.1
Lack of credit	18.4
Poor roads/transport	7.2
Shortage of raw material and stocks	6.8
Interference from authorities	6.0
Poor security	3.1
Lack of worksites	2.5
Lack of skilled labour	0.6
Interruptions of/inaccessibility to electricity	0.6
Poor access to water supply	0.5
Other	9.1
No problems	11.7

Source: National MSE Baseline Survey 1999

**Table 5-11 Sources of Credit for MSEs**

Unit: %

Source	1993	1995	1999
None (no credit received)	85	89.2	89.6
Formal credit institutions	4	3.4	5.7
Cooperatives	-	-	1.2
NGOs	-	-	2.8
Commercial Banks	-	-	1.5
Government	-	-	0.2
Informal institutions	5	7.4	4.7
ROSCAs		5.0	2.5
Family and friends		2.0	1.5
Money lenders		0.1	0.1
Trade credit supplies			0.6

Source: National MSE Baseline Survey 1999

However, it is important to note that most MSEs surveyed in the Baseline Survey are so small in size that 70.1 % of them are found to have only one employee, in other words self employment. The enterprises with 11 to 50 employees, which are classified as small enterprises, account for 0.7 % of all MSEs, as shown in the following table. In the meantime, the above table in the next page shows the distribution of MSEs by industry group, which indicates that of all MSEs, the trade sector

accounts for 64.1 %, services 14.8 % and manufacturing 13.4 %. Unfortunately the data of MSE's access to credit by size of enterprises or by industry group is not available. Therefore it is impossible to look at the situation of the specific segment of MSEs, for example, manufacturing enterprises with 11-50 employees, in National MSE Baseline Survey.

**Table 5-12 Distribution of MSEs by Number of Employees**

Number of Employees	%
1	70.1
2	17.9
3-5	8.7
6-10	2.6
11-15	0.5
16-25	0.1
26-50	0.1
1-10 (Micro enterprises)	99.3
11-50 (Small enterprises)	0.7
<b>Total</b>	<b>100.0</b>

Source: National MSE Baseline Survey 1999

**Table 5-13 Distribution by Industry Group**

Industry	Unit: %		
	Total	Urban	Rural
Manufacturing	13.4	10.2	15.1
Trade	64.1	61.5	65.0
Bars/Hotels/Restaurants	6.0	5.9	6.5
Services	14.8	21.0	11.6
Construction	1.7	1.5	1.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: National MSE Baseline Survey 1999

## 2) KAM survey

On the other hand, members of KAM, most of whom are relatively large in size<sup>71</sup>, do not seem to have difficulty in accessing financial sources. The survey report by KAM in 2005<sup>72</sup> found that the majority of the manufacturing companies were financed through domestic banks (79 % of all survey respondents). The only other source mentioned by a significant number was savings. Further, in the recent past, trends show that other financing sources are gaining popularity e.g. equity, though this is not yet widespread. As for future investment plans, 82 % of the respondent companies had plans to put additional investment in Kenya, which indicates the sector's brisk demand of funds.

## 3) Macro data

On a macro economic basis, domestic credit to the private sector in Kenya has been increasing in total since 2002, with 8.1 % and 12.1 % growth in 2005 and 2006 respectively, indicating a growing

---

<sup>71</sup> More than half of surveyed companies have more than 50 employees.

<sup>72</sup> KAM, "Kenya's Manufacturing Industry: A Survey of the Sector 2005."

demand for credit by the private sector collectively.

**Table 5-14 Domestic Credit as in December**

Unit: Kshs. million

	2002	2003	2004	2005	2006
Central Government	113,384	134,278	121,543	118,879	134,728
Other Public Bodies	8,016	5,992	10,934	11,960	18,465
Private Sector	288,831	302,888	368,683	398,517	446,824

Source: KNBS, Economic Survey 2007

**(5) Future direction**

It is observed that there are three tiers in structure of enterprises in Kenya: large and medium scale enterprises, small-scale enterprises; and micro scale enterprises. Small-scale enterprises, with employment size of 11-50, are often referred to as the “missing middle”, as their presence is unimpressive compared with large, medium and micro industries. It is presumed that they have difficulty in accessing proper financial services, though they have high potential for growth, as shown in Table 5-15. It is necessary to promote this segment of industrial sector in terms of not only access to financial services but also other BDS.

**Table 5-15 Structure of Enterprises and Financial Condition**

	Employment Size	Number of Enterprises	Growth potential	Financial Condition
Medium/Large Enterprises	51-	Tiny (35,000)	Good	- Relatively good access to formal financial institutions - Need more flexibility and diverse loan products
Small Enterprises	11-50	Very small (50,000)	High	- Limited bank financing with collateral constraints - Need financial training
Micro Enterprises	1-10	Very many (1,670,000)	Limited	- Limited capital resources, though various financial schemes and informal lending available - Need lots of financial training

Source: The JICA Study Team based on Stevenson and St-Onge (2005); PSDS

One of the methods to facilitate MSEs’ access to credit which can be practiced immediately is to systematically provide information on financial sources for MSEs. Although there are various financial schemes even now, as mentioned above, MSEs do not appear to be provided with sufficient information on them. The government should collect as much information as possible and set up consultative function for MSEs.

Another option may be diversification of financial services for MSEs to acquire industrial machinery, which is normally difficult for small manufacturers. The possibility of financing services such as asset financing, leasing and hire purchase should be studied and if proved to be feasible, the government may encourage these services by improving legal environment and possibly providing some forms of assistance.

Further, activities recommended in PSDS Implementation Plan (PSDS-PIP), such as enhancement of trade finance facilities, promotion of best practice in financial institutions, provision of credit reference services, and provision of long-term finance to MSEs, should be examined and adopted.

### **5.6.2 Improving Access to Direct Finance**

Lending from the banks is inevitably limited to enterprises with stable revenue or collateral because the banks cannot take the risk of default. On the other hand, the venture capitalists can take risks aiming at high returns. The Capital Markets Authority (CMA) is the regulatory body overseeing both the stock exchange markets and the venture capital. The incentive system for the venture capitalists has already been set up. Registered and approved venture capital funds can enjoy up to 10-year income tax holiday.<sup>73</sup> However, as of February 2007, only three venture capitalists were registered; i.e. Acacia Fund Ltd., Aureos East Africa Fund (K) Limited, and Euro Capital Partners.<sup>74</sup> The Capital Markets (Registered Venture Capital Companies) Regulations, which are designed to set the regulatory framework for the venture capital activities, are awaiting for finalisation by the Attorney General. It is expected that enactment of the Regulations shall attract more venture capitalists to operate in Kenya.

Development of venture capital and the stock exchange market is mutually important. Investment of venture capital is promoted where the companies can go public easily so that the venture capitalist can get a return without holding the stocks for a long period of time. The stock exchange markets are also promoted where venture capital is active because the venture capital encourages and assists companies to go into public.

