

**FINAL REPORT**

**PRIVATE SECTOR STUDY**

**ON**

**THE CROP BASED FOOD INDUSTRY**

Prepared By

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For

**MINISTRY OF INDUSTRIAL DEVELOPMENT**

IN CONJUNCTION WITH

**MINISTRY OF PLANNING AND NATIONAL  
DEVELOPMENT**

## GLOSSARY

ApproTEC	Appropriate Technologies For Enterprise Creation- A Kenya NGO centred on technology and development of enterprise opportunities.
CBFI	Crop based food industry
CBK	Central Bank of Kenya
COMESA	Common Market for East & Southern Africa
DBK	Development Bank of Kenya Ltd.
DFD	Design for Disassembly
DFI	Development finance institution
DIT	Directorate of Industrial Training
DRC	Domestic resource cost
EACC	East African Co-operational Council
EPC	Export Promotion Council
EPZA	Export Processing Zones Authority
FDI	Foreign direct investment
FKE	Federation of Kenya Employment
GDP	Gross Domestic Product
GoK	Government of Kenya
ICDC	Industrial & Commercial Development Corporation
IDB	Industrial Development Bank Ltd.
IPC	Investment Promotion Centre
KAM	Kenya Association of Manufacturers
KARI	Kenya Agricultural Research Institute
KEBS	Kenya Bureau of Standards
KIBT	Kenya Institute of Business Training
KIE	Kenya Industrial Estates
KIPO	Kenya Industrial Property Office
KIPPRA	Kenya Institute of Public Policy, Research & Analysis
KIRDI	Kenya Industrial Research & Development Institute
K-MAP	Kenya Management Assistance Programme
KNCCI	Kenya National Chamber of Commerce & Industries
KNFJKA	Kenya National Federation of Jua Kali Associations
KOSME	Kenya Organisation of Micro Small & Medium Scale Enterprises
KP	Kenya Pounds
KPA	Kenya Ports Authority
KPL/KPLC	Kenya Power & Lighting Company
KPTC	Kenya Post & Telecommunications Corporation
KRA	Kenya Revenue Authority
KSA	Kenya Sugar Authority
MID	Ministry of Industrial Development
MoALDM	Ministry of Agriculture, Livestock Development & Marketing
MPND	Ministry of Planning & National Development
MPW	Ministry of Public Works
MT	Metric ton(ne)
MUB	Manufacturing under bond programme

NCPB	National Cereals & Produce Board
NEC	Not elsewhere classified
NIC	Newly Industrialised Country- a country generating 30% or more of its GDP from its Industrial Sector
NIDC	National Industrial Development Council
PEC	Presidential Economic Commission
R&D	Research & Development
SCG	Sectoral (Strategic) Consultative Group
SEPSO	Small Enterprises Professional Services Organisation
SSJKE	Small Scale & Jua Kali Enterprises
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisations
VAT	Value Added Tax
WTO	World Trade Organisation

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# **EXECUTIVE SUMMARY**

## **BACKGROUND AND OBJECTIVES OF THE STUDY**

This study was commissioned by Kenya Government's Ministry of Planning & National Development in conjunction with Ministry of Industrial Development. The study was a 2-month exercise aimed at providing the initial steps in the public sector - private sector interactions that are highlighted in Kenya's official strategy for industrialisation of the country. The strategy's goal is to achieve Newly Industrialised Country status by the year 2020.

The objectives of the study were to carry out a diagnostic study of the Crop Based Food Industry; To identify gaps in the relevant policy and strategy framework; To discuss the research findings and draft recommendations in a stakeholders workshop for subsector; To form a Sectoral (Strategic) Consultative Group for the subsector; To finalise the findings and draft policy recommendations so that the same can be used for preparation of an appropriate Cabinet Paper.

## **METHODOLOGY ADOPTED IN THE STUDY**

The Consultant executed the study through the use of: desk research; consultations with the MID and MPND; field work in 7 provinces of the country (a total of 58 cases and respondents were reviewed / interviewed); data analysis; discussion of draft recommendations at the stakeholders workshop; finalisation of the study and the policy recommendations.

## **MAJOR FINDINGS OF THE STUDY**

The Consultant identified 8 target subsectors using the following criteria:

Current export activities and the potential for export.

Clustering of industrial firms.

Contribution to national economic development and extent of linkages with other industries.

