REPUBLIC OF KENYA

SECTOR PLAN FOR MANUFACTURING 2013 – 2017

Robust, Diversified and Competitive Manufacturing Sector

The Principal Secretary
Ministry of Industrialisation and Enterprise Development
P. O. Box 34188-0010, Nairobi, Kenya
Tel: +254-20-2718870
e-mail:ps@kilimo.go.ke
Website: http://www.kilimo.go.ke

STATEMENT BY THE CABINET SECRETARY MINISTRY OF DEVOLUTION AND PLANNING

In keeping with the decision that Kenya Vision 2030 be implemented through five year Medium Terms the Government successfully launched the Second Medium Term Plan (MTP 2013-2017) in October 2013. The Ministry of Devolution and Planning then embarked on the process of preparing the second round of Kenya Vision 2030 Sector Plans detailing policies, programmes and projects to be implemented in each sector. A total of twenty one Sector Plans have therefore been produced based on the work of nineteen medium term plan sector working groups and three thematic working groups formed to prepare detailed plans as background documents for the Second MTP).

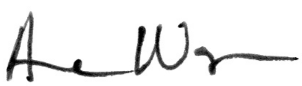
The Sector Plans outline in greater detail specific plans for implementation in each sector during the 2013-17 period. The Plans have been prepared through a participatory and inclusive process involving representatives from the government, development partners, private sector, NGOs, civil society, faith based organizations, professional associations, research institutions, and organizations representing women and youths, among others. Apart from the technical inputs, the Sector Plan priorities have been aligned and taken into account the priorities and inputs from nationwide Second MTP county consultation forums which captured views and priorities of Kenyans at the grass root and local level. Additionally, the Sector Plans have taken on board the key issues and priorities outlined in the Manifesto of the Jubilee Government in line with Second MTP.

The Sector Plans implementation matrices outline the broad goals and strategic objectives, the specific objective of each programme and project, the expected output and outcomes, the indicators for monitoring progress, the entity responsible for implementation, the implementation timelines, the source and mode of funding for each planned programme and activity starting financial year 2013/14 to 2017/18.

In accordance with the Constitution of Kenya, it is expected that the programmes and projects outlined in the Sector Plans will be implemented in close consultation and collaboration with county governments, keeping in mind, the distribution of functions between the national and county governments as outlined in the fourth schedule; and the capacity of county governments. Involvement of the private sector, including through Public Private Partnerships (PPPs), in implementing the sector plans will also be crucial to deliver the expected outputs and outcomes of various prioritized programmes and projects.

To ensure successful implementation of the Sector Plans, and the activities outlined in the implementation matrices, my ministry will put in place the necessary monitoring and evaluation framework and systems including the reporting formats and templates for production of quarterly progress reports by implementing entities.

In conclusion, let me take this opportunity to thank the respective Cabinet and Principal Secretaries involved in various sectors and all those involved in preparation of the Sector Plans.



Anne Waiguru, O.G.W.

Cabinet Secretary, Ministry of Devolution and Planning

FORWARD

Under Vision 2030, Kenya aspires to be a middle income, rapidly industrializing country and globally competitive by 2030. To achieve this, Kenya's GDP must grow by US$4-6 billion per year, which is a growth rate of ~10% per year. We recognise that achieving this growth rate presents a significant challenge for Kenya, as Kenya's has grown at closer to 5% per year over the past few years. We are ready for this challenge.

The manufacturing sector will be a key driver for economic growth and development. Industrial activities create jobs, increase GDP and contribute to wealth accumulation. As such, Kenya aims to have a robust, diversified, and competitive manufacturing sector. We have a solid foundation from which we can build, and we have a clear path ahead for how we can develop the manufacturing sector. In the medium and long term, the sector will play a critical role in propelling the economy to achieve the 10% growth rate needed to reach Vision 2030. In addition, the sector will support the country's social development agenda through the creation of jobs for the increasing number of youths entering the job market, the generation of foreign exchange, and by attracting the Foreign Direct Investments.

While Kenya does have some industrial activities, we also face challenges in the sector. The manufacturing sector's contribution to Gross Domestic Product (GDP) has stagnated at about 10 per cent in the last few decades. The growth of the sector has been below the annual target, and Kenya's exports have remained predominantly primary commodities with low value addition. We must overcome some challenges to build momentum in the sector.

During the first Medium Term plan 2008-2012, the Government developed Sessional Paper No. 9 on The National Industrialization Policy Framework for Kenya 2012-2030 to facilitate the industrial transformation process. The overall policy objective was to enable the industrial sector to attain and sustain annual sector growth rate of 15% and make Kenya the most competitive and preferred location for industrial investment in Africa, leading to high employment levels and wealth creation. The policy aims at providing strategic direction for sector growth and development by creating an enabling policy environment for private sector-led industrial development and a business environment capable of attracting local and foreign investments.

In order to realize the goals of the second Medium Term Plan 2013-2017 of Vision 2030, this plan has taken on board key policy recommendation of Jubilee Coalition Manifesto. The Plan reflects the priorities outlined in the Industrialization Roadmap, key cabinet decisions, and the direction provided by His Excellency the President, Uhuru Kenyatta, CGH.

The Micro, Small and Medium Enterprises (MSMEs) sub-sector is recognised as the foundation of Kenya's industrial and enterprise development. The sector has a huge potential to generate the much needed employment opportunities especially for the youth. However, the potential of the sector has not been fully realised due to challenges such as limited access to appropriate finance; inadequate markets; poor infrastructure in certain areas, limited technology uptake, weak management structures, weak linkages with research institutions, poor product quality especially for SMEs, and lack of access to skilled labour. Providing affordable, high quality and accessible infrastructure will be key in attracting more private investments in the industrial sector. SMEs Industrial Parks, Industrial Parks and Special Economic Zones with requisite infrastructure and social amenities will be developed to provide incentives to potential investors.

To accomplish this plan, the Ministry will collaborate closely with development partners, County Governments and private sector to ensure that all of our resources work in concert. One concrete example of our effort in this area is the Public Private Partnerships Policy and Act, which will strengthen the legal framework for public and private sector to investment in the sector. The PPP policy framework offers an opportunity for Kenya to attract enhanced private sector participation in financing, building and operating infrastructure services and facilities including the SEZs, Industrial and Science Parks; Industrial Clustering and industrial incubations facilities.

The sector plan therefore provides a roadmap for revitalizing the manufacturing sector and making Kenya the most competitive and preferred location for industrial investment in Africa.

Adan Mohamed, EBS

Cabinet Secretary

Ministry of Industrialization and Enterprise Development

PREFACE

The Manufacturing Sector Plan 2013-2017 is the second in the series of the sector plans. The plan provides a framework for accelerating and consolidating manufacturing growth and development in the medium term. It lays a foundation for pursuing the national goal of transforming Kenya into a middle income industrializing economy. The Plan aims at accelerating and sustaining the momentum of industrial growth, mobilizing foreign and local investments into the sector, contributing to the envisaged 10 percent growth in GDP per annum and employment creation.

The Plan draws extensively on lessons learnt during the implementation of the 1st Medium Term Plan (MTP) 2008-2012 and the first manufacturing sector plan of Vision 2030 as detailed in various annual progress reports. Under the Second Medium Term Plan, the country is looking forward to a future in which higher income, sufficient employment, and a better global posting are attainable realities.

Over the years, the Government has put in place several initiatives and efforts towards the development and growth of the industrial sectors resulting into the country having a relatively larger industrial sector in the region. However, most industries are still engaged in the production of low value-addition and limited range of products due to limited technological capability. This has contributed to limited scope for product diversification and expansion of the exports market. Investment in the manufacturing sector has been low partly due to low investment returns attributable to the high cost of doing business which makes goods and services produced in the country uncompetitive.

Access to markets is essential for the development of the industrial sector. However, the country depends on a few traditional export markets for its industrial products. The Plan proposes programs to improve the quality of locally manufactured goods including SME products; measures to curb the influx of sub-standard, dumping and counterfeit goods; and measures to enhance value addition by harnessing exiting agricultural, mineral, natural and forestry resources.

This sector plan has been prepared through a participatory and all inclusive consultative process spearheaded by our ministry as the chair of the Manufacturing Sector Working Group. All the implementing institutions/agencies are expected to implement the plan through their respective strategic plans and annual work plans. Monitoring and evaluation framework will be put in place to track the progress in implementation of various programmes and projects as outlined in the plan.

Dr. Wilson Songa, MBS

Principal Secretary

Ministry of Industrialization and Enterprise Development

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

BDS	Business Development Services
CG	County Governments
DANIDA	Danish International Development Agency
EAPCC	East African Portland Cement Company Limited
EPC	Export Promotion Council
EPZA	Export Processing Zone Authority
EU	European Union
FDI	Foreign Direct Investment
FKE	Federation of Kenya Employers
GDP	Gross Domestic Product
HCDA	Horticultural Crops Development Authority
ICT	Information, Communication and Technology
ISO	International Organization for Standards
IDBC	Industrial Development Bank Capital Limited
KAM	Kenya Association of Manufacturers
KARI	Kenya Agricultural Research Institute
KEBS	Kenya Bureau of Standards
KenInvest	Kenya Investment Authority
KEPHIS	Kenya Plant Health and Inspectorate Services
KEPSA	Kenya Private Sector Alliance
KIE	Kenya Industrial Estates
KIPI	Kenya Industrial Property Institute
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KIRDI	Kenya Industrial Research and Development Institute
KNCC&I	Kenya National Chambers of Commerce & Industry
KNFJKA	Kenya National Federation of Jua Kali Association
KNTC	Kenya National Trade Corporation
KPLC	Kenya Power and Lighting Company
KRA	Kenya Revenue Authority
MDG	Millennium Development Goals
MEPS	Minimum Energy Performance Standards
MoALF	Ministry of Agriculture, Livestock and Fisheries
MoEWNR	Ministry of Environment, Water and Natural Resource
MoDP	Ministry of Devolution and Planning

MoIC&ED	Ministry of Industrialization, Cooperatives & Enterprise Development
MoLSSS	Ministry of Labour, Social Security and Services
MoLHUD	Ministry of Lands, Housing and Urban Development
MoM	Ministry of Mining
MoSCA	Ministry of Sports, Culture and Arts
MoE	Ministry of Education
MoTI	Ministry of Transport and Infrastructure
MoEP	Ministry of Energy & Petroleum
MoEAACT	Ministry of East African Affairs, Commerce and Tourism
MSEA-K	Micro and Small Enterprises Association of Kenya
MSMEs	Micro, Small and Medium Industries
MTP	Medium Term Plan
NEMA	National Environment Management Authority
NCST	National Council of Science and Technology
NMC	Numerical Machining Complex
OVOP	One Village One Product
PCK	Productivity Centre of Kenya
SEC	Special Economic Cluster
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phyto Sanitary Standards
TBT	Technical Barriers to Trade
TNT	The National Treasury
RECP	Resource Efficiency and Cleaner Production
R&D	Research and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
WB	World Bank

EXECUTIVE SUMMARY

Kenya's Vision 2030 aspires to transform the country into a middle income, rapidly industrializing and globally competitive nation. The manufacturing sector has been identified in Vision 2030 as the key driver for economic growth and development. As the second Manufacturing Sector Plan for Vision 2030, this document provides a framework for the implementation of Vision 2030 during the period 2013-17.

In 2007, the Kenyan economy recorded a growth rate of 7 per cent, the highest of the past few years. However, the growth has been fluctuating over the first Medium Term Plan period (2008-2012). We recorded the lowest growth rate of 1.5 per cent in 2008, and then recovered to a growth rate of 5.8 per cent and 4.4 per cent in 2010 and 2011 respectively. Over this time, the contribution of the manufacturing sector to the GDP has remained static at about 10 per cent during the first MTP period.

The performance of the manufacturing sector has been fluctuating since 2007, when the sector recorded a growth of 6.3 per cent. The sector's growth dropped to its lowest level in recent years of 1.3 per cent in 2009, then recovered to record a growth rate 3.3 per cent in 2011. The depressed growth experienced in the sector was attributable to both internal and external shocks. This includes political turmoil, inadequate and costly infrastructure, low technology adoption, high cost of doing business, soaring cost of fuel, weak Kenya shilling and drought experienced within the first MTP Period.

During the plan period, the sector implemented key projects and programmes with varied completion rates. The major achievements under the flagship projects were: development of two (2) strategy papers on iron and steel and training of engineers, technologists and technician, initiation of the development of an industrial park and an SME park with one hundred and thirty five (135) and twenty (20) acres of land identified in Eldoret and Taveta respectively and a initiation of a number of feasibility studies. In addition, progress was made on other programmes: eighty (80) OVOP projects were started in eleven (11) pilot districts, one hundred and eighty eight (188) CIDC constructed and four (4) policies, one (1) legislation and two (2) institutions and one (1) standard tribunal started. Policy, legal and institutional reforms were undertaken to address emerging industrial issues.

However, the implementation of the flagship projects and other programmes faced challenges that included: unavailability of land and inadequate funding. It is envisaged during the implementation of the second sector plan that the lessons learnt from the first plan will be taken into account. Emerging new opportunities such as endorsement of the Kenya Constitution 2010, diversified markets, improved infrastructural development, discovery of oil, minerals and natural gas and the reforms currently being undertaken provide new dimensions for the revitalization of the manufacturing sector.

To realize Vision 2030's goals for the Manufacturing Sector, the Ministry will focus on five key groups of sectors and five enablers. The five groups of sectors are:

1. Grow critical sectors where we have scale (e.g., tea, flowers, coffee, horticulture)
2. Leverage natural advantages to create competitive sectors (e.g., textiles and cotton, leather, agro-processing, beef, fishing)
3. Build local industry to support resource and infrastructure investments (e.g., oil, minerals, infrastructure (steel), geothermal)
4. Transform government industry (pan paper mills, sugar, coffee, coconut / cashew, livestock, pyrethrum)
5. Enhance non-industrial job creating sectors (e.g., ICT, retail / wholesale trade, tourism)

To support the development of each of these key sectors, the Ministry will focus on five enablers:

1. Improve the ease of doing business
2. Support sectors for growth: skills, infrastructure (SEZ, FTZ, etc), and finance
3. Unlock the potential of SMEs
4. Develop a compelling FDI attraction plan
5. Build a strong government delivery capability

The focus on these sectors and enablers will drive Kenya's ability to achieve the goals set out in Vision 2030 and the Jubilee Manifesto.

1 SITUATIONAL ANALYSIS

1.0 Background

Kenya's Vision 2030 aspires to transform the country into a middle income, rapidly industrializing and globally competitive nation. As such, the manufacturing sector has been identified as the key driver for economic growth and development. The Kenyan economy recorded a growth rate of 7 per cent in 2007. However, the economic growth has been fluctuating over the period 2008-2012, recording a growth rate of 2.7 per cent in 2009 and 4.3 per cent 2011. Similarly, the manufacturing[1] sector has followed the same trend in its contribution to GDP, which has remained static at about ten (10) per cent during the first MTP period.

The manufacturing sector has a strategic role in technology and innovation as it is a major conduit for diffusion of new technologies to other sectors of the economy. The sector also has a high potential of employment creation; has strong forward and backward linkages and spill-over effects; provides demand stimulus for growth of the agricultural sector and offers significant opportunities for export expansion.

The manufacturing sector is mainly agro-based as the Kenyan economy is predominantly agricultural based. Kenya's manufactured goods are basic products that include food, beverages, building materials, basic chemicals, pharmaceuticals and others.