The Nairobi Stock Exchange has two markets; i.e. Main Investment Segment Market and Alternative Investment Segment Market. The Main Investment Segment Market requires share capital of Ksh 50 million and 25 % of the shares held by more than 1000 shareholders whereas the Alternative Investment Segment Market requires share capital of Ksh 20 million and 20 % of the shares held by more than 200 shareholders. The total number of listed companies in the Main Investment Segment Market was 41 companies of which 17 companies were from the manufacturing sector as of the end of August 2006. While this is quite small in number, the listed companies in the Alternative Investment Segment Market were even smaller, having only 9 enterprises.

Currently, discussion is ongoing on the need to open an African version of the National Association of Securities Dealers Automated Quotations (NASDAQ) of USA in Kenya, popularly called "ASDAQ". ASDAQ is the over the counter dealing of company shares whose criteria are lower than existing markets in the Nairobi Stock Exchange. ASDAQ could provide direct financial markets to SMEs which have constraints on receiving sufficient credit through indirect finance and stimulate venture capital activities in Kenya.

Thus, the business environment for the direct financial markets is improving, and stock markets and

---

<sup>73</sup> The Income Tax (Venture Capital Company) Rules, 1997

<sup>74</sup> Based on an interview with the CMA in February 2007.

venture capitals are increasingly becoming active. The manufacturers should pay more attention to available opportunities of direct finance through initial public offering and investment by the venture capitals. MOTI is recommended to support in raising awareness of the manufacturers and assist in linking the potential manufacturers to the venture capitals. This would help the venture capital companies find more investment opportunities in the manufacturing sector.

### **5.6.3 Improving Cash Flow**

While there is a limitation in the third party finance, methodologies to improve the cash flow need to be sought in parallel. Inefficiency of the Kenyan manufacturers increases the amount of working capital. The Kenyan manufacturers have to take up some methodologies to reduce working capital; thus reducing the needs for a loan.

One reason that accounts for financial inefficiency is the long duration to collect accounts receivable. Many retailers impose conditions to make payment after the sales are made, and the payment is often not made right after the sales. In a case where the terms and conditions are independent from the sales, the duration of collection of account receivable often exceeds 90 days. By contrast, Japan, for example, regulates the term of payment to the subcontractors in 60 days by law.<sup>75</sup> Such difference in maturity is very disadvantageous for Kenya where the interest rate is quite high.

Another reason that causes increase in the working capital is the large number of inventory and low productivity. Internally, upgrading production management would help to reduce inventory and improve productivity. (See Chapter 5.3.2) Externally, in the area of the Government efforts, development of efficient transportation network and faster clearance at the port will help to reduce working capital. Thus, there are areas which need to be addressed for reduction of working capital both by the Government and the private sector.

It is also recommended that the financial consultation services be geared towards not only the indirect finance but also the direct finance and financial management. It is also essential that the financial consultation includes feasibility assessment of investment.

## **5.7 Human Resource Development**

The importance of human resource development is well recognised in Vision 2030, which stresses the needs for enhancing science, technology, and innovation (STI) as a foundation for realising the Vision. Technical education is critical for industrial development because it is the key instrument to develop human resource who can lead industrial transformation.

The Education system for industrial development is essential throughout the chain beginning from primary education to the tertiary level. Those who demonstrate talent in manufacturing often acquire basic skills for ingenuity in early childhood while high technical features embedded in the manufacturing sector are often originated in R & D outcomes in tertiary institutions.

Various papers suggest a number of good recommendations for improvement in the education system

---

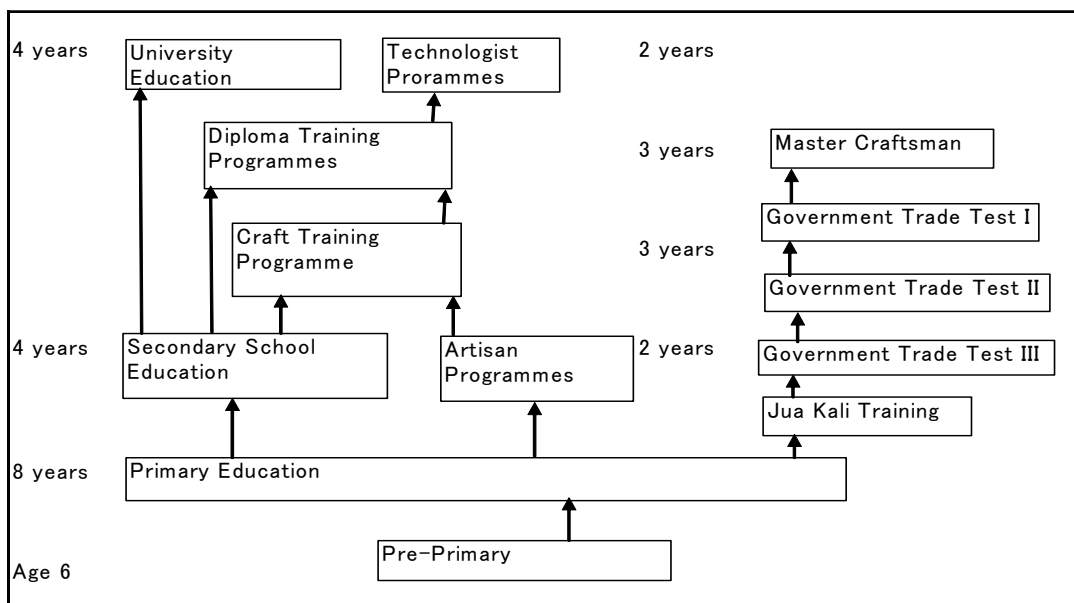
<sup>75</sup> Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors; Law No. 120 of 1956, Japan

to enhance its contribution to industrial development. MAPSKID intends to provide some additional insights to contribute to the on-going discussions on TIVET reform from an industrial development point of view.

### 5.7.1 Current Situations and Constraints of TIVET System

#### (1) Current institutional framework

The education system in Kenya is administered by 8-4-4 system. Alongside the academic course, TIVET courses run in parallel. The entire picture of the TIVET system is hard to grasp as many of them were established in response to immediate needs observed by various organisations ranging from ministries, private companies, communities, to NGOs without a legal system nor institutions governing the whole TIVET. There are three prime ministries administering TIVET institutions, namely, MOST, MLHRD, and the Ministry of State for Youth Affairs. Over ten additional ministries run the more than forty TIVET institutions, which cover subjects of their specific interests. Moreover, there are over 1,000 private TIVET institutions which may or may not be in line with the national accreditation system. This spread of management has made coordination of activities and maintenance of training standards difficult.