Kenya's manufacturing sector includes micro, small, medium and large industries classified mainly by employment levels and capital investment. The medium and large industries constitute less than 5 percent of the total number of enterprises but contribute over 60 per cent to the manufacturing sector GDP contribution. Similarly, the Micro and Small enterprises comprise about 95 per cent of the number of industries but contribute only about 20 per cent to the manufacturing sector GDP contribution.

During the first MTP period, the Kenyan economy enjoyed a period of modest growth although the annual performance has been below the targets set in the first Medium Term Plan. However, despite the economic growth, the manufacturing sector has not been dynamic enough to function as, "an engine of economic growth" especially when compared to newly industrialized emerging economies. The implementation of the second MTP will take into consideration the lessons learnt from the first MTP. The enactment of the Kenya constitution 2010, devolved government, expanded markets, improved infrastructural development , discovery of oil and natural gas and the reforms currently being undertaken provide new opportunities and dimensions to the revitalization of the manufacturing sector.

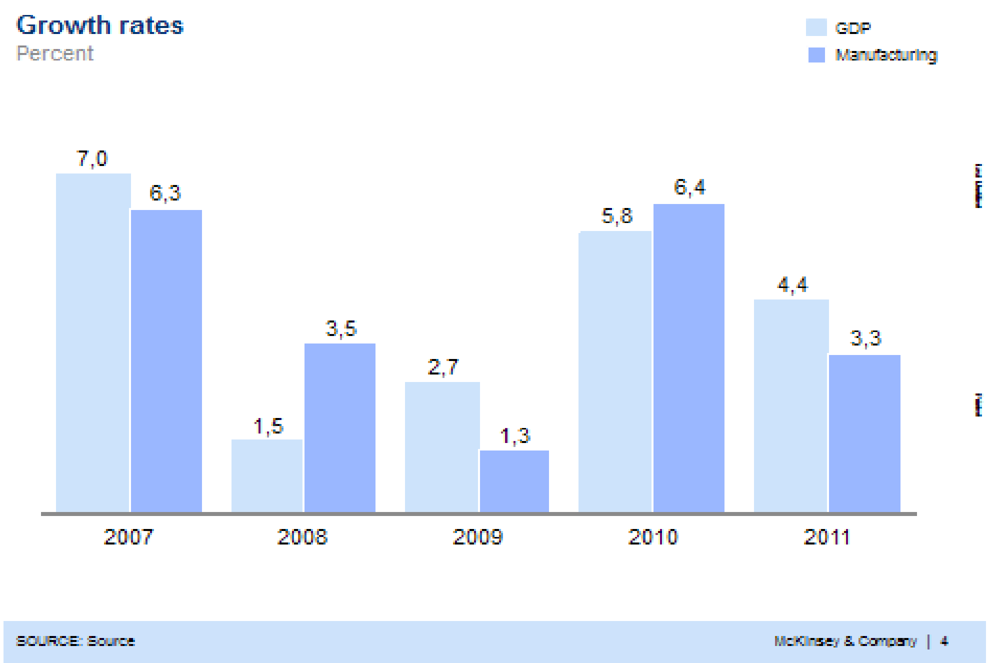
Sector Performance

The performance of the manufacturing sector has been fluctuating since 2007 when the sector recorded a growth of 6.3 per cent, dropped to 3.5 per cent in 2008, dropped further to 1.3 per cent in 2009, recovered to record a growth of 4.4 per cent in 2010 and 3.3 per cent in 2011. The sector's contribution to the GDP has remained static at an average of 10 per cent. This is as a result of depressed growth experienced in the sector attributable to both internal and external shocks. This includes inadequate and costly infrastructure, low technology adoption, high cost of doing business,

soaring cost of fuel, weak Kenya shilling and drought experienced within the first MTP period.

1 Manufacturing means the physical or chemical transformation of materials, substances or components into new products but excludes repairs. Materials, substances or components transformed are raw materials that are products of agriculture, forestry, fishing, mining, quarrying or products of other manufacturing activities.

Figure 1.1 Economic and manufacturing sector growth rates



Source: Economic Survey 2011

Employment within the manufacturing sector has grown over the first MTP period. Formal employment in the sector grew by 5 per cent from 261,300 in 2007 to 275,800 in 2011 while informal employment grew by 17 per cent from 1.57 million in 2007 to 1.83 million in 2011.

There is significant disparity in wage employment by gender. Female wage employment constituted 16 per cent of the formal total wage employment in 2011, and female manufacturing wage employment accounted for 6.6 per cent of the total female employment during the same period. This may be attributable to limited skills among women to enable them secure employment opportunities in the sector.

The sub-sectors that recorded the highest growth changes in 2011 include textile and clothing –18 per cent petroleum and other chemicals –14.6 per cent, non-metallic minerals –14.4 per cent, beverages and tobacco –10.3 per cent and metal products –10 per cent.

In the export sub-sector, locally-manufactured goods comprise 25 per cent of Kenya's exports. However, the share of Kenyan products in the regional market is only 7 per cent of the US $11 billion regional market. The Eastern African market is dominated by imports from outside the region. This is an indication that there is a large potential to improve Kenya's competitiveness in the region by replacing external suppliers gradually.

1.1 Achievements and Constraints in the First MTP 2008-2012

Kenya's aspiration as contained in the first MTP (2008 – 2012) was to have a robust, diversified and competitive manufacturing sector. To achieve this, the MTP identified a number of short and medium term programmes that included: capacity building for industrial development and quality service delivery; establishment of policy, legal and institutional framework for industrialization; promotion of the development of micro, small and medium industries; and promotion of research and development (R & D), innovation and technology adoption.

During the plan period, the sector implemented key projects and programmes with varied completion rates. In addition, policy, legal and institutional reforms were undertaken to address emerging industrial issues. However, the implementation of the flagship projects remained a challenge. Inadequate funding was identified as a major challenge in the implementation of key planned projects and programmes in first Medium Term Plan.

During the implementation of the first MTP, new priority areas were identified and considered necessary to complement the existing flagship projects. These included facilitating the training of engineers, technologists and technicians; transformation of KIRDI into a Centre of Excellence for R&D; development of Iron and Steel Mill; and development of Constituency Industrial Development Centres (CIDCs). Please see Appendix 1 for more details on each of the intiatives from the First MTP.

2 EMERGING ISSUES AND CHALLENGES

2.0 Introduction

The manufacturing sector in Kenya, that accounts for 11% of GDP trails many middle-income countries in its level of industrialisation:

Figure 2.0 Comparison of manufacturing contribution to GDP and exports for selected countries

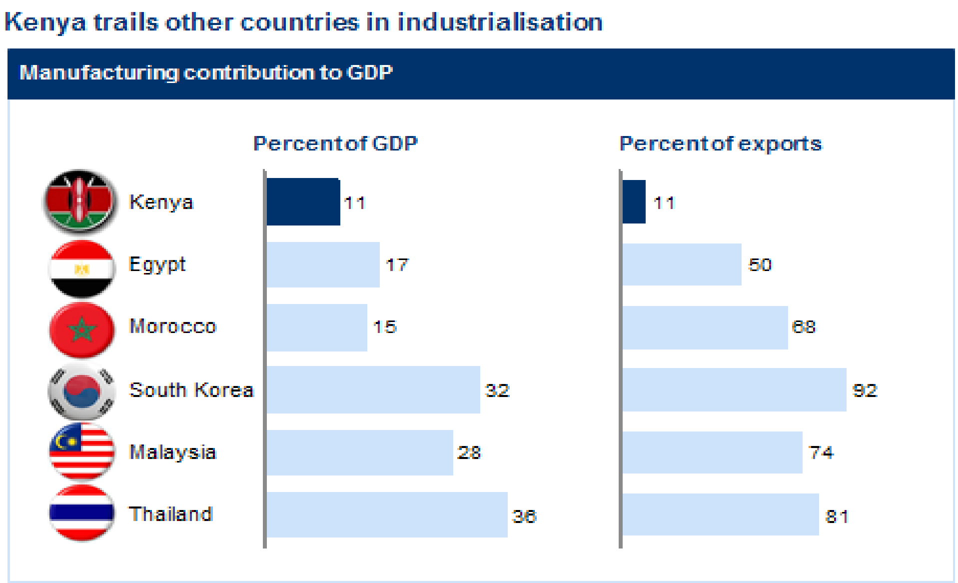


Figure 2.0 demonstrates that for Kenya to become a newly industrialized country, the contribution to GDP and exports by the manufacturing sector requires to be more than doubled the current rate as is the case with newly industrialized countries.

From this base, the government has set a target to grow manufacturing to 20% of GDP and 30% of exports. To do this, Kenya will need to address multiple challenges that have hindered the development of Kenya's manufacturing sector to date, including:

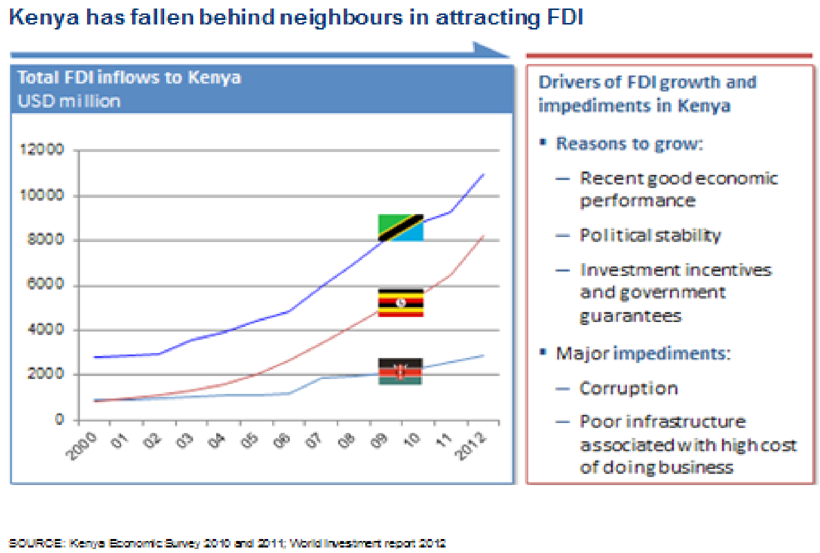
i. **Low levels of Foreign Direct Investment (FDI)**
ii. **High cost of doing business**
iii. **Weak competitive ranking**
iv. **Insufficient government support**
v. **Unprepared human capital**
vi. **Regional and global challenges**

Highlight on each of these challenges is presented below.

2.1 Low levels of FDI

Without FDI, Kenya will continue to struggle to fund the increase in manufacturing it needs to achieve the goals set in Vision 2030. Kenya has fallen behind its neighbours in attracting FDI:

Figure 2.1 Comparison of FDI flows for Kenya against Uganda and Tanzania

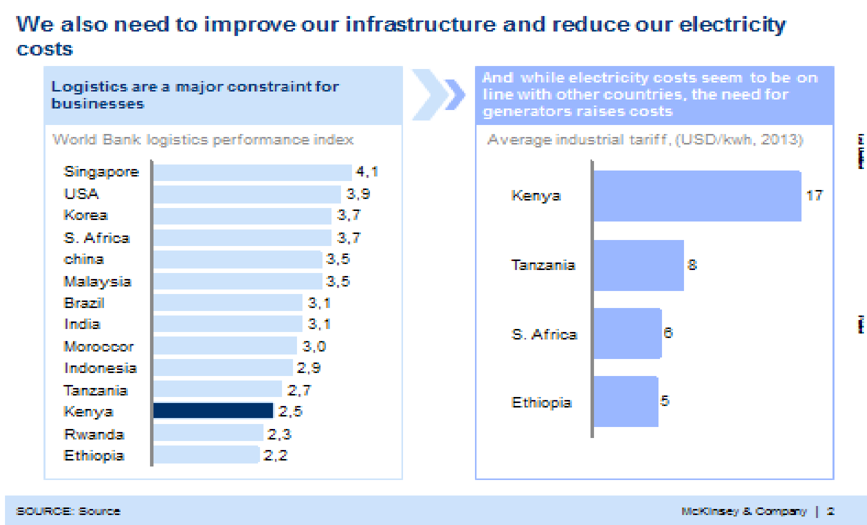


As Figure 2.1 shows above, Kenya is falling behind Tanzania and Uganda in attraction of FDI by as much as 3-5x. Investors are interested in bringing money to East Africa, but they choose to invest in countries other than Kenya. This is likely due to a range of reasons, including the high cost of doing business in Kenya and weak competitiveness rankings.

2.2 High cost of doing business

Businesses wanting to operate in Kenya face high costs, especially when compared to other potential investment destinations. For example, Kenya has relatively high logistics and electricity costs, which make it difficult for a business to operate profitably.

Figure 2.2 World Bank Logistics performance indicator and average industrial tariffs



2.2.1 High iinfrastructure and energy costs

As indicated in Figure 2.2 above, Kenya's average industrial tariffs is the highest as compared to countries with similar industrial bases in East, Central and Southern Africa. The high infrastructure cost has contributed to high cost of doing business in the country, which has led to a lack of competitiveness of the industrial sector. Inadequate, unstable and costly supply of energy in Kenya has led to low productivity, high production and distribution costs and uncompetitive products and services. In addition, inefficiencies at the port and under developed rail system have aggravated the problem.

However, the Government has continued to build, upgrade and maintain its infrastructure that is expected to support industrialization and encourage industrial dispersion. Some of the key projects include but are not limited to the rehabilitation of the Northern Corridor, Lamu Port Southern Sudan-Ethiopia Transport (LAPSSET) project, Geo-Thermal power exploration, modernization of the airports, sea ports and railway systems; fibre optic cable and construction of the ICT Park, while the construction of the Mombasa second container terminal and the proposed Dongo Kundu by pass are expected to boost the efficiency and reliability of the port of Mombasa. Fast tracking the expansion, modernization and maintenance of roads, rail, airports, seaports and ICT networks to industrial areas and those areas of existing and high potential for industrial development will provide incentives to potential investors to these areas.

2.2.2 Lack of economical land for industrial use

The availability of adequate and accessible industrial land is a crucial factor for industrial development. Land availability and ownership are major constraint for industrial investment in Kenya. In addition the cost of land is very high which discourages industrial development and foreign direct investment. Furthermore industrial land has not been zoned by national and local government. During the first plan period, non-availability of suitable land hampered the timely implementation of projects and programmes such as CIDCs, SME parks, SEZ, industrial clusters among others. Similarly, FDI inflows were constrained by the high cost of land.

However, there are reforms in the land sector which will address some of the land issues. The National Land Commission will be expected to establish land banks for industrial development including implementation of flagship projects that require sizeable and strategically located pieces of land in various parts of the country.

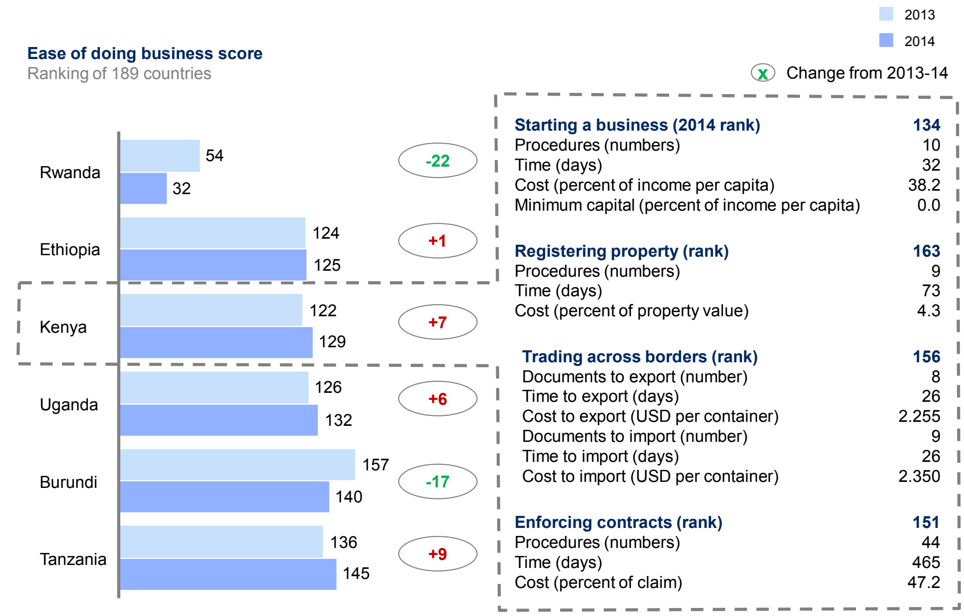
2.2.3 Limited innovation and technology development

Low technology utilization, lack of innovation and use of obsolete technology has led to low productivity and competitiveness in the manufacturing sector. There are weak linkages between the technology and research providers and the market. Moreover, low funding for R&D has also contributed to poor adaptability of technology. Inadequate awareness of the role of intellectual property rights in fostering socio economic development is hindering the commercialization, registration and protection of new innovations in the manufacturing sector and patent mining for technological development. To exploit opportunities availed by the growing regional and global market, the country needs to improve its competitiveness, productivity, and product quality.

2.3 Weak competitive ranking

Kenya ranks 129 out of 184 countries in the global Ease of Doing Business ratings. This rank is important for two reasons: it highlights a major challenge that businesses face when trying to invest in Kenya and it discourages potential investors who are looking for a place that is easy to do business.

Figure 2.3 Kenya's ranking in the World Bank's Ease of Doing Business indicators



An increase from 2013-2014 indicates a negative change in case of doing business

SOURCE: World Bank Doing Business

As figure 2.3 demonstrates, Kenya's ranking has deteriorated, dropping 7 places from 2013-2014.

2.3.1 Business environment

The Business environment in any economy is an important factor in determining the level of investments that take place, expansion plans for businesses, employment levels, revenue collected and the general well being of the society. Currently, Kenya's business environment is hampered by long processes for starting a business and registering property, challenges with enforcing contracts, and high levels of corruption. These challenges discourage investors who would otherwise build businesses, create jobs, increase the level of manufacturing and improve Kenya's economy.

2.3.2 Security

Security is a major area of concern for foreign investors and businesses. Crime levels in Kenya are high, causing many people to look for safer destinations. Added to this, the threat of terrorism has forced manufacturers to hire extra security, install CCTVs, and other security devices and this has increased production and distribution costs.

2.4 Insufficient government support

2.4.1 Insufficient incentives and high taxes

Over the first Medium Term Plan, the country attracted few local and foreign investments in the manufacturing sector despite existing incentives. This has led to minimal growth of the sector and low generation of employment opportunities in the formal sector. The high tax burden on investors and businesses discourages investment, and inefficiencies in tax administration create further challenges.

In addition, Kenya provides inadequate local resources for investment and incentives.

2.4.2 Budgetary allocation

Inadequate budgetary allocation and cuts especially in development funds has hampered the implementation of the various projects and programmes to be undertaken by the Sector. Flagship projects and other programmes outlined in the plan required substantial amount of resources to be implemented.

2.4.3 Access to financial services for industrial development

The realization of sustainable and meaningful Industrial development in the country requires access to affordable long-term finance and credit facilities. In Kenya access to long term financing is limited and this has inhibited the competitiveness and growth of the manufacturing sector. The current financial products available are mainly short and medium terms loans.

The bureaucracies and collateral requirements banks impose serves to screen out the vast majority of SMEs. In addition, the level of interest rate spread is high and this has increased the cost of doing business. Further, the Development Financial Institutions including KIE and IDB capital have not been able to adequately fund the industrial sector financial needs due to inadequate resources to meet the increased demand. There will be need to review, harmonize and restructure the existing DFIs and other development funds targeting enterprise development and industrial financing.

In an effort to address limited access to finance by SMEs, credit guarantee schemes will be one of the initiatives necessary to improve business environment, competitiveness and facilitate the achievement of vision 2030.

2.4.4 Devolution under the Constitution

The Constitution has created devolved structures, particularly the County Governments (CGs), that have created opportunities for industrial dispersion and equitable economic growth. Flagship projects and other programmes outlined in the plan will be implemented at the County level.

County Governments therefore will play a key role in the implementation of the identified programmes/ projects through mobilization of community support and identification of land for the projects. County Industrial Development Offices will coordinate all industrial activities at the county level specifically responsible for implementation of National Industrialization Policy at the devolved level.

For smooth and effective implementation of industrial projects and programmes at the county level, closer collaboration between the national and county governments will be imperative while capacity at the local level needs to be strengthened.

2.4.5 Counterfeit, dumping and substandard goods

The importation of counterfeit, sub-standard, and subsidized goods into the country has continued to impact negatively on the locally produced products. Counterfeit trade has also discouraged innovation efforts, reduced the government revenue base and even created a health- hazard to consumers. However, Kenya passed the Anti-Counterfeit Act 2008 and established an Anti-Counterfeit Agency to deal with issues on counterfeit and substandard goods.

At the EAC regional level, the draft Anti-Counterfeit Bill is at the Legal and Judicial Affairs Sectoral Council awaiting Legal inputs before it’s sent to EALA for debate and enactment.

In compliance with the WTO requirements, Kenya has finalized the drafting of the Anti Dumping Bill which when enacted will address the issues of Dumping and how to invoke various safeguard measures and is modelled along the WTO model.

This draft Bill will provide for the establishment of the Trade Remedies Agency and for the investigation and imposition of anti-dumping and countervailing measures; trade safeguard measures and for connected purposes

2.4.6 Public Private Partnerships

Public Private Partnership (PPP) is one of the strategies for development and the Sector requires strong collaboration and linkages with several Agencies including Government ministries and departments, the Private Sector, the Civil Society and Development Partners in the development of the industrial sector.

There are no strong mechanisms to support these arrangements. However, the Government has enacted the PPP legislation which is expected to strengthen the legal framework for public and private sector partnerships in investment in the manufacturing sector.

2.4.7 Industrial subcontracting linkages

Limited industrial subcontracting has been ongoing without an enabling policy framework. The absence of the policy has hindered the promotion and facilitation of industrial subcontracting between large and small scale industries

2.4.8 Linkages of MSE with Medium and Large Industries

Majority of the micro and small industries are informal, have a high mortality rate and Business Development Services are not readily available and affordable to them. There are weak linkages and subcontracting arrangements with the medium and large firms.

In addition, the growth and graduation of the firms in this sector has not fully realised its potential due to a number of factors such as poor market access, restrictive legislation and regulation, high cost of credit, poor infrastructure and access to land.

2.4.9 Market access

Most of Kenya's manufactured products are facing stiff competition in the local, regional and global market due to high cost of production (high energy costs, inadequate and inefficient road, port and rail infrastructure, slow movement of cargo), non-compliance to international standards and non-tariff barriers.

Stringent and non-uniform application of rules of origin coupled with the non-observance of various protocols and treaties within the regional trading blocs has been a great challenge. The continued non-compliance with the application of the EAC common external tariff has adversely affected the competitiveness of Kenyan products within the region.

With the global reduction of import tariff under WTO regime, there has been significant increase in non-tariff barriers, technical barriers to trade, sanitary and phyto-sanitary measures and other non-tariff measures which have affected exports of Kenyan manufactured goods.

2.5 Inadequate human capital

2.5.1 Skills mismatch

There is a mismatch between available technical skills and market demands due to poor linkages between training institutions and the industry. The sector requires a critical mass of skilled workforce which includes Engineers, Technologists, Technicians and Craftsmen who are innovators. Currently, the number of engineers to population stands at approximately 1:6700.

2.5.2 Gender inequalities

Gender based inequalities have continued to persist in Kenya, with the Gender Development Indicator (GDI) for Kenya currently being 0.622. This suggests that as compared to men; women in Kenya are generally disadvantaged in most social and economic sectors. Wage employment participation of women in the manufacturing sector in Kenya accounts for about 6.6 per cent of the total female wage employment (Republic of Kenya, 2012), the low participation of women may be explained by limited skills, gender job stereotypes and culture.

Particular challenges have continuously constrained women and impacted their ability to upgrade their production in both the formal and informal manufacturing sector. These constraints include poor access to market information, technology (skills) and investment finance. Although these challenges also constrain male entrepreneurs, entrenched (discriminatory) socio-cultural values and traditions continue to hinder women participation in investments, employment and other key manufacturing activities.

Analysis has shown that gender inequalities in access to education, skill and prodcution resources constrains attainment of economic growth targets. Providing women and men equal access to factors of production such as skills and training could contribute to increased productivity, better growth, and an enhances attainment of the manufacturing sector growth targets set out in this Medium Term Plan period. During this period, efforts will be made to enhance participation of women, men and youth in manufacturing activities and programmes proposed including at the county level. It will be necessary to make use of the affirmative action to ensure a third of the opportunities opening up in the industrial sector are undertaken by either men or women, (where possible because there could be skill mis-match)

2.6 Regional and global challenges

2.6.1 Customer preference and universal standards

Rapidly changing consumer needs, preferences and quality requirements, both locally and internationally are creating a strain for many Kenyan manufacturers especially SMEs. Compliance with international or national standards is critical, not only for fair competition in the domestic market, but also for creating a presence in export markets. A majority of SME are unable to fully comply with these standards requirements thus inhibiting their export potential.

Capacity building will be necessary in areas of business development services, standards and conformity, certification and market intelligence on required and emerging standards.

2.6.2 Global recession

The world has witnessed rapid economic growth and expansion of trade driven primarily by emerging economies including China and India. The rapid and continued strong growth in these emerging economies has pushed pressure on crude oil prices thus continue to impact on Kenya's industrialization growth and development. The recession experienced in key Kenyan export markets has also negatively affected the Kenyan industrial performance through reduced demand for goods. In addition, the volatile international financial market poses additional challenges to Kenya economy.

Other global economic and security issues including terrorism and international crime, outsourcing, environmental concerns, carbon emissions, international standards certification and increased demands for raw materials are likely to pose greater competition for Kenya.

For Kenya to exploit the opportunities availed by the growing regional and global trade, measures will have to be put in place and implemented to up-scale competitiveness, productivity and quality control regimes to ensure that the country is competitive in local, regional and international arenas.

On the demand side, the growing world economy and population offers an expanded potential market for Kenyan products beyond the traditional markets of EAC, COMESA and EU. However, the implementation of regional trade arrangements poses a major challenge for Kenya as the Common External Tariff Agreements are often flouted by some member states while other member states impose Non-Tariff Barriers on Kenyan exports.

The global recession experienced in key Kenyan export markets has negatively affected the Kenyan industrial performance through reduced demand for goods. The upsurge in oil prices and volatile international financial market has increased production costs, significantly reducing the profits. This has forced firms to scale down on their operations in order to contain the situation.

2.6.3 Climate change and global warming

Climate change poses development challenges for Kenya since its economy relies heavily on natural resources to support people's livelihoods and to contribute to national income. However, Kenya has not adapted to a future of drought, floods and uncertain seasonal patterns, and to develop the capacity to benefit from international adaptation funds and the carbon market.

The Kenyan economy is heavily dependent on climate-sensitive sectors, such as agriculture and tourism. The decline in rainfall as a result of climate change has resulted into decline in water quantities leading to interruptions in electricity generation especially given that most of the electric power is hydro-generated. The availability of agro-raw materials needed by industries is also adversely affected by the vagaries of weather. Climate change and climate variability can lead to reduced crop production that directly impacts the manufacturing sector. The manufacturing sector also contributes to climate change through greenhouse gas emissions resulting from fossil fuel consumption when manufacturing firms operate standby generators or emergency power systems due to unreliable electricity generation.

The country also faces other inter-related environmental problems that include deforestation and destruction of water catchment areas, soil erosion, desertification, and water shortage. Environmental pollution resulting from poor management of industrial and solid waste impacts negatively on the country's socio-economic development.

Water resources are also under pressure from the multiplicity of users, including domestic consumption, agricultural and livestock usages as well as the usage in industrial and power generation, among others. In addition water sources are increasingly polluted from agricultural chemicals, industrial effluents and urban sewerage which continue to degrade water quality.

Water quality problems, including the continuing water hyacinth infestation of fresh water lakes including Lakes Victoria and Naivasha have contributed to substantial disease outbreaks ,decline in the fish output and availability of clean water for the manufacturing sector. The general scarcity of water is projected to pose a serious development challenge in the coming years if climate change and environmental issues are not addressed.

2.6.4 Export base and value addition

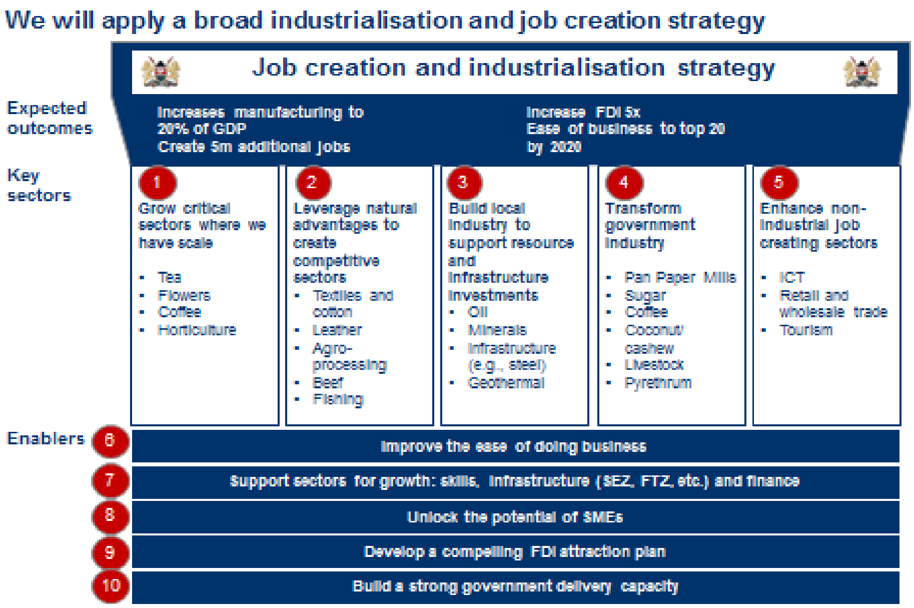
Most industries are still engaged in the production of low value-added and limited range of products due to limited technological capability and limited information on international trade opportunities. An over-reliance on the few traditional exports has, over the years, led to a fluctuation in foreign exchange earnings. This is despite the country pursuing an export-led growth strategy. These factors have contributed to limited scope for product diversification and expansion of export base.

3 PROGRAMMES AND PROJECTS FOR 2013-17

Introduction

The Ministry of Industrialisation has developed a roadmap for the medium-term industrialisation of the country, which will help Kenya deliver the goals set forth in Vision 2030.