Source: UNDP and GOK, Study Report on Status of Jua Kali Sheds and Youth Polytechnics in Kenya

**Figure 5-9 Current TIVET System in Kenya**

**Table 5-16 Type of Major TIVET Institutions**

Institutional Type	Number	Line Ministries	Credentials from KIE (Entry Requirement)			Credentials from NITC
			Craft Certificate (KCSE-D)	Diploma (KCSE-C)	Higher Diploma/ Degree (KCSE)	Trade Tests (I~III) (KCPE/KCSE)
National Polytechnic	4	MOST	○	○	○	
Institute of Technology	16	MOST	○	○		
Technical Training Institute	14	MOST	○	○		
Industrial/Vocational Training Centre	5	MLHRD		○		○
Youth Polytechnic	600+	Ministry of Youth Affairs				○
KIBT	1	MOTI		○		
KITI	1	MOTI				○

KCSE: Kenya Certificate of Secondary Education; KCPE: Kenya Certificate of Primary Education  
Source: The JICA Study Team

The first stream of TIVET is designed alongside the academic system mainly administered by the Directorate of Technical Education (DTE) in MOST. Certificate, diploma, and higher diplomas are credited through the curriculum by the Kenya Institute of Education (KIE) and examinations by the Kenya National Examination Council (KNEC). Both KIE and KNEC are Semi-Autonomous Governmental Agency (SAGA) under the Ministry of Education (MOED). *Sessional Paper No.1 of 2005 on a Policy Framework for Education, Training and Research* has recommended that credentials from academic ladder and TIVET ladders be designed in equal level so that students can chose the path in higher education interchangeably.<sup>76</sup> In a recent reform, the Kenya National Polytechnic and the Mombasa National Polytechnic started to offer degree courses in collaboration with universities.

The second stream of TIVET is designed for those who are in need of hands-on knowledge, which is to be utilised immediately in the private sector. The major institution administering this ladder is the Directorate of Industrial Training (DIT) in MLHRD. The idea of this stream is co-sponsorship between the Government and the Private Sector. Accordingly, the National Industrial Training Council (NITC), established under the Industrial Training Act (Cap 237), oversees curriculum development and testing. NITC is a tripartite body represented by DIT, the Federation of Kenya Employers, and the Central Organization of Trade Unions (COTU). This stream provides certifications from the national trade tests for 32 technical and vocational subjects. Part of the operational fees are covered by the Industrial Training Levy, which pools the funds collected from enterprises charged per employee. Enterprises then apply to receive the funds when training needs arise.

<sup>76</sup> Ministry of Education, Science and Technology (2005) *Sessional Paper No.1 of 2005 on a Policy Framework for Education, Training and Research*, pp.28-29.

KIBT and KITI are directly administered by MOTI. Due to their legal status, it is not possible for them to generate their own income to cover some expenses including the cost of renewing facilities and equipment. In order to generate some impact, optimal level of investment is required; yet, neither resource endowment nor allocation is optimal. For example, KITI has been experiencing serious obsolescence of the training facilities and equipment and inability to catch up with the quality demand from the job market.<sup>77</sup> On the other hand, KIBT provides business management courses nationwide at a very small fee. Due to its capacity, it can only visit the same sites once per year. It is hardly possible to follow up with the same beneficiaries even if they may have some kind of additional needs. KIBT is proposing the alteration of their status to SAGA to have independence in the administration.

The increasing demand for technical education has also attracted private institutions to enter the market.<sup>78</sup> In addition to TIVET institutions sponsored by NGOs, there are various commercial-oriented TIVET institutions. Schools such as business management, secretarial skills, and ICT related skills are notably emerging in urban areas. These institutes often apply foreign curricula and certificates instead of the local ones.<sup>79</sup>

## (2) On going reforms of TIVET

Reforming of TIVET system has been advocated for a long time. Notable progress was made in 2003 with a rapid appraisal report on the status of TIVET. It was on this occasion when the importance of linking technical education to industrial development was stressed.<sup>80</sup> The recommendations from the report were successfully put in place in *Sessional Paper No.1 of 2005*. The Paper highlights the constraints of TIVET such as poor physical and human capacity in management, inflexibility and irrelevance of the curricula for industry, limited interaction with private sector, and current fragmented government administration. Then it calls for the development of the National Skills Training Strategy and the establishment of the National TIVET Authority. Suggested administrative and substantive service reforms include encouraging private sector investment, review of current delivery mechanism, labour market survey and skill needs assessment, audit of TIVET institutions, review of the curriculum, and development of adequate infrastructure.<sup>81</sup> Then recommendations from *the Sessional Paper* have been followed by the Kenya Education Sector Support Programme (2006-10), which comprises 23 investment projects.

As for the key reform by MLHRD, the revision of the Industrial Training Act, enacted in 1960, has been submitted. In order to enhance the effectiveness of TIVET function, it was suggested that DIT

---

<sup>77</sup> Many teaching machineries and equipment were the ones coming from the time of the foundation in 1965 with the Japanese financing (based on the interview with KITI officials in September 2006.)

<sup>78</sup> Ministry of Education, Science and Technology (2003), Report on Rapid Appraisal on the Status of Technical and Vocational Education and Training (TVET) in Kenya, p.15

<sup>79</sup> Ministry of Education, Science and Technology (2003), Report on Rapid Appraisal on the Status of Technical and Vocational Education and Training (TVET) in Kenya, p.17

<sup>80</sup> Ministry of Education, Science and Technology (2003), Report on Rapid Appraisal on the Status of Technical and Vocational Education and Training (TVET) in Kenya, p.ix.

<sup>81</sup> Sessional Paper No.1 of 2005, pp. 32 & pp. 57-61

---



become SAGA. With the back up from Vision 2030, TIVET reform is fully supported by the Government, and MOST is about to complete formulating the National Science and Technology Skills Training Strategy.

The low level of industrial development is a reflection of the status of the TIVET in Kenya. Many TIVET institutions have laid emphasis on job creations and providing students with hands-on technology, which enables production with low investment. Since job absorption by the formal sector is limited, it has made sense that the curriculum is designed for equipping the students with basic knowledge. However, designing the curriculum to meet the needs of MSEs has caused the limitations in the supply of capable workforce who can lead in industrial development. The increasing global competition calls for more emphasis on training human resource to become competitive workers at the global standards. Moreover, the fact that curriculum by KIE has not been revised for 25 years illustrates a very wide technological gap existing between what are taught at TIVET in general and the global-standard industrial technology. Lack of funding to renew facility is another chronic problem surrounding TIVET. Some curriculum revision and facility renovation were undertaken partially with support from donors. For example, the Government of Italy has collaborated on upgrading of the training curriculum and facilitation of the Department of Electric and Electronics in the Kenya Polytechnic, Nairobi and the Mombasa Polytechnics from 2004 to 2007.

### **5.7.2 Recommendations for improving TIVET for the industrial development**

#### **(1) Strengthening linkage with the private sector**

The best model of TIVET needs to be sought through public, private, and academic partnership. The private sector is the most effective source of information that can upgrade the TIVET. Since the technologies change rapidly, it is necessary to have the involvement of the private sector in curriculum development and dispatching the trainers. Moreover, many vocational training schools abroad receive orders from the private sector. This helps the vocational schools to keep up with the technological needs of the private sector and also generates some income for machinery renovation.