Figure 3.0 Industrialization Roadmap



As indicated in Figure 3.0, the roadmap includes 10 major components: 5 groups of key sectors and 5 enablers to deliver impact in those sectors. The 5 groups of key sectors are:

3.1 Sectors where Kenya has scale (

e.g., Tea, Flowers, Coffee and Horticulture)

3.2 Sectors where Kenya can leverage natural advantages to drive competitiveness

(e.g., Textiles and cotton, Leather, Agro-processing, Beef and Fishing)

3.3 Sectors that require local industry to support resource and infrastructure investments

(e.g., Oil, minerals, infrastructure and geothermal)

3.4 Sectors that can transform government industry

(e.g., Pan Paper Mills, sugar, coffee, coconut/ cashew, livestock and pyrethrum)

3.5 Non-industrial job creating sectors that Kenya can enhance sectors

(e.g., ICT, retail/wholesale trade and tourism)

In addition to projects in these 5 sector groups, projects will also designed to tackle 5 major underlying enablers aimed at:

3.6 Improving the ease of doing business

3.7 Supporting sectors for growth: skills, infrastructure (SEZ, FTZ, etc), and finance

3.8 Unlocking the potential of SMEs

3.9 Developing a compelling FDI attraction plan

3.10 Building a strong government delivery capability

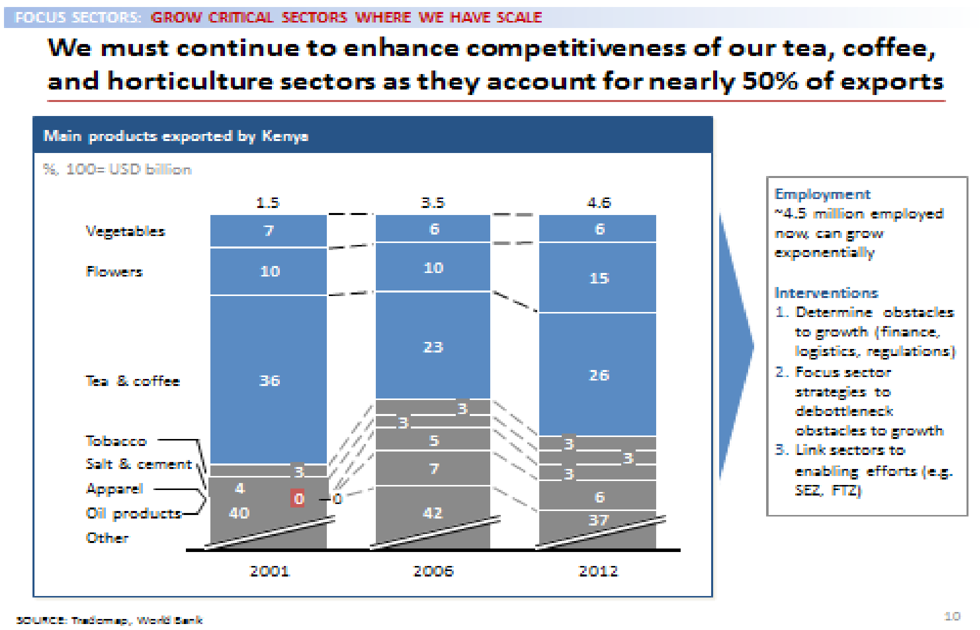
The sections below contain more details on each of these sectors and enablers.

3.1 Sectors where Kenya has scale:

In the last decade, an exponential growth in the global interest in natural products in the areas of food, medicine, dietary supplements, personal care, household care and organic fertilizers has occurred in response to growing awareness of the health risks of synthetic chemical products. The global value of natural products business is immense, currently estimated at over US$513 billion, and growing at an average annual rate of 5-10 per cent.

Kenya is endowed with an abundance of natural resources including plants with high medicinal, cosmetic and nutritional value that is not being exploited locally. Currently, Kenya's exports are highly dominated by these natural resources:

Figure 3.1 Key exports from Kenya



As indicated in figure 3.1 above, over 50% of Kenya's exports comprises of tea, coffee and horticulture sector products. The first step to grow these sectors is to enhance their competitiveness. Kenya can do this by determining obstacles to growth (e.g., finance, logistics, regulations), developing focused sector strategies to debottleneck these obstacles, and then linking these sectors to enabling efforts (e.g., FTZs).

In addition, Kenya should consider ways to increase the value add for these products. Many international organizations export these resources raw for manufacture of high value products such as medicine, nutritional supplements and cosmetics. Investment in creation of capacity for value addition to the enormous biodiversity in resource-endowed countries, such as Kenya, should be prioritized. A major feature of this trend is to build and promote a knowledge-based economy. A sustainable source of raw material to support the harnessing of this sub-sector on a commercial scale will entail setting up botanicals and plantations by application of modern biological and information technologies. Such prudent utilization of local resources resulting in various socio-economic benefits, and their fair and equitable sharing, as stipulated in the Convention on Biological Diversity and Nagoya Protocol, is increasingly receiving international attention.

Project activities under this programme will promote home-grown innovations and lead to development and manufacture of niche products that meet national and international standards for local and global markets. To achieve this, comprehensive product-specific business plans will be prepared outlining activities to be conducted in the short-, medium- and long-term. These will focus on securing commercial-scale raw material base, value-addition, and up-scaling marketing of prioritized products. In addition, this will involve developing and enhancing capacity for pilot and industrial production and distribution channels, at national and county levels, as well as utilizing pre-existing facilities. All these project activities will rely on fostering appropriate partnerships and networks at local, county, national, regional and international levels to enable access to requisite natural resources; building and enhancing transfer of technology; patenting, protection of IP rights and equitable sharing of benefits; ensuring quality assurance, licensing and marketing of finished products and services.

3.2 Sectors where Kenya can leverage natural advantages to drive competitiveness

In the short to medium term, agro-processing, leather and leather goods, textiles and clothing and furniture industries have been prioritized due to strong backward and forward linkages that provide opportunity for value addition and creation of employment opportunities to the increasing number of unemployed youths. In addition, beef and fishing are priorities given the opportunity for Kenya to grow these sectors. Kenya has significant opportunities in each of these sectors, but also faces major challenges.

Figure 3.2 Priority sectors of Kenya's natural advantage

FOCUS SECTORS: LEVERAGING NATURAL ADVANTAGES

We will create competitive sectors by leveraging opportunities

	Opportunity	Key challenges	Impact
A Textiles	• 90% of land for cotton unused • Under-utilised manufacturing capacity • Duty free access to U.S. ($93 billion) and EU ($228b) thru AGOA and EPA • International companies actively diversifying from the East	• Low productivity and quality, of cotton • Outdated processing capacity • High cost of energy , labor, and logistics (for export)	• GDP from 4-7% of agriculture • Employment of 675K in 3 years from 148k
B Leather	• Displace imports: Local demand of 28m units, only 4m filled locally • $60 billion global market • 80% of Kenyan land ideal for cattle	• Low productivity - hides raised as by-product • 85% of skins damaged/lost during slaughter • Poor logistics and low tannery capacity • Shortages of trained personnel and capability	• GDP ~$630m • ~400k jobs in 5 years
C Agro-processing	• Global food demand will grow 70% • Duty free access (EAC, AGOA, EU) • Domestic consumption to double by 2020	• Low productivity of small holder farmers, poor quality, and significant wastage • High cost transport infrastructure • Lack of processing capacity	• 200k jobs over 2 years
D Beef	• Large potential export market • 80% of land ideal for cattle	• Lack of disease free zones • Low productivity, poor quality feed, lack of water • Lack of controlled processing facilities	• TBD
E Fishing	• Kenyan fishery potential estimated at 150k MTs while only producing 7k MT	• Lack of infrastructure and modern fishing vessels • Lack of commercial processing capability • Lack of skilled expertise	• TBD

11

Better understanding the details behind each of these sectors will help unlock their full value.

3.2.1 Textiles

Opportunity: 90% of land for cotton unused, under-utilized manufacturing capacity, duty free access to U.S. ($93 billion) and EU ($228b) thru AGOA/EPA and international companies actively diversifying from the East.

Keychallenges:Lowproductivityandqualityofcotton,outdatedprocessingcapacity,highenergy,laborandlogisticscosts
Impact: GDP from 4-7% of agriculture, employment of 675,000 in 3 years from 148,000

3.2.2 Leather

Opportunity: Displace imports (local demand of 28m units, only 4m filled locally) $60 billion global market and 80% of Kenyan land ideal for cattle Key challenges: Low productivity - hides raised as by-product, 85% of skins damaged/ lost during slaughter, poor logistics and low tannery capacity and Shortages of trained personnel and capability Impact: GDP ~$630m and ~400k jobs in 5 years

3.2.3 Agro-processing

Opportunity: Global food demand will grow 70%, Duty free access (EAC, AGOA, EU), Domestic consumption to double by 2020

Key challenges Low productivity of small holder farmers, poor quality, and significant wastage, high cost transport infrastructure and lack of processing capacity

Impact: 200,000 jobs over 2 years

3.2.4 Beef

Opportunity: Large potential export market and 80% of land ideal for cattle **Key challenges:** Lack of disease free zones, low productivity, poor quality feed, lack of water and lack of controlled processing facilities **Impact**: To be determined

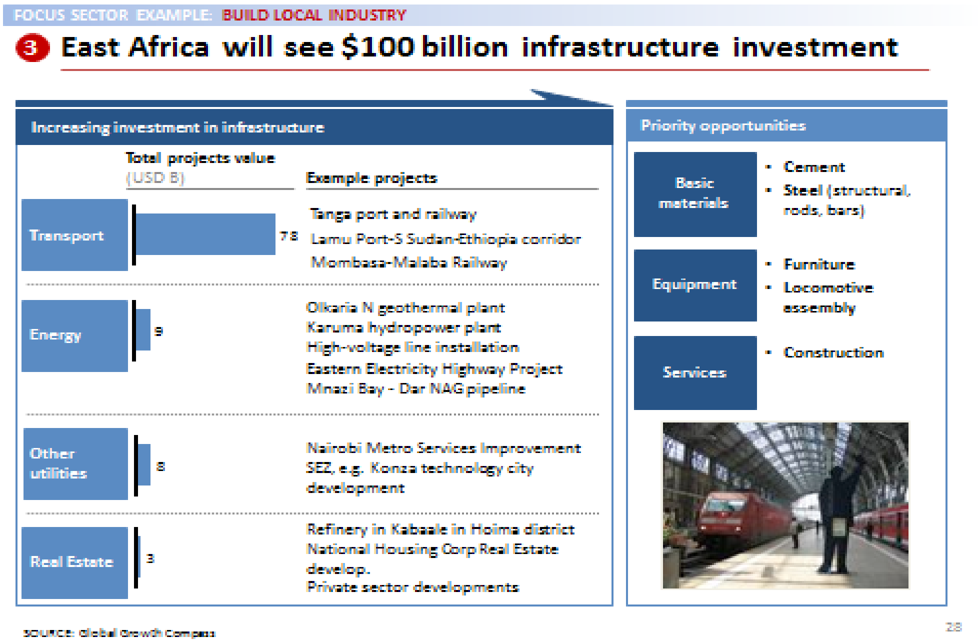
3.2.5 Fishing

Opportunity: Kenyan fishery potential estimated at 150k MTs while only producing 7k MT **Key challenges:** Lack of infrastructure and modern fishing vessels, lack of commercial processing capability and lack of skilled expertise **Impact**: To be determined

3.3 Sectors that require local industry to support resource and infrastructure investments

East Africa should see >$100 billion in infrastructure investment across transport, energy, real estate and other utilities in the coming years. This investment will create significant opportunity in growing local support industries.

Figure 3.3 Infrastructure investment in East Africa



Government projects world over are meant to catalyze economic activities through growth of local industries and creation of employment to their citizens. However, borne out of experience from the first MTP, Government sponsored flagship projects fell short of this expectation. As the government will be a primary sponsor for this massive infrastructure investment, Kenya should encourage local supply of these support industries where possible.

In order to reverse this trend, the Government has set a goal of 70 per cent local content in all government-sponsored projects. The activities to address these challenges are:

i. Develop and provide guidelines on the thresholds for local content for projects and programmes undertaken by public entities. The local content in this context will include employment and inputs that are locally available.
ii. Develop guidelines for government sponsored projects undertaken by international companies to ensure sustainable technology transfer and skills enhancement for the local people.
iii. Propose amendments to the Public Procurement and Disposal Act and relevant regulations to support the implementation of (i) and (ii) above to include participation of women and youth owned enterprises.

3.3.1 Development of Integrated and Mini steel Mills

The iron and steel industry development was included as a Vision 2030 project after it was realized the sector plays a key role in the support of the manufacturing sector. Iron and steel is the foundation of industrial development as the products from this industry are widely used in all sectors of the economy including the construction industry and infrastructural projects. The National Industrialization Policy has identified this industry as one of the priority industries to drive the industrialization process in the short and medium term. The policy identifies the sector as a strategic and defines the policy measures to be pursued to develop the sector.

The manufacturing industry depends heavily on products from the iron and steel industry as witnessed in the motor vehicle industry, machine tool industry and farm machinery industry subsectors. Moreover, Vision 2030 has several infrastructural projects including the Lamu Port and Southern Sudan-Ethiopia (LAPSSET) Corridor Project, which covers roads construction, railway construction, ports and pipelines that require high quality iron and steel products.

The implementation of this project will be undertaken through Numerical Machining Complex (NMC) a government agency whose mandate includes manufacture of steel products. NMC has been identified as a focal point for promoting development of the iron and steel industry. Further value addition and product development will be promoted under the subcontracting arrangements with SMEs.

3.3.2 Transformation of Numerical Machining Complex (NMC)

NMC was formed as a state agency for manufacturing motor vehicles, vehicle spare parts and metal based engineering products. The company is equipped with modern machining workshop, a foundry heat treatment and design facilities. The agency has capacity for manufacturing a wide range of complex and high precision cast and machined products for both local and regional markets. However the agency has not realised its full potential due to various constraints. To overcome these constraints the Government will transform the agency to be able to realise its full potential in supporting development of the iron and steel sector. Some of the transformation activities will include restructuring, upgrading and improving funding levels and governance.

Transformation of NMC resulting in maximising installed capacity will play a strategic role in the development of the iron and steel industry. Furthermore this goal will be attained by partnering with strategic investors in the establishment of the proposed mini steel mill.

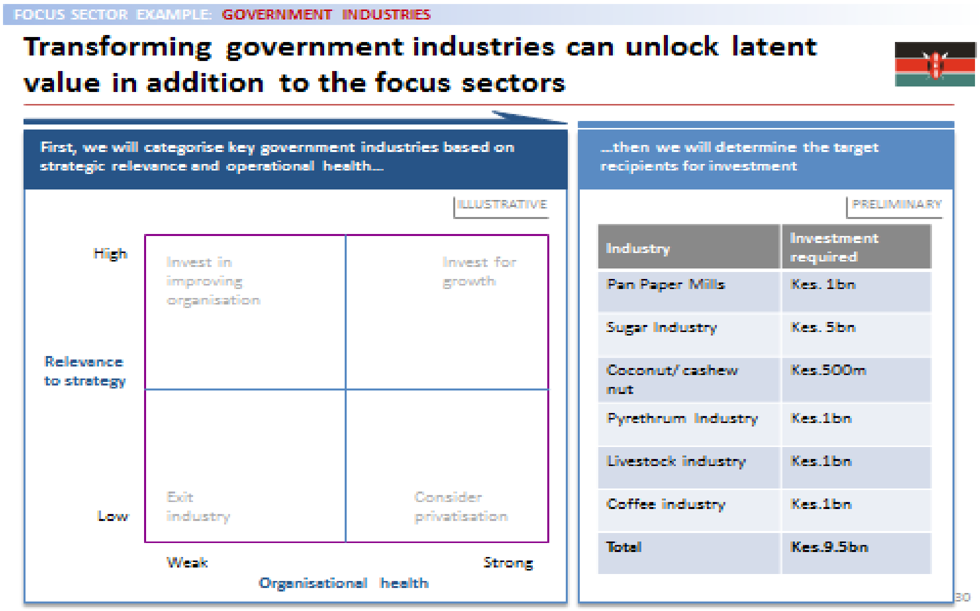
The activities to address these challenges are:

i. Identify/ acquire suitable land for development of a mini steel mill in Athi River
ii. Carry out baseline survey to establish the quantity of scrap metal available in Kenya
iii. Carry out feasibility studies for establishment of a mini steel mill
iv. Identify potential strategic investors under PPP framework
v. Develop a legal and regulatory framework to support the iron and steel industry
vi. Implementation of the first phase.

3.4 Sectors that can transform government industry

Projects in these sectors will be identified by first categorizing key government industries based on strategic relevance and operational health and then determining target recipients for investments. Preliminary recipient industries include pan paper mills, sugar industry, coconut, pyrethrum, livestock and coffee.

Figure 3.5 Transformation of selected Government Industries



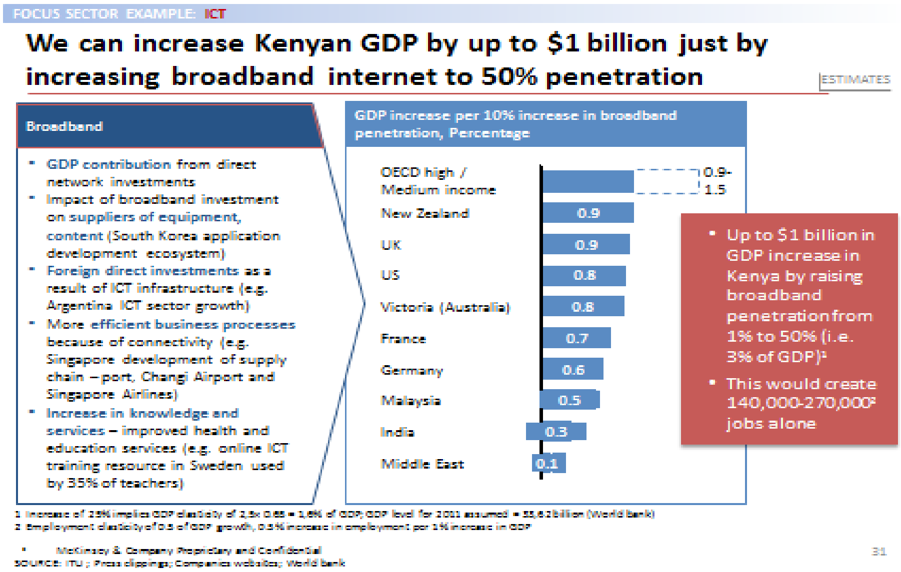
The Government of Kenya has already identified a set of initiatives to support each of these industries over the next year while developing a plan to unlock the latent potential in each industry.

3.5 Enhance non-industrial job creating sectors

Non-industrial sectors, such as ICT, retail and wholesale trade and tourism, will play a vital role in supporting the manufacturing sector to achieve the Vision 2030 goals. These sectors create jobs, contribute to the overall GDP and improve Kenya's perception across the world.

For example, Kenya has a strong ICT backbone, given the SEACOM cable linkage. By increasing broadband penetration to 50%, up from current levels of ~1%, Kenya can add up to $1 billion to its GDP and can create 140,000-270,000 jobs.

Figure 3.5 Impact of increasing broadband internet penetration



3.6 Improving the ease of doing business

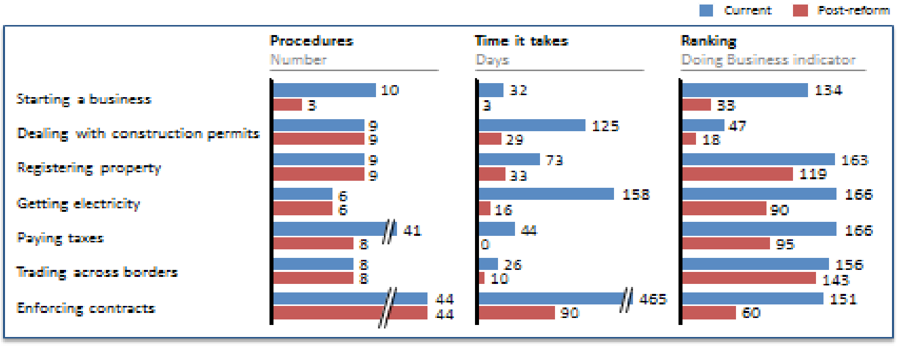
As discussed in section 2.3, Kenya faces significant challenges in its Ease of Doing Business rating. Implementing targeted reforms to improve this rating will improve the overall business environment, increase FDI and other investments and contribute to job growth.

Kenya plans to address this challenge with a program of targeted reforms across a broad range of activities related to doing business in the country:

Figure 3.6 Kenya's Ease of Doing Business ratings

ENABLERS: EASE OF DOING BUSINESS

We will increase our ranking with targeted reforms



Other reforms necessary

Doing Business indicator	2014 Rank	Proposed changes	
Resolving Insolvency	123	Reduce duration from 4.5years to 1.5 years	Enact the Insolvency Bill
Protecting Investors	98	Allow access to all corporate documents before trial	Regulate approval of related party transactions
Getting Credit	13	Enforce legal rights and maintain a unified credit information system.	Enact the Insolvency Bill

SOURCE: KenInvest, IFC Doing Business indicators

33

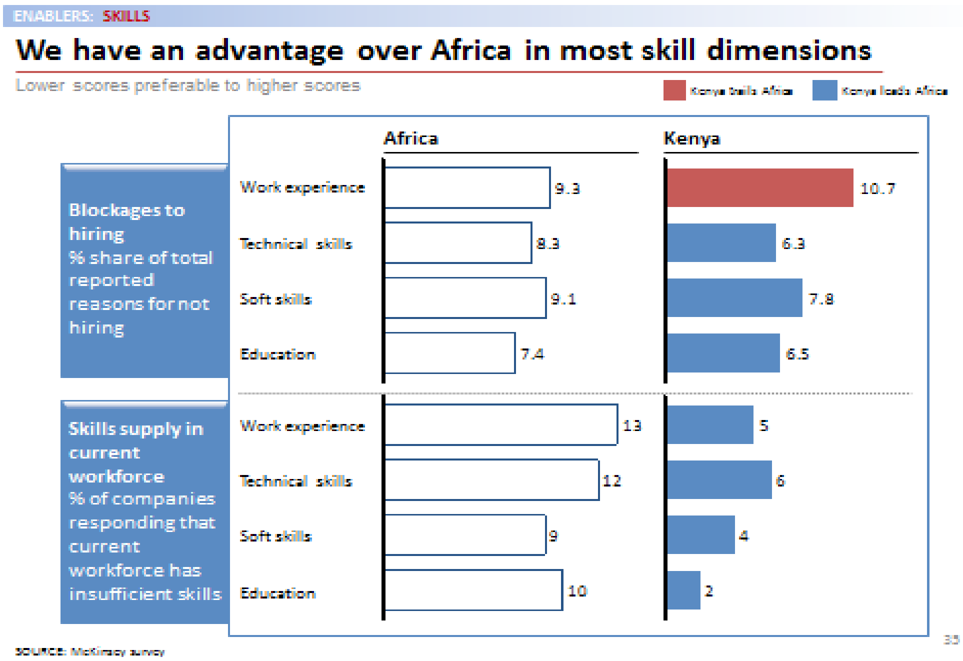
In addition, Kenya plans to invest in a One Stop Shop that will facilitate starting a business and investing in the country. Run by KenInvest, this One Stop Shop should greatly improve the business environment in Kenya.

3.7 Supporting sectors for growth: skills, infrastructure (SEZ, FTZ, etc), and finance

3.7.1 Skills development for technical human resource for the manufacturing sector

Kenya aims to create a globally competitive and adaptive human resource base to meet the requirements of Kenya Vision 2030. In general, Kenya does better than average in Africa across many indicators of skills.

Figure 3.7 Comparison of human resource skills in Kenya vis-à-vis Africa



That said, to be successful in developing competitiveness, the capacity to utilize knowledge; information in design, production, manufacturing and marketing must be enhanced. Improved productivity must however be driven by a critical mass of a skilled workforce which includes Engineers, Technologists, Technicians and Craftsmen who are innovators. Currently, the number of engineers to population stands at approximately 1:6700. To effectively support the manufacturing sector this ratio is proposed to reduce to 1:5000 benchmarked against South Africa's 1:3200. It is for this reason the training of this cadre of professionals was identified as a high priority project for Kenya Vision 2030 manufacturing sector.

The activities to address these challenges are:

- Develop and operationalize strategy for training of engineers, technologists, technicians and craftsmen
- Conduct a projected needs analysis for engineering skills required for achievement of Kenya Vision 2030 manufacturing sector goals to guide the training institutions on numbers and courses
- Transform KITI to be a centre of excellence for industrial skills development
- Co-ordinate development of harmonised linkage between industry, research institutions and academia and encourage female students to take up engineering related courses.

3.7.1.2 Transformation of KIRDI into a world class research institution

The role of Science, Technology and Innovation (STI) is recognized globally as being a critical cog in the wheel of economic growth. It constitutes key components of social integrations and sustainable development. It is the key to poverty reduction and enhancing access to basic needs in developing countries like Kenya. Kenya Industrial Research & Development Institute (KIRDI) is a national industrial research institute whose mandate is to undertake industrial research, technology and innovation and disseminate findings that will have an impact on national development.

The transformation of KIRDI into a reputable and competitive research institution under Kenya Vision

2030 will be realized through deliberate capacity building initiatives, attracting and retaining high calibre professionals, upgrading quality of Research, Technology and Innovation programmes and activities and modernization of the institute's infrastructure in line with the demands and expectations of industry, among others. KIRDI is therefore expected to play a critical role in facilitating technology transfer to MSMEs, improving product designs and promoting product innovations.

This will promote rapid growth in the manufacturing sector and give an impetus to the Kenya Vision 2030 manufacturing sector goal of attaining a 10 per cent annual growth.

The activities to address these challenges are:

- Upgrade the Institute's equipment and laboratories
- Construct a state-of-the art research facility at KIRDI South 'B' site.
- Increase the number of researchers from 10 to 60 and encourage women participation.

3.7.2 Development of Special Economic Zones (SEZs) and Free Trade Zones (FTZs)

The establishment of three Special Economic Zones was envisioned in the Kenya's economic blue print Vision 2030 and Medium Term Plans as one of the flagship projects that could help the country to achieve a 10% economic growth. The overall objective of SEZs program is to contribute towards the transformation of the country's economic base in order to realize a higher and sustained economic growth, employment creation and poverty reduction in the country.

Under the Special Economic Zones strategy, three special economic zones are to be established at Mombasa, Lamu and Kisumu. The Mombasa special economic zone will include a Free Trade Port at Dongo Kundu which is expected to serve both East and Central Africa countries.

The main objectives of establishing Special Economic Zones in Kenya are:

i. To attract both local and foreign investments
ii. To expand and diversify production of goods and services for domestic and export markets
iii. To promote value addition
iv. To promote local entrepreneurship through Small and Medium Enterprises (SMEs)
v. To enhance technology development and innovation
vi. To promote rural and regional industrialization by exploiting comparative advantage of local resources

The objectives of establishing a Free Port at Dongo Kundu- Mombasa are:

i. To establish transhipment facilities and container yards for transhipment
ii. To provide full range of related transhipment services
iii. To provide an automobile terminal and yard, break-bulk center, repackaging and re-distribution center, warehouse facilities, logistics and distribution hub, dry docks for ship repairs maintenance and servicing, and a large customs inspection and clearance center.

The activities to address these challenges are:

i. Identify/ acquire suitable land for SEZs and FTZs
ii. Develop master plans to provide the infrastructural layout

iii. Conduct EIA for each of the sites
iv. Develop basic infrastructure such as access and on site roads and utilities supply.
v. Develop investment promotion strategy.

3.7.3 Development of Industrial and Technology Parks

Industrial and technology parks are important vehicles for catalysing innovation and value addition in the manufacturing sector. These parks are developed to attract new companies, expand employment opportunities to citizens and attract FDI .The parks offer infrastructure and shared resources such as power supply, telecommunication hubs, management offices and internal transportation. For this to be realised, a minimum of ten (10) hectares will be required for development of the project in the identified areas.

The following will be the anchor activities in the industrial and technology parks:

i. Technology transfer
ii. Commercialization of research outputs
iii. Promotion of innovation
iv. Value addition
v. Technology incubation, transfer and development
vi. Platform for linkage between academia and research institutions and industries

The activities to address these challenges are:

i. Identify/ acquire suitable land
ii. Develop master plans
iii. Conduct EIA for each of the sites
iv. Develop basic infrastructure such as transport access and utilities supply.
v. Develop a framework for management of Industrial and Technology parks
vi. Sourcing and identifying private sector investments through PPP framework

3.7.4 Development of Industrial Clusters

The Cluster Approach is a modern business value creation method of effecting positive social and economic changes through enriching the culture of innovation, productivity and prosperity in utilization of natural resources and assets, networks and culture of regions. Kenya Vision 2030 development blue print advocates for regional manufacturing and industrial clusters as engines for realizing industrialization.

Adoption of a cluster development strategy as part of regional and national competitiveness strategies was recommended by the National Economic and Social Council (NESC). The main focus being government intervention in promoting market oriented research, value addition and marketing of region specific products through the support of academia, the private sector and related actors.

The Sector will pursue the development of three (3) clusters which include; Meat and leather cluster through establishment of meat processing plants, tanneries and other related industries in Garissa and Kajiado and promotion of dairy products processing in Kiganjo- Nyeri.

For this to be realised, a minimum of fifty (50) hectares will be required for development of the project in the identified areas.

The activities to address these challenges are:

i. Identify/ acquire suitable land
ii. Carry out feasibility studies
iii. Develop master plans
iv. Conduct EIA for each of the sites
v. Develop basic infrastructure such as transport access and utilities supply.
vi. Develop a framework for management of Industrial clusters and encourage women representation.
vii. Sourcing and identifying private sector investments through PPP framework

3.7.5 Energy provision for the manufacturing sector

Energy is a key enabler of the sector and the supply of adequate and quality energy to industries is an important factor in improving competitiveness. Conversely, supply of inadequate, unreliable and costly energy leads to low productivity, poor quality and un-competitiveness of manufactured products, and also negatively impacts on the environment, including contribution to green house gas emissions.

In Kenya the cost of energy is relatively high compared to other competing economies such as South Africa and Egypt. This scenario, combined with other operational inefficiencies, renders products manufactured in the country uncompetitive.

In order to address the energy challenge, the manufacturing sector needs support to transition to a low carbon pathway and to enhance its resilience to climate change impacts;

The activities to address these challenges are:

Conduct an energy mapping survey to generate information on energy requirements for the manufacturing sector to facilitate planning for energy requirements for the country and also improve awareness of climate change risks and impacts.

Increase to thirty (30) per cent peak energy surplus out of the mapping in (i) above within the second MTP period.