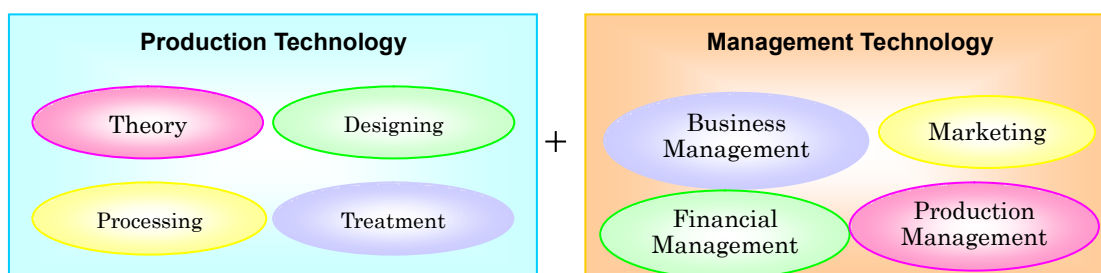
The Technology Development Centre in Athi River, established in 1998 under DIT of MLHRD, was designed to have a close linkage with EPZ companies in Athi River. Yet, stagnation of EPZ companies in Athi River has hampered creation of the dynamic relationship with the Centre. In general, the stronger the sub-sector, the more collaboration TIVET institutions can receive. Therefore, creation of the relationship between TIVET institutions and the private sector may rely more on the development of the latter. Yet, TIVET institutions also need to keep in mind the need for creation of mutual benefits since cooperation from the private sector is difficult to obtain if the private sector cannot feel the benefit. So the relationship needs to be sought through a win-win scenario.

Although MOTI is not the main stakeholder in administering TIVET, MOTI, as a representative of the interests of the industry, should have a role to play in strengthening linkages between the industry and TIVET institutions. Establishment of TIVET Authority with participation of MOTI is being planned by MOST. Concrete tasks of MOTI in TIVET development needs to be discussed in the

TIVET Authority.

(2) Coverage of technical education and training

Increasing competitiveness of the industry now requires that technical education and training cover both production and management technologies. The present technical curriculum is focused on production technology, and it almost neglects management technology, which is the source of productivity increase. A review of the curriculum is necessary to capture all the components that would bring up the industry.



Source: The JICA Study Team

**Figure 5-10 Coverage of Technical Education and Training**

In a large enterprise where the division of work is established, each personnel can be specialised in a certain subject. However, the managers in MSEs have to have a good understanding both in production and management technologies. The management technology is the key for increasing productivity and stabilising the company's financial status. Moreover, as discussed in Chapter 5.2, production and quality control is an indispensable tool to increase productivity and to link up to assemblers because supplying to assemblers requires observation of certain QCT standards.

Although the actual practice on production management may be difficult to learn at training institutions, theories, concepts, and basic practice should be introduced so that the students acquire ideas before they go into the field. Having learned in youth is helpful to internalise the concept of QCT since it has been found extremely difficult to motivate MSMEs to change their production practices unless their immediate customers demand for the change.

It is not right to blame obsolescence of facilities entirely on the widening technological gap from the global standards. Although it is true that modern facilities improve labour productivity, MSMEs can still produce global standard products with basic machinery. The photos below are taken in one small factory in rural Japan. The operators are the local housewives, whose technological training background may not be much different from the Kenyan TIVET students. Yet, what is very peculiar is the production process, which constantly cares about precision through reference to the drawings, cleaning with vacuum, and sample checking with a magnifier and a calliper. These production practices are the methodologies that enable the Japanese manufacturers to keep the global standards regardless of the level of their financial resources. TIVET institutions need to teach such production management techniques that enable precision work. A good model for TIVET is demonstrated by the Tool Room & Training Centre in Bangalore, India (See Box 5-7).



Drawings are posted in front of the operator so that she can check as necessary.



The operator vacuums processed parts and machinery once a while in order to remove the dust, which would disturb precision work.



The magnifier is placed on the machinery so that the operator can check precision on sample basis. A calliper is also placed on the desk as shown in the middle photo.

### Box 5-7 Industrial Training Model: Tool Room & Training Centre in Bangalore, India

The industrial training run by the Government Tool Room & Training Centre in Bangalore demonstrates a good model. The Centre runs under the State Government of Karnataka and was established with the assistance of the Government of Denmark in 1972. The Centre offers diploma and post-diploma courses in metalwork and moulding. The Centre is keen on the latest technology since they receive orders from private companies. The notable characteristic of the Centre is that it teaches production management together with manufacturing techniques. The graduates from the Centre hold a high profile status and are fully absorbed within the manufacturing sector. They are also in high demand abroad. On average, 20 to 25 % of the graduates are employed abroad including in Malaysia, Singapore, and Australia.



A board showing the progress of the training



Proposals for "Kaizen" posted on the wall



Student's note



A training scene

The work procedure is explained with process time and drawing.

Source: KRI International Corp. (2007) Private Sector Development in India (Project Research), JICA

In the area of production technology, improvement needs to be made in designing and drawing, which are the fundamental techniques for creating networks among the manufacturers. Without designing and drawing techniques, it is not possible to pass an order to another company since

specifications need to be agreed upon based on the drawing before making a contract. This does not mean that all the TIVET institutions require CAD. The drawing techniques can be learned from an early age, starting from the hand drawing. On the foundation of the hand drawing, TIVET institutions can teach technical drawing over the drafters and finally on CAD depending on their financial availability. The hand drawing shown in the third photo in Box 5-7 is the benchmark, which all the Kenyan TIVET institutions can take up immediately.

While it is recognised that upgrading the whole TIVET institutions is difficult to achieve due to financial constraints, the best practices need to be made starting from the top, i.e. at the national polytechnics. Therefore, the following activities are recommended to be undertaken:

- i) MOTI and KAM collaborates with allocation of industrial attachment for the national polytechnics;
- ii) Annual review of training curriculum of the national polytechnics
  - with the participation of the manufacturers and
  - with more emphasis on production management and technical designing.

(Action Plan 3.7.1)

### (3) Inducing motivation for life-long TIVET

The industrial development necessitates continuous upgrade of worker skills. Accordingly, TIVET system needs to be designed in a way to motivate both employers and employees to utilise the system after employment. Such system needs to be convenient (e.g. trainings can be undertaken in flexible time) and to be appreciated of the values.

Although the industrial training levy system is designed to provide training opportunities to employees, it is difficult for the employers to release employees from jobs to attend training courses, whose certificates are not appreciated to have high values. However, the national trade test system can overcome constraints from sacrificing working time if preparation of the test can be done mostly after work or weekends. Kenya already has national trade tests administered by MLHRD, but they are for craftsmen and considered a lower qualification than diploma or degrees.

On the other hand, if the national trade test is well designed in various levels from the basics to the highest, employees will be motivated to receive higher certificates, and employers have incentives to support the initiatives by the employees. The Japanese Government, for example, has the national trade tests in 137 job categories. The system was initiated in 1959 with 5 trades and gradually expanded afterwards. In addition, many sub-sectoral associations design and administer specific testing. Trade test is now available for any job category. Each trade test has from 3 to 5 levels of certificates, which cover from the beginner to the top managerial levels. Applicants can take tests according to their knowledge level. This trade test system in Japan is greatly contributing to upgrading industrial human resource. Both employers and employees utilise the trade tests to acquire specific technical skills since academic courses usually do not equip the students with specific

technical knowledge necessary to undertake the job.<sup>82</sup>

Therefore, upgrading of vocational skills evaluation system is recommended through the following procedures:

- i) Benchmarking study on trade test system abroad,
- ii) Designing new trade test system in Kenya,
- iii) Pilot tests, and
- iv) Annual implementation of trade tests.

(Action Plan 3.7.2)

Another system, which Kenya can utilise, is skills competitions both domestically and internationally. As for international skills competition, it is recommended to join in WorldSkills<sup>83</sup>, an international association, which carries out an international competition every 2 years. WorldSkills now has memberships of 41 countries including South Africa. In 2007, over 850 young people are participating in the international skills competition held in Japan. Many member countries have established domestic competitions to select the candidates for the international competition. Top companies also have established internal training system, which is designed to win in the competitions. Joining in WorldSkills would guide the Kenyan TIVET to keep up with the global standards.

## 5.8 Industry Network

### 5.8.1 Theory and current situation of industrial clustering in Kenya

The term "cluster" is used in various ways and sometimes leads to confusion. There are two popular streams of definitions used for industrial development in developing countries, these are:

- i) "geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region"<sup>84</sup> and
- ii) "sectoral and spatial concentration of firms" .<sup>85</sup>

---

<sup>82</sup>For details, see JAVADA, Skills Evaluations System in Japan  
<[http://www.kokusai.javada.or.jp/english/SESPP/01\\_sespp/skills\\_ev\\_sys.pdf](http://www.kokusai.javada.or.jp/english/SESPP/01_sespp/skills_ev_sys.pdf)>.

<sup>83</sup> Home Page of WorldSkills <<http://www.worldskills.org/>>

<sup>84</sup>The Institute for Strategy and Competitiveness, Harvard Business School  
<<http://www.isc.hbs.edu/econ-clusters.htm>>

<sup>85</sup> Schmitz H. and Nadvi K. (1999) Clustering and Industrialization: Introduction, World Development Vol. 27, No.9, pp.1503. World Development Vol.27, No.9, 1999 is a special issue on clusters, which contains 15 articles that report experiences of clustering in developing countries including Kenya, written by Dr. McCormick, D.

---

The main difference between the two definitions is that the former definition often covers a wider area whereas the latter definition covers a more concentrated area based on the theory on "externality" by Marshall.<sup>86</sup> The players in the cluster in the latter definition are mostly MSMEs, and the cluster development activities in the former definition try to maximise externality. (See Box 5-8) On the other hand, the players in the former definition often include large-scale enterprises, and its activities cover issues that are considered the key factors for competitiveness creations. While there are many cluster promotion projects, their approaches are different depending on its project purpose.

**Box 5-8**

**Examples of Externality**

- Advertisement impact
  - Market information
  - Suppliers' availability
  - Technological spill over
  - Joint use of machinery
- ↓
- Joint marketing
  - Joint purchasing

Yet, there are similarities between the two definitions. Both definitions recognise the importance of strengthening linkages and specialisation that lead to competitiveness creation. The linkage creations are not restricted to the manufacturers since the dynamic clusters show linkages with other economic sectors including BDS providers. As discussed in Chapter 5.2.1, specialisation is the key for technological development since it is not possible to accumulate knowledge and capital if a company does not concentrate on its core competency. Then specialisation requires linkage creation so that the value chain is created. Thus linkages with the related and supporting industries are very important for clustering.

However, the present characteristics of the Kenyan manufacturers do not show competency neither in linkage creation nor specialisation. Porter argues that the dynamic cluster shows strong correlation among the four determinants; namely factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry (See Box 7-1 in Chapter 7). Although creation of dynamic clusters requires improvement in all the four determinants, this chapter particularly discusses about some ways for linkage creations.

**5.8.2 Cluster promotion**

**(1) Creation of integrated economic zones**

Vision 2030 finds potential in Athi River, which is only 19 km away from Jomo Kenyatta International Airport. With the planned rehabilitation of Nairobi-Namanga road, accessibility to Nairobi and Arusha will improve. EPZ Athi River is the largest EPZ, hosting 24 companies and 10,000 workers in 108 hectares out of the 339 hectare fenced site. Due to the development of EPZ companies, the local Mavoko/Kitengela area is developing into a major commercial, residential, and industrial area. Vision 2030 envisages establishment of a BPO Zone under MOIC and first-tier retail shops under MOTI in Athi River. The private sector is reportedly showing interest in investing in social facilities and amenities including hotels, living estates, golf course, and schools. With the

---

<sup>86</sup> Marshall argued that cluster generates "localized external economies that lowered costs" of business. [Marshall, A. (1920), Principles of Economics, 8th Edition. London: Macmillan. as cited by Schmitz and Nadvi (1999), p.1504]

policy back up and investment interest by the private sector, it is high time to create the best model of an integrated economic zone, which can attract investment from the leading manufacturers.

As discussed in Chapter 5.5.2, it is unlikely that Kenya can compete in investment incentives by offering fiscal incentives only, since more industrially advanced countries try to attract investment by not only the fiscal incentives but also provision of a strong economic infrastructure, which is integrated with the social and amenity environment.<sup>87</sup> However, Kenya as a leading tourism country, definitely has a comparative advantage in the social and amenity environment in the region. If these are integrated in industrial areas, Kenya's attractiveness as an industrial investment destination shall improve.

It is also recommended that an SME Park be established in this zone so that it could have four viable economic entities which can enjoy externality together; namely transformed EPZ (as discussed in Chapter 5.5.2), BPO, first-tier retail shops, and the SME park. There would also be a Technology Development Centre, which can serve the training needs of the workers. After establishment of the zone, it is expected that a forum is formed by the private and public sectors operating in the zone to create a collaborative atmosphere for the linkage creation as observed in a model case demonstrated in Penang, Malaysia discussed in Box 7-2 in Chapter 7. After the successful model in Athi River, the lessons can be replicated in other areas along the proposed industrial corridors.

## (2) Promotion of subcontracting

Promotion of subcontracting is not a new agenda. Subcontracting has been repeatedly tried out in vain since 70's including assistance from KIEL and UNIDO. The main reason for not producing the sustainable outcomes is disregard of QCT standards as discussed in Chapter 5.2. Trying to match the large enterprises with MSMEs without understanding the concept of QCT will not result in a sustainable outcome. It is more realistic that the subcontracting network is created from the top MSMEs and subsequently to the lower levels so that the level of QCT standards is easily shared between an outsourcer and subcontractors. It is often the case that there is some gap of the QCT standards initially between the two. Yet, those manufacturers who are willing to meet the outsourcer's demands can establish stable positions as subcontractors. Many of the top multinational manufacturers extend support to their subcontractors to bring up QCT level. One best practice observed is the Penang Skills Development Centre (PSDC), Malaysia. While the building of the Centre is constructed by the local government, the multinational manufacturers in Penang collaborate in creating teaching modules, lecturing, and receiving Internships. (See Box 7-2 in Chapter 7) The type of subcontractor highly demanded by large-scale manufacturers is a company, which can undertake simple jobs by strictly following predetermined QCT standards.

---

<sup>87</sup> For example, see a planning on the Integrated Industrial Township by the Greater Noida Industrial Development Authority, India <[http://greaternoida.nic.in/about\\_us/profile.htm](http://greaternoida.nic.in/about_us/profile.htm)> and Smart Village in Egypt discussed in Chapter 10.3.2.

---

### (3) Incubation centres

Regarding the various needs and vulnerable nature of infant enterprises, business incubation approach has been tried out in Kenya. An incubator provides a variety of services such as provision of affordable operating space, access to finance, technical and managerial support, and so forth. KIEL was established for the same purpose.