- Enhance availability of energy to manufacturing enterprises to 100 per cent;
- Reduce power connection period to manufacturing sector to thirty (30) days;
- Encourage energy efficiency improvements at the enterprise levels
- Encourage use of renewable energy and industrial-scale cogeneration using biogas produced from agricultural residues, which is used to generate electricity and heat

3.7.6 Development of a standards infrastructure

Standards infrastructure refers to all aspects of standardisation, metrology, testing and quality management including certification and accreditation. Consumers are increasingly demanding international standardisation of production practices and traceability of products for quality, health, safety and full disclosure to ensure consumer protection.

During the plan period, the sector will strengthen the standards infrastructure to meet the rapidly changing consumer needs, preferences and quality requirements.

The activities to address these challenges are:

i. Upgrade the laboratories at Kenya Bureau of Standards (KEBS)

ii. Construct a state-of-art testing centre in Mombasa and Kisumu

iii. Enhance and upgrade surveillance equipment at Ports of Entry

3.7.7 : Standards and Labeling Programme

The main objective of the project is to remove the barriers to rapid and widespread uptake of energy efficient motors in the industrial sector; refrigerators in the residential; display refrigerators in the commercial sector; air-conditioners in the commercial and residential sectors; and lighting in the three sectors.

The activities to address these challenges are:

i. Gazettement of six (6) test procedures and minimum energy performance standards

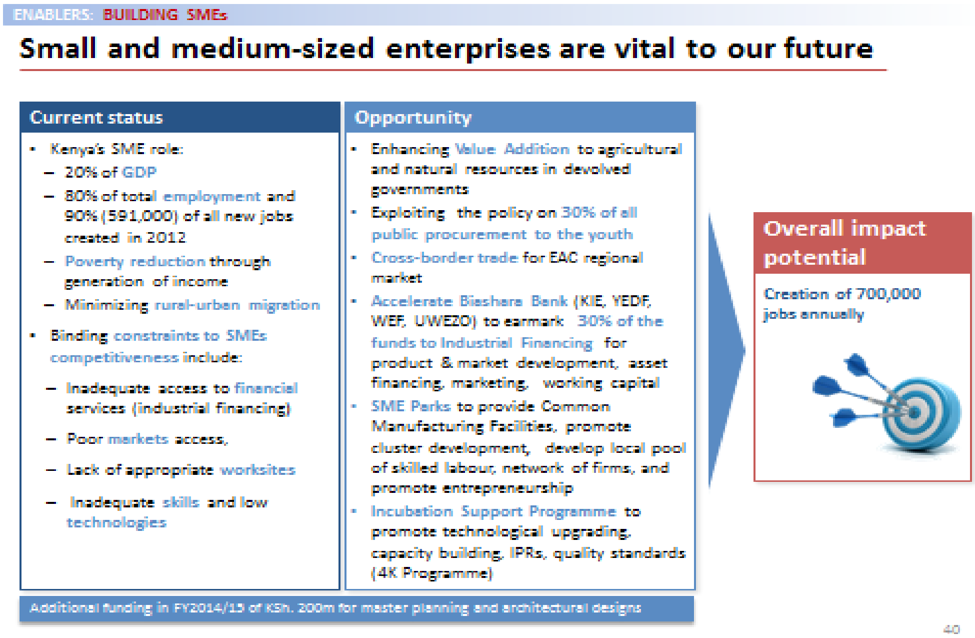
ii. Integration of Minimum Energy Performance Standards (MEPS) Compliance in the Pre-shipment Inspection System

iii. Expand the appliances under consideration from the current four (4) to eight (8).

3.8 Unlocking the potential of SMEs

SMEs will play a vital role in Kenya's development and industrialization.

Figure 3.8 Current status and opportunities for SMEs



3.8.1 Development of SME parks

SME parks are transformative and high impact projects that are expected to create jobs and wealth. For this to be realised, a minimum of ten (10) hectares will be required for development of the project in the identified areas. SMEs in the manufacturing sector form the bedrock of industrialization and it is a recognized that SMEs play an important role in many developing economies.

It is against this background the development of five (5) SME parks was identified as one the Kenya Vision 2030 Manufacturing Sector flagship projects in the first MTP, these were in Mombasa, Nairobi, Kisumu, Nakuru, Eldoret. Due to unavailability of suitable industrial land in Mombasa and Nairobi, alternative land was identified in Juja and Taita Taveta. The identified land in the two areas is in the vicinity of universities of technology and therefore more appropriate for development of industrial and technology parks.

In order to promote industrial dispersion and balanced economic development in the country, 47 SME Parks will be developed as flagship projects under the sector.

The activities to address these challenges are:

i. Identify/ acquire suitable land
ii. Develop master plans
iii. Conduct EIA for each of the sites
iv. Develop basic infrastructure such as access and on site roads and utilities supply.
v. Develop a framework for management of SME parks and encourage women representation.
vi. Sourcing and identifying private sector investments through PPP framework

3.8.2 Value addition and productivity improvement programme

The overall objective is to promote value-addition to and commercialization of resource endowments by small and medium industries, improve labour and total factor productivity and promote resource efficiency and cleaner production and improve competitiveness at the enterprises level for enhanced value-addition. Three sub-components will be implemented as described below.

3.8.2.1 Productivity improvement and cleaner production

The main objective of the productivity improvement and cleaner production programme is to promote labour and total factor productivity improvement; energy and resource efficiency and cleaner production to enhance enterprises level competitiveness.

The focus will be the existing small and medium value-adding enterprises to improve production process, plant work flow operations, and lay-out improvements and Resource Efficiency and Cleaner Production (RECP). For RECP, the scope of sub-sector coverage will be increased from 3 to 22 as identified in the Sessional Paper No.9 of 2012 on National Industrialization Policy.

The activities to address these challenges are:

i. Increasing the number of participating enterprises from ten(10) to two hundred and fifty(250)
ii. Conducting energy, resource and waste in-plant assessment (audits).
iii. Identification of RECP opportunities in enterprises targeting energy, water and material efficiency and pollution reduction activities
iv. Mainstream the operations of Kenya National Cleaner Production Centre (KNPC) into the ministry responsible for industrialization

3.8.2.2 One Village One Product (OVOP)

The main objective of One Village One Product (OVOP) is to contribute to the Kenya vision 2030 strategy through the support of MSMEs to increase incomes through value addition of locally available resources and market access by increasing the current coverage and number of quality products at county level.

The activities to address these challenges are::

i. Facilitate local communities for commercial utilization of a wide range of locally available resources for local and international markets
ii. Facilitate linkages between MSMEs engaged in value addition and service providers offering financial services, business management, processing technology, product certification, packaging, branding and marketing
iii. Provision of information on best practices existing elsewhere for benchmarking and experience sharing among MSMEs
iv. Promotion of OVOP model of value addition to county governments

3.8.2.3 Research development and commercialization

Research and development is essential in developing innovative capacity and commercializing research findings for increased efficiency and productivity. This will be essential for creation of niche products, increasing the products base, improvement of production processing and packaging technology through the following activities:

i. Create a database of commercializable research findings from Universities and Research Institutions.
ii. Match make and create linkage between research institutions and industry for commercialization of at least hundred (100) industrial research findings.
iii. Create a legal framework for operationalization of (i) and (ii) above, and protection of intellectual

and copyrights.

iv. The branding and marketing initiative is aimed at enhancing productivity, quality and competitiveness of MSMEs products through provision of technology, design, product development, standardization, protection of innovations. It involves coordinating the institutions responsible for product research and development, standardization and development of standards, intellectual property protection and provision of long term financing and work sites.

The activities to address these challenges are:

i. Create a Special Purpose Vehicle (SPV) to co-ordinate the institutions above

ii. Develop and market to international levels fifty (50) niche products by MSMEs.

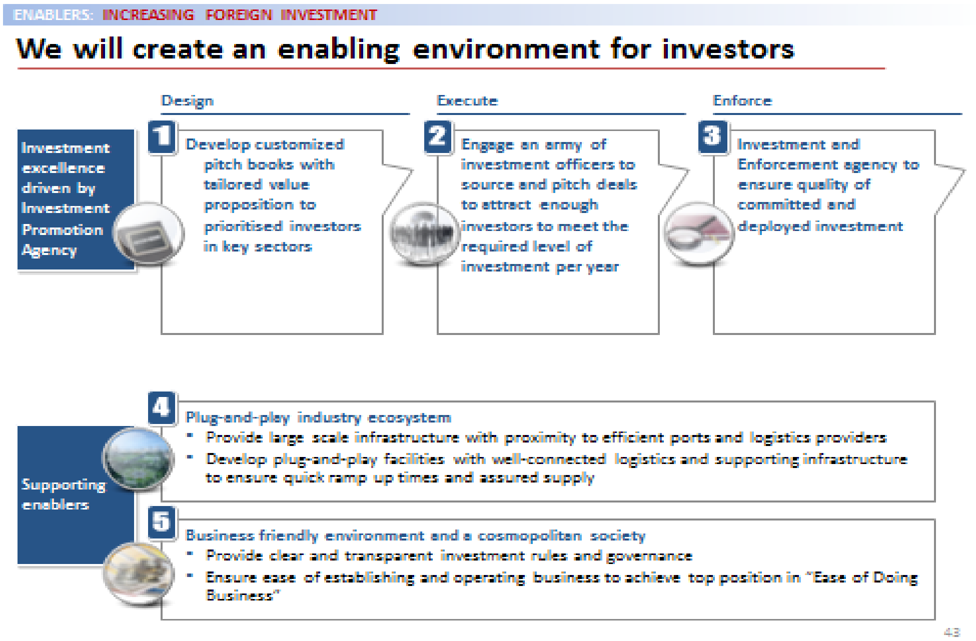
iii. Develop a Reverse Engineering Strategy

iv. Develop a legal framework to operationalize activities (i) and (ii) above

3.9 Developing a compelling FDI attraction plan

Development Financial Institutions (DFIs) are unique financial institutions that provide affordable and appropriate financial services that generally not undertaken by other commercial banks. The DFIs should provide low interest rates on medium to long term capital to the manufacturing sector, especially the MSMEs for the achievement of Kenya Vision 2030. The institutions act as catalytic agents in promoting balanced industrial development in the country. The financial sector in Kenya is relatively well developed. However, there is limited access to long term financing which inhibits the growth and competitiveness of the industrial sector enterprises.

Figure 3.9 Steps towards increasing Foreign Direct Investment



In order to effectively discharge their mandate and play their role in national development, the

The activities to address these challenges are:

i. Fast track the enactment of the DFIs Bill.

ii. Implement the DFIs reform strategy.

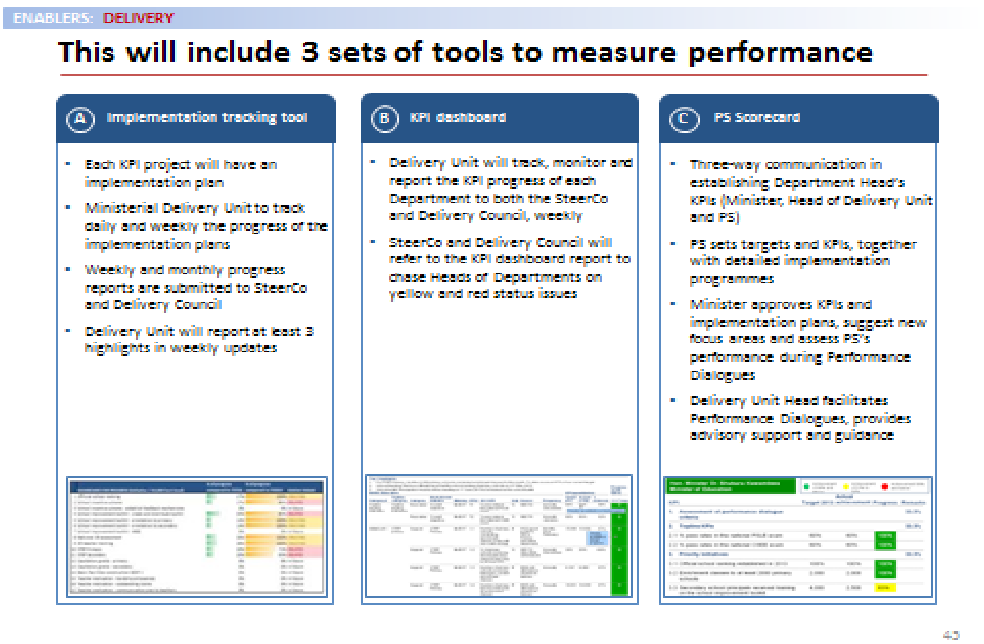
iii. Review, harmonize and restructure the existing DFIs and other development funds targeting enterprise development. Re-capitalize the DFIs with a total capital portfolio of Kshs. 40 billion to ensure availability of medium and long term finance with a lending interest rate target of less than 10 per cent per annum within the 2nd MTP period.

iv. Encourage other funds such pensions and co-operatives to invest in industrial development and provide incentives to encourage Kenyans in the Diaspora to invest in industrial development.

3.10 Building a strong government delivery capability

The key sectors and enablers included in this roadmap will play a central role in helping Kenya reach Vision 2030. That said, the Government of Kenya must be able to deliver against these programmes for them to be successful. As such, the GoK will develop a delivery capability:

Figure 3.10 Key Performance Indicators for strong government capability



This delivery capability will ensure that GoK executes against each of the activities and initiatives in the roadmap.

4 POLICY, LEGAL AND INSTITUTIONAL REFORMS

The development and growth of the manufacturing sector has to be supported by sound and progressive industrial policies, legal and institutional framework that promote industrial linkages, effective coordination, and facilitates domestic and international trade.

During the second Medium Term Plan Period, the Sector will implement the Sessional paper No. 9 of 2012 on National Industrialization Policy framework (2012-2030) and the EAC industrial policy and strategy (2012-2032) and undertake necessary policy, legal and institutional reforms.

4.1 National Industrialization Policy Framework for Kenya

This policy has been developed as a framework to spearhead Kenya's Industrialization process towards attainment of middle income economy. The overall objective of the policy is to revitalize and sustain the growth of the industrial sector and enhance its contribution to GDP. This will be achieved through creating an enabling environment for improved productivity and competitiveness. It also provides for a legal and institutional framework and provides measures for resource mobilization, high value addition, standardization, research & development, innovation, incubation, technology transfer and protection of IPR.

Among the key activities to be implemented under NIP include:

i. Finalization of Subcontracting Policy to promote the industrial sub contracting linkages in the manufacturing sector to enhance economic growth and job creation.

ii. Develop the Business and Technology Incubation policy to increase the survival rate of SMEs and ensure they graduate to medium and large enterprises in order to ensure sustainable employment and wealth creation.

iii. Finalize the development of the National Intellectual Property rights to strengthen the management and administration of the IPR system to encourage innovation and creativity.

4.2 East Africa Community industrial Policy and Strategy

The overall objective of the EAC industrial policy and strategy is to enhance industrial production and productivity and to accelerate the structural transformation of economies of the EAC region in order to enable sustainable wealth creation, improved incomes, and high standard of living for the Citizens.

The Policy has identified six (6) strategic regional industries namely: Iron ore and other mineral processing; Fertilizers and agrochemicals; Pharmaceuticals; Petrochemicals and gas processing; Agro-processing and Energy and Bio-fuels. Kenya's industrial development process has been aligned to the EAC development initiatives. The following activities, among others, will be undertaken at the National level:

i. Sensitization of the Citizens on the implementation of the EAC Industrial policy and strategy

ii. Creating/establishing a framework for public-private partnership for coordinated development of the strategic regional industries

iii. Strengthening R&D, Technology and innovation capabilities

iv. Support the establishment of regional centres of excellence in technology transfer and innovation

4.3 Standards, Quality Infrastructure and Intellectual Property Rights

Standards play a critical role in National, regional and international trade. Kenya will need to strengthen quality assurance institutions to ensure that imports, exports of goods sold in Kenya, regionally and internationally are to the highest quality standards. The entry into the local market of sub standard, counterfeit and contraband products has impacted negatively on the performance of the manufacturing sector. Furthermore, counterfeit trade has also discouraged innovation and reduced national revenue base. Moreover, low capacity for intellectual property rights is a disincentive to innovation in the sector.