Similar facilities and projects can be found today. KoBi, one of such projects, is a project by the JKUAT, Centre for Business Incubation under the InfoDev Incubator Initiative Work Programme supported by WB. It is to support business start-ups without sufficient financial capacity to secure business premises, access to the information, and business skills. The core services are provision of affordable office space with access to ICT facilities, provision of business training through IFC Small Business Solution Centre, and support for accessing to the financial markets provided by IFC. The kind of business engaged in by tenants is software development, translation, editing, and designing of printed materials. MOTI is currently pursuing the possibility of establishing incubations, utilising its own affiliated parastatals under the partnership with JKUAT.

Yet, some issues need to be reviewed. Firstly, the biggest challenge is sustainability: whether it is possible to operate on a cost recovery basis. Providing various supports can be costly. Maintaining the services requires some mechanism of cost recovery. On the other hand, the beneficiaries may not be able to grow as the implementers expect them to make some kind of contribution, such as the rent of the premises. For example, the Kenya Kountry Business Incubator (KeKoBI) facilities are accommodated in IFC SSC, and the rent charged to the tenants is subsidised. However, it has been experienced that the enterprises cannot generate profit in order to pay even the subsidised rent on a sustainable basis. One of the problems observed among these start-ups is marketing capacity. Therefore, KeKoBI started to support their marketing activities within its capacity; e.g., providing the reference to JKUAT related institutions. This shows that tenants need to be selected on their potentials; i.e. those which can grow and pay-back some fixed costs. In the case of KeKoBI, securing rent income is critical. Another aspect is the question of the competitiveness of the incubators as service providers. Though it is a good idea to have everything in one place, it is not always the case that the service providers have up-to-date good skills and knowledge to provide various types of services. Therefore, networking with other BDS providers become crucial.

### (4) MSME parks

Vision 2030 envisages setting up MSME parks under its flagship project. To have the MSME parks<sup>88</sup> as a tool for competitiveness creation, tenant enterprises have to be selected on the basis of the growth potential. Attracting the competitive MSMEs to move into the MSME parks requires well prepared infrastructure and common facilities such as testing and laboratory facilities as well as a delivery station as well as daily life facilities. MSME parks also have to be connected to the major

---

<sup>88</sup> In the context of Industrial Master Plan, Micro Enterprises could also be included and in this section, the term “MSME parks” is used.

---



cities through efficient transportation. The MSME parks can also be a tool for clustering if the group of enterprises is selected from those which have common business interest so that the common facility and the business network can be created based on the needs of the sub-sector. As argued in the Integrated Economic Zone above, it is important to create the best model at first and to replicate the lessons in other locations.

#### (5) One Village One Product

One Village One Product is a movement promoted by the Japanese Government in assisting local economic development in developing countries. This movement was popularly adopted in Japan in 1980's and 1990's and successfully created an economic development model in rural areas. The aim of the One Village One Product is to produce competitive product utilising the local resource, which the area has a comparative advantage.

The movement starts from creating a network in the community and comes up with a vision of transforming the community to the one which can produce more value-added products and expand the markets, thus increasing the income level. It finds a way to utilise the local resources including commodities, technology, and human resources in the most effective manner. This movement is considered applicable to the Kenyan rural development through empowering the local communities.

One Village and One Product is a slogan to motivate people. It does not mean so literally. While it is important to produce one successful product in one project at first, the product range can be diversified afterwards as long as it is relying on the identified core competency.<sup>89</sup>

There are some key factors for success.

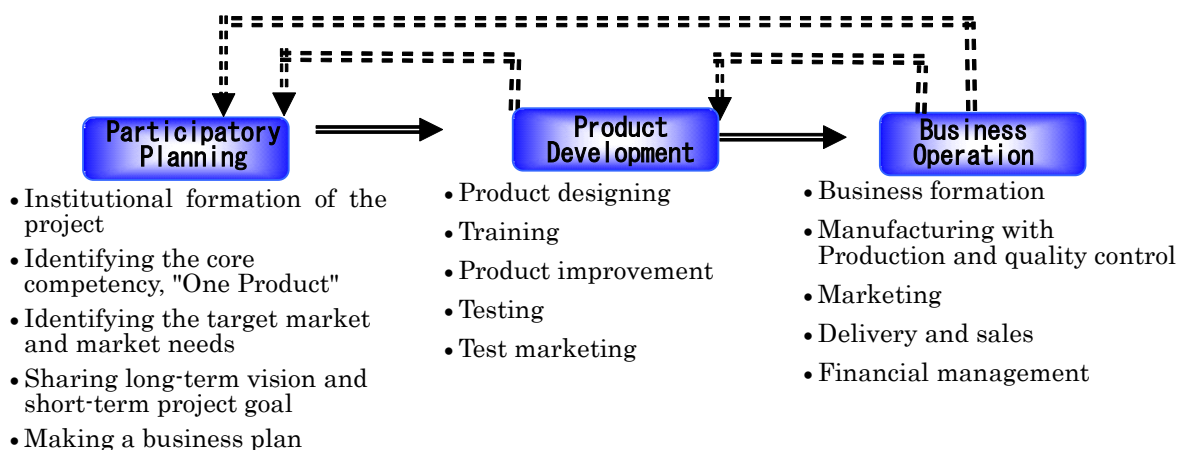
- i) Social capital: Since the activity assumes involvement of multiple players in the local area, existence of social capital or "norms of reciprocity" is a prerequisite to induce cooperation among the participants.
- ii) Core members: There have to be some core proactive participants who lead the transformation process. Public assisted projects have a risk of distorting the social network. It may cause some to just join a project as "free riders" while others may see the project as an opportunity to maximise their personal benefits and try to avoid welcoming new members who may reduce their vested interests. It is advisable that the project keeps open membership during the planning process so that those who are most willing to sacrifice their time for the common interests can stay in the core.
- iii) Facilitation: From the experience of various cluster projects all over the world, it is

---

<sup>89</sup> For example, Box 5-4 in Chapter 5 discusses a model case in Umaji Village in Kochi Prefecture, Japan, utilising one agro-commodity called citrus junos fruits. With the success of producing citrus junos drink, processed items are now diversified ranging from food to cosmetics. Observing the success of the Cooperative, which produced the drink, other farms in Kochi Prefecture also ventured into production of processed citrus junos with its own unique value addition. Now Kochi Prefecture is considered as the most dynamic cluster of citrus junos products.

---

- considered important to have someone who takes a facilitation role, often chosen from local BDS providers.<sup>90</sup>
- iv) **Vision:** To motivate the group of people to move together, a long-term vision with realistic short-term project goals needs to be shared among the participants.
  - v) **Differentiation:** The product development process has to start from identifying market needs, to which a product is designed accordingly. The Product cannot be a mere copy of existing ones in the markets. The market position would not be stabilised without differentiating from those existing ones and establishing a brand image. The differentiation process leads to innovation accompanied by human resource development and technological upgrades of the community. (See Box 5-4 in Chapter 5)
  - vi) **Persistence:** One needs to be aware that a competitive product that catches the markets is not something developed easily. A project ideally moves linearly, starting from participatory planning, product development, to actual business operation. Yet in reality, it is often the repetition of trials and errors that make it necessary to go back to the earlier process. (Figure 5-11) Success can be obtained only through persistent commitment by the facilitator and the core members.



Source: The JICA Study Team  
**Figure 5-11 Process of the One Village One Product Project**

One big difference in preconditions between Japan and Kenya is means of market access. Japan has a well developed infrastructure and e-commerce that enable direct selling from the rural producers to the consumers. It is thus important for the Kenya Government to speed up building infrastructure and B2C e-commerce. In the meantime, one important aspect, which might require government assistance, is establishing market channels to compensate the missing link.

Several similar activities like One Village and One Product are being conducted in Kenya. One of them is the Kenya Agricultural Productivity Project (KAPP) assisted by WB. KAPP involves 1,200

---

<sup>90</sup> Depending on the project, name of the facilitators is different. For example, the cluster projects in India call them Cluster Development Agents.

community groups in 20 districts. Each district has a service unit comprising of 1 coordinator, 2 technical staff, and 1 monitoring and evaluating officer. The service unit assists the community groups to develop enterprise development plans, utilising local agro-resources. Training and extension services are provided according to the needs of each development plan. One Village and One Product approach and these on-going projects can share their experiences with each other and establish the best model in Kenya.

## **Chapter 6 Consideration of Environment and Social Aspects in Industrial Development**

### **6.1 Consideration of Environment**

#### **6.1.1 Situation of National Environment in Kenya<sup>91</sup>**

According to NEMA, 85 % of the territory in Kenya is covered by Arid and Semi-Arid Lands (ASAL). 80 % of the population lives in 15 % of the total land, which poses enormous pressure on nature: Land degradation and the decrease of surface water are the problems often observed. Due to the insufficient solid and liquid waste management capacity and regulatory framework with enforcement capacity, the situation of soil, river and lake water has been increasingly deteriorated. The expanding economic and productive activity exacerbates the situation. Kenya is endowed with enormous biodiversity. However, the infestation and irregular growth of alien species puts stress on the eco-system. This situation becomes a threat to the health situation of its residents. Moreover, scarcer resources such as fodder and water cause conflicts among users of resources, which eventually put a large burden on the poor. On the other hand, it is noted that preparedness to disaster is not enough and therefore once any disaster occurs, it causes the serious damage.

#### **6.1.2 Environment and Industrial Development - Some Critical Issues**

Conservation of the environment and a balanced co-existence of industrial development are especially important for Kenya. Sustainable development is by all means a major issue. Sustainability of resource-based industries such as agriculture, livestock and fisheries can be ensured with this balanced development. Another aspect is the economic value of the preserved natural environment. Ksh 48.9 billion was acquired from the tourism industry in 2006.<sup>92</sup> The natural endowment and tourist attractions provide a big advantage. Moreover, growing consciousness toward health and environment would add the value to the commodities produced under specific environmental concerns.

From the aspect of industrial development, environmental issues are especially critical in the following point:

- i) Utilisation/exploitation of resources as energy, raw materials and inputs such as water and land for production activities
- ii) Being the cause of urbanisation as a result of the agglomeration of industrial enterprises and workers working in the area as well as the traffic
- iii) Emission of pollutants through production activities
- iv) Providing active solutions to environmental problems: Potentials of alternative energy

---

<sup>91</sup> NEMA Strategic Plan 2005-2010

<sup>92</sup> Economic Survey 2006

development

While the first three points pose the critical issue of resource distribution and control of emission in order to ease the pressure of industrial activities on the environment, the last point calls for the active involvement of industry to provide a solution to the environmental issues. In the following sections, on-going regulatory mechanism in relation to i) and iii) and on-going and implemented activities targeting ii) and iv) are to be summarised.

### **6.1.3 Environmental Management: Regulatory Mechanism, Institutional Arrangement and Current Situation on the Implementation**

#### **(1) Environment Management Co-ordination Act (EMCA) and establishment of NEMA**

The environmental management has been regulated through a wide range of legal frameworks, scattered through various ministries responsible for specific resources and economic activities. In 1999, EMCA was enacted in order to co-ordinate environmental management. Based on this act, the National Environmental Council was established as a body to coordinate relevant ministries and organisations. As the implementation body, the National Environment Management Co-ordination Agency (NEMA) was established as the oversight agency of environmental management.

EMCA also obliges almost all the new economic, industrial, and social projects to undertake EIA in order to obtain EIA license. For the existing economic, industrial and social activities, periodic Environmental Audit and Monitoring (EAM) are required.

#### **(2) Other regulation for environmental management**

The standard and procedures for EIA/EAM are to be specified by legal notices. Currently, only water quality, water management, and conservation of bio-diversity regulation have been enacted. On the other hand, as mentioned earlier, various regulations define various resource utilisation and management as well as control of emission of pollutants. For example, the Water Act regulates the entire chain from the conservation of water bodies and catchment's areas, water usage, to waste water management. The Local Government Act (Cap 265) provides local authorities responsibility and authority for environmental management.

Industrial activities are also regulated by the Public Health Act (Cap 242) administered by the Ministry of Health for their factories: location of factories, solid and liquid waste emission through production activities, and the hygienic situation within the facilities are regulated by the Act. Factories Act is administered by MLHRD Directorate of Occupational Health and Safety Services (DOHSS). This act regulates the occupational health and safety as well as emission of untreated fumes into the atmosphere. At the same time, this act regulates the handling and management of toxic substances within the factory premises.

Land allocation and physical planning is administered by MOL. The Ministry undertakes physical planning based on the Physical Planning Act (Cap 286.) On the other hand, Agriculture Act (Cap. 318.)

### (3) Public regulatory bodies relevant to the environmental management

The regulatory bodies relevant to environmental management comprise a wide range of ministries and regulatory agencies due to the nature of environmental management as a crosscutting issue. The above-mentioned regulations are administered by the Ministry of Environment and National Resources, NEMA, MOWI, Ministry of Health, Ministry of Local Government (MOLG), MLHRD, MOL, MOA and other regulatory bodies under these ministries. In addition, Ministry of Tourism and Wildlife, MOEN as well as the regional development authorities that is mandated to manage river and lake basin development and environmental conservation are the bodies involved in the environmental management.

### (4) Enforcement

Despite the regulatory framework, there are many cases where enforcement has not been adequately done. The reasons may be due to the small capacity of the enforcement bodies. For example, there is only 1 inspector per province in addition to 10 in Nairobi for enforcing compliance to EIA/EMA. Likewise, DOHSS has a limited capacity to undertake inspections of all the industrial establishments. In addition, the prosecution requires police force whereas the human resources to understand the issues within the police is very limited. This inability of legal enforcement gives the sense of unfairness among those who comply with the regulation.

Physical planning and land allocation should be guided by the plans developed by MOL. However, it has been widely observed that the actual land usage does not follow the physical plans as the final decision on land use can be decided by the local authorities, and it is often done regardless of physical planning.