In order to enhance standards and quality infrastructure and promote protection of intellectual rights the following policy measures will be pursued by the sector during the plan period:

i. Fast track the harmonization and implementation of EAC and COMESA common quality standards and enactment of the EAC Anti-Counterfeit Bill;

ii. Restructure and strengthen the Kenya Intellectual Property and Standards Tribunals to enhance their effectiveness;

iii. Develop an Anti-counterfeit Policy and strengthen the Anti-counterfeit Agency; and fast track the development of the National Quality and Standards Policy.

iv. Fast track the enactment of the National Intellectual Property Policy; and

v. Strengthen institutional capacity for IPR and increase knowledge and awareness of IPR

4.4 O ther Policy and institutional reforms measures:

4.4.1 The Mining and Minerals Act 2012 provides a regulatory framework for exploitation and value addition of mineral resources and is expected to impact positively on the development of mineral based industries such as iron and steel.

4.4.2 The review and alignment of the Occupational Safety and Health Act, 2007 and the Work Injury Benefits Act, 2007 will ensure the health and safety of industrial workers.

4.4.3 The operationalization of the Public Private Partnership (PPP) legal framework will ensure efficient execution of the Public Private Partnership Projects Agreement and contracts entered by Contracting Authority. The framework is crucial for the implementation of Industrial Flagship Projects and other programmes.

4.4.4 The Reforms in the land, energy and physical infrastructure, governance, judicial and legal sectors will provide an enabling environment for sustainable industrial development and growth.

4.4.5 Transformation of Kenya Industrial Training Institute to Semi-Autonomous Government Agency – KITI is mandated to train artisans, technicians and middle level managers on industrial skills development with a strong component of entrepreneurship skills for self employment especially empowering the youth with relevant skills. The transformation of KITI will grant it more flexibility in management and operations with the view of enhancing its operation and spearhead the training components towards realization of the Kenya Vision 2030 .

4.4.6 The fast-tracking of MSME Bill to facilitate the growth and development and coordination of the SME Sector.

4.4.7 The Special Economic Zones (SEZ) policy will provide framework for infrastructure development and incentives regime to attract both local and foreign investment.

4.4.8 The Science, Technology and Innovation Policy will provide a framework for promoting innovation and commercialization of research outputs within the industrial sector.

4.4.9 The draft Natural Products Industry Policy, 2012 and the accompanying bill will provide a framework for fully harnessing the natural products subsector.

APPENDIX 1: LESSONS LEARNED FROM PREVIOUS MTP

1.0 Progress made in implementation of the flagship projects

In the first MTP, flagship projects under the manufacturing sector included the following:

1.1 Development of SME Parks

The Sector during the Plan period was to develop at least five (5) Small and Medium-Enterprise (SME) Industrial parks in key urban centres in Nairobi, Nakuru, Mombasa, Eldoret and Kisumu. In order to pursue this goal, 135 and 20 acres of land have been identified in Eldoret and Taita Taveta respectively. More efforts to acquire land in the other counties are underway. Development of master plans and structural designs are ongoing

Some of the challenges encountered in the First MTP included low funding for flagships and difficulty in acquiring industrial land for development of the SME parks.

1.2 Development Special Economic Zones

Special Economic Zones (SEZs) are designated geographical areas with liberal economic laws, developed infrastructure where goods and services provided are restricted by controlled access and are generally regarded as imports outside the customs territory. They play an important role in catalyzing economic and social development and increasing competitiveness.

During the plan period, two (2) SEZs were planned to be implemented in Mombasa and Kisumu. For the Mombasa site, land was identified in Dongo Kundu and Lamu. The SEZ concept was approved by Cabinet and a Government-to-Government agreement signed with the Government of Singapore for the development of the Master Plan. Further an SEZ policy and bill have been developed and approved by cabinet and a Sessional paper on the same has been prepared in readiness for tabling in parliament.

1.3 Development Industrial Parks

During the first MTP two (2) industrial parks were to be developed in Mombasa and Kisumu within the Special Economic Zones (SEZ). In Mombasa and Kisumu, 3000 and 1000 acres of land were identified respectively for development of industrial parks. Master plans and basic infrastructure for the industrial parks will be developed within the second MTP. Resources to support development of the parks will be mobilized through a Public, Private sector Partnership (PPP) approach.

Furthermore during the implementation period, land for development of a third industrial and technology park was identified at Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Juja. The university allocated 32 acres of land for development of the park and a Memorandum of Understanding (MoU) has been signed between the Ministry and the University. The development of master plans and structural designs for the park are in progress.

1.4 Development of Industrial and Manufacturing clusters

Industrial and Manufacturing Clusters have been identified as powerful tools for promoting productivity and competitiveness. During the first MTP the Sector was to identify Industrial and Manufacturing clusters to be developed to improve the competeviness of the sector. During the period a study was conducted by KIPPRA which identified priority sectors for implementation of the cluster strategy to enhance regional and national competitiveness.

The study identified meat and leather, fisheries and dairy cluster as having high potential for value addition. Informed by this study, the Ministry of Industrialization together with other stakeholders embarked on promoting development of the fisheries cluster in Kisumu and Meat and leather cluster in Garissa and Kajiado.

Sensitization and training of entrepreneurs in these clusters has been undertaken and financing of the cluster projects is being pursued through the government, UNIDO and other Development Partners. Feasibility studies on the meat and leather clusters are in progress. During the second MTP specific projects which will include among others, development of tanneries and slaughter houses, meat processing, fish processing and production of animal feeds will be pursued within the relevant clusters.

1.5 Development of the iron and steel Mill

Industrialization of any nation is largely dependent on the availability and affordability of iron and steel. It is generally accepted that there are deposits of iron ore reserves that exist in several locations in Kenya (including Meru, Ikutha, Taita, Embu, Lolgorien, Samburu, and Funyula districts), although the exact quantities and quality of the ores are yet to be established. There are also smaller deposits in various parts of Nyanza, Western and Coastal regions including Pyritic Ores in Bukura area, Limonitic Ores on Lugulu Hill South of Sio and Goethite Ore on Mrima Hill in Kwale.

Arising from the discovery of iron ore and recognizing the importance of the iron and steel subsector in supporting development of other sectors of the economy, the government adopted development of the sector as a priority. The Ministry of Industrialization in partnership with other stakeholders has therefore been developing mechanisms for development of the sector. The National Industrialization Policy identifies the sector as strategic and defines the policy measures to be pursued to develop the sector.

During the first MTP, a concept paper on development of the sector was approved by the Cabinet, paving way for a Memorandum of Understanding (MoU) between the Government of Kenya and a South Korean investor. In the MoU, the investor was to partner with the Government of Kenya to develop mini steel mill among other projects. Furthermore, a strategy paper for promoting the sector has been developed and drafting of Iron and Steel Bill 2012 is in progress. The process of conducting baseline study to establish the quantity and quality of ferrous scrap available in the country and a feasibility study on establishment of mini steel mill are ongoing. During the second MTP a study will be carried out to determine the quantity and quality of iron ore available in the country. Moreover, a legal and institutional framework will be created to promote development of the sector.

1.6 Training of Engineers, Technologists and Technicians

The Manufacturing sector has being identified as one of the key drivers of the economy and continues to face various challenges, including, lack of high quality skills and competencies, high cost of production, competition from cheap imports and substandard goods, high taxes on inputs, high cost of borrowing, non tariff barriers and inadequate incentives. These factors have hampered the sector from realizing its full potential. Vision 2030 development blue print recognizes that, for the country to attain its development goals, an adaptive human resource base is required.

Kenya's global competitiveness depends on the country's ability to identify, develop and utilize its human resource base that will be constantly subjected to re-training and have access to modern technologies through learning to enhance productivity. To be successful in developing competitiveness, Kenya must enhance its population's capacity to utilize knowledge, information in design, production and marketing.

Furthermore, improved productivity of the Kenya Industrial sector and its competitiveness in national, regional and international markets is a key factor to raising living standards of Kenyans and achievement of Vision 2030. Improved productivity must however be driven by a skilled workforce that includes Engineers, Technologists, Technicians and Craftsmen.

It is against this background, that the government identified training of engineers, technologists, technicians and craftsmen critical to the manufacturing sector. The Ministry of Industrialization has adopted this as high priority and in collaboration with Ministries responsible education and youth affairs have developed a strategy paper for training of the engineering cadre. The strategy paper outlines the mechanisms for establishing centres of excellence for training of engineers, technologists, technicians and craftsmen at the University, Technical colleges and Youth polytechnics, and further outlines the mechanism that will be used to improve enrolment of students in engineering disciplines and improving linkage between the academia and the industry.

1.7 Transformation of Kenya Industrial Research and Development Institute (KIRDI)

The role of Research and Development (R&D), Science, Technology and Innovation (STI) is recognized globally as being a critical cog in the wheel of economic growth. It constitutes key components of social integrations and sustainable development.

KIRDI is the only national industrial research institute whose mandate is to undertake industrial research, technology and innovation and dissemination of findings that are expected to have an impact on national development. The institute has however not realized its full potential due to low capacity and lack of strategic linkage with industry. Against this background, during the first MTP the government adopted transformation of KIRDI as a flagship project within the manufacturing sector.

The transformation of KIRDI into a reputable and competitive research institution with state of the art research facilities will be realized through deliberate capacity building initiatives, attracting and retaining high calibre professionals, upgrading quality of Research, Technology and Innovation programmes and activities and modernization of the institute's infrastructure in line with the demands and expectations of industry.

KIRDI is therefore expected to play a critical role in facilitating technology transfer to MSMEs, improving product designs and promoting product innovations. This will promote rapid growth in the manufacturing sector and give an impetus to the Vision 2030 manufacturing sector goal of attaining a 10 per cent annual growth.

During the second MTP the institute will be transformed by upgrading the equipment, expansion of the physical infrastructure and deepening human resource capacity building.

2.0 Progress made in implementing other programmes and projects

These are the achievement under the following programmes and projects during the First MTP:

2.1 Development of Constituency Industrial Development Centres

This project was under Kenya's Economic Stimulus Programme (ESP) which was established in the Financial Year 2009/2010 to address the declining economic performance, stimulate economic growth and create employment opportunities. The main activity under this sector was the construction and equipping of Constituency Industrial Development Centres (CIDCs) in the 210 constituencies to provide worksites and tools for the youth to pursue gainful employment.

A total of 188 constituencies out of the 210 identified land for the construction of CIDCs. The Ministry of Industrialization completed construction of 139 Constituency Industrial Development Centres in various constituencies while construction works for the remaining 49 centres are at various stages of implementation. Two CIDCs: Kiambaa and Kitui Central have been equipped and are ready for launching. A management agreement contract has been signed between the Ministry of Industrialization and KIE to manage some of the CIDCs. Out of these, 47 CIDCs have been identified for upgrading into industrial parks in each of the counties. The challenges experienced include: Land identification and acquisition, capacity of local county contractors, financial and procurement.

2.2 4K MSE 2030 Programme

The goal of the programme was to revolutionize and modernize the Medium Small and Micro Enterprises (MSME) sector which had continually faced the challenges in building capacity for mass production through Innovation, design and product development, standardization and patenting for productivity, quality, competitiveness and marketing of SME products.

The 4K MSE 2030 programme comprised 4 institutions namely: KIRDI, KEBS, KIPI and KNFJKA as partners. However, the programme was reviewed and the Kenya National Trading Corporation (KNTC) incorporated to provide marketing and distribution services to MSME products and Kenya Industrial Estates (KIE) to provide work sites and credit. It was then upgraded to become the 5K MSE 2030 programme comprising KIRDI, KEBS, KIPI, KNTC and KIE. As a result, KNFJKA's role was reviewed to focus on mobilizing the target Mses Beneficiaries to participate in the programme.

The main activity during the first MTP was the promotion of the upgrading of 50 products under this initiative. Five products were identified for upgrading through reverse engineering. These were: Arc Welding Machine, Handloom, wheelbarrow, Transformer and Hospital bed. The programme upgraded Handloom, Arc welding machine and Hospital Bed from the SME sector. The upgrading of the handloom was meant to build capacity of women entrepreneurs in value addition in textile sector.

In order to strengthen the 5K MSE 2030 programme, the registration of a company Kenya Premier Products Limited is being pursued. The envisaged company's core business will be upgrading, marketing and branding of MSE products. The main challenges were low funding and cross-agency coordination for this programme.

2.3 One Village One Product Project (OVOP)

One Village One Product (OVOP) programme is a community development model aimed at bringing together all stakeholders at local level in identification and commercialization of the local resources, promoting value addition and marketing of processed products both at local and international markets.

During the First MTP the project was implemented in 11 pilot districts in phase one (Nyeri North, Laikipia West, Kisii, Nandi East Bomet, West Pokot, Yatta, Vihiga, Garissa, Isiolo and Kwale) and 80 projects in value addition were identified and supported. In phase two, 14 additional districts were included (Kirinyaga West, Mbeere South, Meru South, Wote, Wundanyi, Muranga South, Malindi, Migori, Rarieda, Kimilili, Kiambu East, Loitoktok Njoro and Teso). Most of the projects are undertaken through groups including youth and women engaging in value addition.

The support provided included linkage with financial institutions; training in business management, product development, certification, packaging and branding; processing technology; marketing; and financial management. The OVOP programme promoted various value added products including Honey processing; milk processing, Aloe vera products, silk products, traditional beads and accessories, wood carvings, basket weaving, artistic furniture production and soapstone products. Various capacity building initiatives were undertaken for the community groups, technical officers and management committees.

Regional and national exhibitions were conducted and resulted in products awareness for local and international markets. The main challenges included lack of a budget line specifically for OVOP activities within the sector and insufficient linkages with technical, financial, and marketing institutions at both national and district level.

2.4 Micro, Small and Medium Enterprises Competitiveness Project

This project was funded through a credit facility from the World Bank (2005-2012) and was to increase productivity and employment in SMEs through 3 components namely: access to finance, improve business environment and strengthening enterprise skills and markets linkages to meet the demands of SMEs.

The achievements include: the access to finance component developed new financial products for SMEs such as Asset Financing, receipt warehousing, weather insurance, credit referencing and deposit taking by Micro Financial Institutions and Cooperative Societies. In addition, two financial access (Finaccess) studies were undertaken. The Finaccess studies assisted banks and financial institution to open branches closer to the clients including agent and mobile banking. Over US$ 11.5 million (Kshs. 954.5 million) has been lent to SMEs under the SME Risk Capital and technical Assistance fund of the project. Of the total amount disbursed, 38 per cent was given to women owned enterprises.

Under the strengthening enterprise skills and market linkages component, over 47 pilot projects were undertaken in the cotton, coffee, leather and pyrethrum value chains thereby increasing productivity and competitiveness through implementation of Good Agricultural Practices (GAPs) and certification of co-operatives. The pilot value chain matching grant, through the various Apex committees created in the identified value chains resulted into establishment of the Cotton Development Authority (CODA) and the Kenya Leather Development Council.