## 6.1.4 On-Going Activities and Supporting Institutions

### (1) Energy efficiency, conservation and development of alternative sources of energy

#### 1) GEF-KAM Energy efficiency project

With financial assistance through Global Environment Facilities (GEF) mainly financed and organised by WB and UNDP, GEF-KAM Energy Efficiency Project was started in 2001. In 2006, with the financial support from the MOEN, the Centre for Energy Efficiency and Conservation (CEEC) was established at KAM. The project set the benchmarks for energy consumption and cost and Energy audits were undertaken of the participating firms and possible measures for energy savings and cost management were diagnosed. At the same time undertaking training of those who are working within the industrial sector for various energy efficiency matters. Apart from the permanent establishment of CEEC, the consultants and experts who provided auditing and advisory eventually set up a private company to provide the same services. This development ensured the availability of services.

#### 2) Development of renewable sources of energy

The Sessional Paper No. 4 on Energy in 2004 mentioned the need for developing renewable sources of energy raising geo-thermal, hydro-power, solar energy, co-generation, wind power, and bio-gas.

Apart from large-scale projects with donors' financial support (hydro-power and geo-thermal), co-generation and possibility supply of the electricity to national grid as IPP has been pursued in Mumias using the waste of production during the sugar extraction. MOEN is currently implementing a pilot project of micro-hydro aimed at spreading wider. There is an initiative to develop bio-diesel and ethanol as a source of alternative energy. MOEN together with various stakeholders set up a committee to review the possibility of this development.

## (2) Controlling industrial waste and pollution emission

### 1) Kenya National Cleaner Production Centre (KNCPC)

KNCPC was established by the support of UNIDO in order to transfer technology and manufacturing skills to reduce the emission of wastes. The idea is to reduce environmental hazardous waste emissions whereby reducing cost as well as increasing the efficiency of production by promoting 3R. KNCPC undertakes the auditing of enterprises and provides advice on the necessary measures to realise the cleaner production. An example can be found in the skin and hide processing workshop in KIRDI, which contains the emission of hazardous wastes from the process. It receives financial support from MOTI and is now established as a trust under MOTI.

### 2) Plastic waste management

In order to control the plastic waste, United Nations Environment Programme (UNEP), UNDP, NEMA, and KAM formed joint initiatives. The package includes the development of a policy framework and mechanism for recycling and raising public awareness. This is a pilot project implemented in Nairobi. Members of KAM sponsor activities including public awareness campaigns and recycling under PEAK initiative.

### 3) Product development to balance economic development and environmental conservation

World Wildlife Foundation (WWF) and Oxfam financed a project implemented by KGT to promote the use of trees which grow relatively faster than those commonly used by wood curving artisans. By assisting them with product development and access to markets for these artisans using the faster-growing trees, the project aimed to reduce the impact on the environment through logging slow-growing trees and, at the same time, improve the income generation capacity of artisans.

### (3) Recommendation

In order to acquire the awareness for environmental concern, it requires some degree of economic development. Regarding the majority of the corporate sector comprises of MSEs, the contribution of MSEs on the environmental degradation through emission industrial waste. Their capacity would not allow them to install proper waste treatment instruments. Hence, the large part of the waste treatment would be expected to be handled by the local authorities that also often lack the capacity of undertaking these tasks.

The experiences of KNCPC indicate that the waste and energy use management can be normally accepted when there is no additional capital investment required. On the other hand, the corporate

sector responded positively where the actual cost reduction can be materialised through the advisory services of GEF-KAM Energy Efficiency Project.<sup>93</sup> Under this circumstance, the following directions can be drawn:

- i) Awareness building of corporate sector and consumers
- ii) Provision of the technical support for MSEs to assist controlling their waste management and energy use
- iii) Assisting the developing marketable products which positively contribute to conservation of environment or to reduce the stress of environment
- iv) Assisting the physical and economic development planning of relevant authorities and environmental management

In order for enterprises to adapt environmentally sound technology and manufacturing practices with less emission and efficient operation, the technology first has to attract them by demonstrating the possibility of cost reduction. On the other hand, MSME sectors with sound operation and efficient production technology may be attracted to access this technology. Therefore, the availability and accessibility of the information with the awareness of MSME side may induce the adaptation of the technology and manufacturing practices. The fourth point should be taken into consideration when regional development is to be pursued. The introduction of EIA/EMA provides the opportunity to screen projects with the possibility of negative impact on the environment. However, non-compliance by the private sector due to the absence of enforcement of penalties can exacerbate compliance even worse. Under this situation, it is important to assist local authorities to take the environmental aspect into their consideration when undertaking economic development planning.

## **6.2 Safety, Health and Gender**

Industrial development has to be in tandem with social welfare. Yet, observation of the safety and health regulations is very weak. Some areas for improvement include consolidating auditing between environment, health, and safety, including advices for improvement in time of auditing, and conducting campaigns to raise social responsibility towards compliance.

As for gender consideration, GOK, through the Ministry of Gender, Sports, Culture and Social Services(MGSC&SS), issued National Gender and Development Policy in 2000. In 2006 MGSC&SS prepared the Strategic Plan (2005-2010). GOK has a clear policy to enhance efforts to achieve gender equality in the implementation of development programmes. ERS recognizes the importance of gender issue especially in terms of employment opportunity. MOTI, as well as other Ministries, is in a position to plan and implement policies with due consideration of such issues including human resource mobilization especially in manufacturing sector. Participation of women

---

<sup>93</sup> Based on the interview with Mr. , Deputy Director of KNCP and the report by Mr. James Wakaba, KAM “Energy Efficiency and Conservation: Kenya’s Experience.”

---



workforce in manufacturing sector still needs improvement and active promotion of gender consideration by MOTI in collaboration with MGSC&SS, relevant agencies and private sector is expected.

It is noted, as an example, that Kenya Women Finance Trust (KWFT), private micro financing institution, provides loans to women entrepreneurs especially for low income women managing enterprises. KWFT was established in 1981 and has grown its operation. KWFT introduced a group-based lending similar to the one used by the Grameen Bank in Bangladesh but it was modified to fit Kenyan conditions and practices. The amount disbursed in 2006 is Ksh 3,606 millions and the number of outstanding loans is 85,163 as of December 2006. Activities like KWFT would encourage and enhance gender consideration.

#### References

- CBK (2006), Annual Report 2006
- CBK (2006), Banking Supervision Annual Report 2005
- CBK (2006) Kenya Monthly Economic Review, October 2006
- KNBS (2006): Economic Survey 2006, Republic of Kenya.
- Economist Intelligence Unit (2006), Country Profile 2006: Kenya
- G.S. Namusonge (2004), the Role of Development Financial Institutions in the Acquisition of Technological Capabilities by Small and Medium Enterprises in Kenya, African Technology Policy Studies.
- Lois Stevenson and Annette St-Onge (2005), Support for Growth-Oriented Women Enterprises in Kenya, ILO.
- Porter, M. (1990), The Competitive Advantage of Nations, Macmillan.
- Republic of Kenya (2004) Investment Programme for the Economic Recovery Strategy for Wealth and Employment Creation 2003-2007
- WB (2005), African Development Indicators 2005
- WB (2006), 2006 World Development Indicators
- Wafula S Masai and Andrew K Mullei (2006), Improving Financial Sector Performance in Kenya, ACEG.