Similarly, the project led to creation of over 2,500 jobs that included men, women and youths. Further, of the 1,619 SMEs trained under the Business Plan Competition, most of them were youth and 30 percent were women. Over 150 local case studies developed and mainstreamed in the curriculum for teaching students and MSMEs in Business schools of the three participating universities namely: JKUAT, Kenyatta University and Strathmore University leading to those institutions starting Centres' of entrepreneurial excellence.

The improved business environment component was expected to contribute to the reduction of compliance cost for the formal sector and provide incentives for the MSMEs in the informal sector to become formal economic entities. This objective was to be achieved through simplification of the GoK's tax, licensing and registration regime for Micro and Small businesses start up regulations through a one-stop approach.

On licensing, the Government introduced the Single Business Permit under the Local Government Act. This has since reduced multiple licensing requirements. On registration, the Government has computerized the Company and Business Registration under the AG Chambers thereby reducing registration costs.

On taxation, KRA has computerized the issuance of Personal Identification Number (PIN) system and filing of annual returns which can now be done online. They have also introduced the Electronic Tax register (ETR) that helps MSMEs to keep records and introduced the turn over tax for businesses whose turn over falls between Kshs. 500,000 and Kshs. 5 Million. These pay a fixed rate of 3 per cent. In addition KRA has waived the requirement of filing of returns for those whose only source of income is salaried employment. KRA piloted Electronic Cargo Tracking of transit goods to curb against diversion and hasten the movement of cargo along the transit cargo.

On the establishment of One-Stop-Shop, Kenya Investment Authority has been given the mandate to implement and has since moved into bigger new premises at the Railways headquarters. However, this has not been fully implemented.

The challenges that affected the project implementation included the complexity of the project structure, several implementing partners making it difficult for coordination and ownership, lengthy disbursement process of the project funds leading to delays and high turnover of project staff. The project implementation was through demand driven initiatives and due to the lack of awareness on the project, there were delays in the uptake of the project services and opportunities.

2.5 Business Sector Program Support (BSPS)

The Business Sector Programme Support (BSPS) was a 5 year development support programme from the Government of Denmark to the Government of Kenya covering the period 2006-2012. The programme was to support creation of enabling environment and pilot value-addition projects to address employment creation as a means to reduce poverty.

On the creation of enabling environment, the project facilitated trade and industrial policy development and trade information delivery services for market access at the export promotion council. The value addition pilot projects were implemented in rural areas across the country and addressed product development and market diversification for commercial crafts; sanitary standards for handling and packaging horticultural products; production technology for local arc welding machines; fish leather processing technologies and commercialization; promotion of enterprises on water hyacinth products; technology transfer and capacity building in honey processing; efficient production of bricks and clay products; fruit processing; cotton and textile; leather tanning; enhancing competitiveness of SMEs through cleaner production; development of fisheries and beef clusters; and piloting on bio-gas. The 15 pilot projects were implemented mainly by youth and women groups. Out of the 15 groups of projects, 9 progressed to completion while the rest are at various stages of completion

There were challenges and constraints encountered during the implementation of this programme which included export market access complexities such as Sanitary and Phyto-Sanitary (SPS) measures and Technical Barriers to Trade (TBT), weak capacity and financial status of target beneficiary groups, and low capacity for cleaner production at enterprise level.

2.6 Standards and Labelling Programme in Kenya

The Standard and Labelling Programme initiative was designed jointly between Government of Kenya and UNDP to remove barriers to market transformation of energy efficient products and services in Kenya with replication effects to four (4) other East African Community States. The goal is to reduce energy related Carbon Dioxide gas (CO2) emissions by improving the energy efficiency of selected appliances and equipment in residential, commercial and industrial sectors.

The programme achievements include: Conducted a Baseline study; drafted Test Procedures for five (5) selected electrical appliances have been completed and submitted to KEBS; drafted Minimum Energy Performance Standards for five (5) selected items that have been completed and submitted to KEBS for mainstreaming and Gazettement; Undertook awareness campaigns through trade fairs/shows and media publication on Energy Efficiency Standards and Labelling and Carried out the Medium Term Evaluation (MTE), and made recommendations that will guide the remaining part of the programme.

The main challenges were: delays in disbursement; lack of counterpart funding and weak inter-agency collaborations; the difference in fiscal years by both GoK and UNDP.

2.0 Progress in Policy, legal and institutional frameworks

During the First Medium term Plan 2008-2012, the Sector undertook policy, legal and institutional reforms in order to provide for a favourable environment for industrialization as discussed below. The policies and strategies developed were: National Industrialization Policy; Master Plan for Kenya's Industrial Development; National Business and Technology Incubation Policy; National Subcontracting Policy; Intellectual Property Rights Policy; Public Procurement and Disposal (Preference and Reservations) Regulations, 2011.

3.1 Policy Framework

i) The National Industrialization Policy

The Sector developed the National Industrialization Policy (NIP) and Industrial development Bill which have been approved by Cabinet for publication and tabling in Parliament. The policy provides a framework to drive Kenya's aspiration to be a middle income and rapidly industrializing country and globally competitive. The policy focuses on value addition and has prioritized seven (7) sectors out of the twenty two (22) identified based on their potential for growth, employment and wealth creation and availability of national resource base. The seven (7) priority sectors are both labour intensive and medium-high technology sectors and include: agro processing, textile and clothing, leather and leather products, iron and steel, machine tools and spares, agro-machinery and pharmaceuticals. The implementation of this policy would leverage on subcontracting, business and technology incubation and protection of intellectual property rights. In addition it will facilitate forward and backward linkages with other economic sectors and provides a framework for addressing the enablers, funding mechanism and institutional arrangements to revitalize the industrial sector

ii) Master Plan for Kenya's Industrial Development (MAPSKID)

MAPSKID was developed with support from JICA as part of the NIP implementation. It provides a road map for industrial growth and development, in particular, the manufacturing sector. The overall goal of the master plan is to create an enabling environment that will nurture rapid and sustainable growth for manufacturing sector.

iii) National Business and Technology Incubation Policy

This policy is anchored on the National Industrialization Policy which identified enactment of Business and Technology Incubation policy as key in unlocking the potential in the MSE sector. Business incubation is a deliberate process of nourishing Start-up, Micro and Small business initiatives into vibrant wealth-creating enterprises. This can be done through the provision of work space, internet access, and business counselling services, mentoring, linkages and other shared facilities. The policy takes cognizance of the fact that, in spite of Kenyan Medium, Micro and Small Enterprises (MSMEs) employing a great number of people and having the capacity to contribute greatly to the industrialization process, the jobs in the MSE sector are unsustainable, characterized by high mortality rate and informality.

The draft National Business and Technology Incubation policy was developed through an all inclusive consultative process and was subjected to a stakeholders' validation and is in the process of finalization. The policy addresses the challenges that Kenya faces in her endeavour to achieve the goal of industrialization. Most MSEs die before their 5th anniversary. A negligible number of MSMEs graduate to medium and large enterprises.

iv) National Subcontracting Policy

This policy is anchored in NIP which identifies subcontracting as one of the key strategies for the growth and graduation of MSMEs and promotion of linkages especially in the manufacturing sector to hasten the pace of economic growth and create more jobs. Sub-contracting is a type of work contract that seeks to outsource certain types of work to other companies. It is done when the general contractor does not have the time or skills to perform certain tasks. Sub-contracting is expected to mitigate this through inter firm linkages which will ensure improved productivity and competitiveness in a vibrant industrial sector.

The Subcontracting policy was developed through an all inclusive consultative process and was subjected to a stakeholders' validation and is in the process of finalization. The draft policy has the overall objective of increasing production, competitiveness and employment in Micro Small and Medium Industries (MSMEs). The manufacturing sector has neither developed extensive linkages within itself nor with the rest of the economy

v) Intellectual Property Rights Policy

The draft National Intellectual Property Policy and Strategy (NIPPS) has been prepared to strengthen the management and administration of the intellectual property system and to encourage innovation and creativity in Kenya as envisaged in the NIP, Kenya Vision 2030 and the Constitution.

The policy was developed through an all inclusive consultative process and is in the process of finalization. Kenya has three autonomous IP offices. These are the Kenya Industrial Property Institute (KIPI) for industrial property rights, Kenya Copyright Board (KECOBO) for copyrights and related rights and The Plant breeders Rights office for plant breeders rights.

During the plan period, the three institutions have been strengthened, public universities and research institutions have developed respective IP policies and have technology transfer offices and the Intellectual Property Tribunal has been established. National Intellectual Property Rights Policy will provide the overall framework to coordinate and guide the IPR regime in the country.

vi) Preference and Reservations in public procurement for locally manufactured products

The Public Procurement and Disposal (Preference and Reservations) Regulations, 2011 was developed and gazetted to address procurement of locally manufactured products by public agencies.

3.2 Legal Framework

i) Anti- counterfeiting measures:

The enactment of the Anti-Counterfeit Act was done in 2008 and became operational in 2010. The Act prohibits counterfeiting, trade and all other dealings in counterfeit goods. The Act also established the Anti Counterfeit Agency (ACA) and has continued to undertake its mandate that includes investigations; raids and seizures on counterfeit and contraband goods.

The main challenges that affected the agency included lack of adequate funding, inadequate staffing levels and weak interagency collaborations.

3.3 Institutional Framework

i) Restructuring Kenya Industrial Training Institute (KITI)

KITI provides capacity building for entrepreneurship and industrial development at middle level cadres. A draft legal framework has been developed to transform KITI to a Semi-Autonomous Government Institution (SAGA) so as to sustain and respond to industrial sector training needs.

ii) Standards institutional reforms

Kenya Accreditation Services (KENAS) was established as a legal entity in 2009 mandated to be the sole national accreditation body to assess against internationally recognized standards, organizations that provide certification, testing, and inspection and calibration services.

iii) Strengthening of Parastatals

There have been various initiatives to reform and strengthen some of the Parastatals in the Sector, which include the Development Financial Institutions (DFIs). Kenya Industrial Estates (KIE), Numerical Machining Complex (NMC) and the Industrial Development Bank (IDB Capital) have been restructured and mechanism put in place to enhance governance and management. DFI reform strategy has also been developed out of which a draft DFI bill has been drafted awaiting cabinet approval. In addition, Kenya Industrial Development and Research Institute (KIRDI) and Kenya Industrial Estate have been strengthened through enhanced funding.

IMPLEMENTATION MATRIX

Goal		Facilitate investment and employment creation in the economy.									
Strategic Objectives for 2013-2017		-increase FDI -create employment -increase the manufacturing GDP to 20 % -increase share of manufactured goods in the country's export									
Programme (Strategic Thrust)		Attracting local and investment; and employment creation									
Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Budget (Kshs. Billions)**				
Development of Industrial Clusters	Promotion of value addition Research and development	Land acquisition, Mater plan and EIA for3 Industrial clusters -Feasibility studies reports -Basic infrastructure developed. -Potential investors identified	Wealth and employment creation	MoIC&ED, MoALF, KIRDI, KIPI, KEBS, CG, KIE, MoNT, KEPSA, MoL-HUD, MoDP, KenInvest, Universities	2013-2017	GoK/Donor support, Private sector	1.5B	1.5B	1.5B	1.5B	1.5B
Development of integrated and mini steel Mini	To promote local production of Iron and steel products	-Land acquired, Feasibility study &EIA reports, Strategic Investor identified -Mini steel mill in place	Percentage increase in industrial growth	MOIC&ED, NMC, MEMR, MoLHUD MoM	2013-2017	GoK/Donor support, Private sector	3B	2B	2B	2 B	3B
		-Restructured NMC					300M	100M	100M	100M	100M
Skills development for the key sectors	create a globally competitive and adaptive human resource base for the key sector	-Needs analysis report -integrated plan developed -Transformation of KITI as centre of excellence -academia/industry linkages	-Improved productivity -increased employment	MOIED, KITI,	2013-2017	GoK, Development Partners	760 M	3B	3 B	3 B	3 B

Goal	Facilitate investment and employment creation in the economy.										
Strategic Objectives for 2013-2017	-increase FDI -create employment -increase the manufacturing GDP to 20 % -increase share of manufactured goods in the country's export										
Programme (Strategic Thrust)	Attracting local and investment; and employment creation										
Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Budget (Kshs. Billions)**				
Transformation of KIRDI into a world class research institution	Enhance capacity for research & development and technology transfer.	-Upgraded equipment, expansion physical infrastructure State-of-the art research facility in place.	Technology transfer to MSMEs; Improved product design and innovation	MOIED, KIRDI,	2013-2017	GoK, Development Partners	800M	1B	1B	1 B	1B
Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Budget**				
							2013	**2014**	**2015**	**2016**	**2017**
Enhancement of local content in Government projects	Expand opportunities & Increase market access for local production.	Guidelines prepared for undertaking GoK projects Amendments to PPDA of 2005	Increased market opportunities Enhance local production Job creation	MOIC&ED, MoTI, MoCT, MoLSSS, MoEP, MoTI, MoDP MoNT	2013-17	GOK, Private Sector and Development Partners	20M	25M	30M	35M	40M

Goal		Facilitate investment and employment creation in the economy.									
Strategic Objectives for 2013-2017		-increase FDI -create employment -increase the manufacturing GDP to 20 % -increase share of manufactured goods in the country's export									
Programme (Strategic Thrust)		Attracting local and investment; and employment creation									
Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Budget (Kshs. Billions)**				
Natural Products Industry	To develop niche products and promote capacity for home grown innovations	Production facilities at national and county level developed and enhanced; A rich pool personnel trained in manufacturing skills; Countrywide and cross-border product distribution and uptake outlets; A number of locally derived value-added natural products in local and export markets; A functional revolving fund	Locally derived value added natural products mainstreamed into the national economy; employment created, household incomes and standard of living improved; contribution to GDP growth	Natural Products Industry Coordination Board, MOIC&ED, KIRDI,KIPI, KIE, KEPSA; KAM; KNCCI; KEBS; PPB; MOEP CG,	2013-17	GOK, Private Sector and Development partners	40M	450M	640M	840M	104M
Ease of doing business	Improve the ease of doing business rating from 123 to top 10 in five years	One –Stop shop established Reforms undertaken in key sectors	Increased FDI inflow; Higher global competitiveness index	MOIED Keninvest MoTI MoEP	2013-17	GOK	0.5M				

Goal	Facilitate investment and employment creation in the economy.
Strategic Objectives for 2013-2017	-increase FDI -create employment -increase the manufacturing GDP to 20 % -increase share of manufactured goods in the country's export
Programme (Strategic Thrust)	Attracting local and investment; and employment creation

Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Bud**	
Programme/ Project	**Objectives**	**Expected output**	**Expected outcomes**	**Implementing Agency**	**Time Frame**	**Source of funds**	**Indicative Bud**	
							2013	**2**
Productivity improvement and cleaner production	To promote labour and total factor productivity improvement	250 SMEs trained Energy, resource and waste management audits undertaken in targeted SMEs	Improved productivity	MOIC&ED KNCPC PCK MOEP KAM	2013-17	GOK, Private Sector and Development partners	10M	1
Research development and commercialization	To develop innovative capacity and commercialization of research findings	Database of research outputs 100 research outputs for commercialization. 100 contracts signed. 100 new products produced	Increased productivity and competitiveness	MOIC&ED KIRDI Universities Research Institutions Private sector	2013-17	GOK, Private Sector and Development partners	100M	1
Branding and Marketing of Kenyan SME Products	To improve competitiveness of SME products	50 niche products by MSMES	Create wealth and employment	MOIC&ED KEBS KIRDI KIPI KNTC KNFJKA	2013-17	GOK, Private Sector and Development partners	30M	3