Economic and financial viability at present levels and at expanded production levels.

The selected target subsectors are:

ISIC No. 3113 Canning and preserving of fruits and vegetables

ISIC No. 3115 Manufacture of vegetable oils and fats

ISIC No. 3116 Grain mill products

ISIC No. 3117 Manufacture of bakery products

ISIC No. 3118 Sugar factories and refineries

ISIC No. 3119 Manufacture of cocoa, chocolate and sugar confectionery

ISIC No. 3121 Manufacture of food products NEC

ISIC No. 3122 Manufacture of prepared animal feeds

The key findings of the research and field work were that:

Firms in the overall subsector are mainly constrained by poor infrastructure and utilities, raw material problems, marketing and distribution problems, inadequacies in and

declining finance options, and a policy environment which does not provide adequate support. While Kenya's traditional exports especially tea and coffee continue to go to the traditional markets, the East African regional market is becoming a leading destination for products such as edible oils, confectionery and some grain mill products. A number of firms have identified other export opportunities (for both traditional and non-traditional exports) in overseas and East African destinations but have not yet been able to investigate them or exploit them. The recommendations in this report addressing this issue.

The overall subsector has positive benefits in terms of employment creation and very strong positive linkages to agricultural development and the Small-Scale and Jua Kali Enterprise (SSJKE) sector.

The opportunities which are available for SSJKE to exploit are in:

**Processing** (fruit drinks, dried fruit, sauces, maize milling, baking, fried crisps / nuts / grains and oil pressing); **Raw material production**; **Distribution / wholesaling**; **Retailing**; **Transporting**; and **Subcontracting of activities by larger firms**.

The following gaps were found in the current policies and it is the Consultant's view that, in order to support export-led development which is a justifiable strategy for achieving NIC status, they should be filled. The key to strengthening Kenya's export competitiveness will be found in a mixture of interventions thus:

**Promotion Of Internal And External Competition:** Promotion of internal competition requires an efficient Monopolies Commission that is well staffed and is able to investigate cases of contravention of the rules and regulations governing fair trade and practices. Kenya does not have a technology policy, and this is needed to deliberately encourage new technologies and techniques of production. In terms of external competition, the macro economic situation and deliberate export promotion activities influence the competitiveness of Kenya's products in the external market and there is need to balance the budget.

**Improvement In Export Incentives, International Trade Logistics And Procedures:** More needs to be done to expose manufacturers to the export markets and make it easier to venture into the export market and there is need for an Export Credit and Guarantee scheme, which might assist new and genuine exporters to venture into the export market.

**Rationalisation Of The Tariff And Tax System:** There are still a few cases where there are ambiguities by Customs Officers in terms of classification of certain items in the import code book and these need to be rationalised.

**Reform Of The Legal Framework For Industrialisation:** There is need for better coordination of ministerial responsibilities in respect of availability of raw material inputs for the sub-sector and establishment of the broad-based Crop Development Council should be implemented. In our findings, the manufacturers are generally

unwilling to provide comprehensive and correct information as required under the Industrial Registration Act. In our view, the Department is well placed to collect and analyse manufacturing sector information that can provide a sound basis both for industrial planning but more importantly for use by the manufacturers themselves.

**Technology Policy and Promotion of Domestic Research and Development (R&D):**

A rejuvenated KIRDI that is more autonomous is well placed to play the following critical roles in the field of technology development and management in conjunction with firms in manufacturing in general and food crop based industries in particular. In order to provide an institutional basis for KIRDI to provide these services, it is important to consider giving an element of autonomy for the Institute, initially with part of overhead costs being met from the Exchequer, and with gradual phase off as full autonomy is given to the Institute.

**Private Technology Providers:** There is a growing number of private sector and NGOs which assist entrepreneurs through identification and development of technologies that are appropriate for the establishment of viable small scale enterprises. The National Council for Science and Technology and the Ministry of Industrial Development should support them.

**CONCLUSIONS AND RECOMMENDATIONS**

The Consultant identified key potential product lines for promotion and development within the 8 target subsectors as follows: -

**Tea and Coffee**

Products with key potential: made tea and green coffee.

**Fruit and Vegetable products**

Products with key potential: processed tropical fruit including pineapple, passion, mango, papaya, avocado (using technologies which include freezing, concentration, and canning) and processed vegetables especially french beans, baby carrots, cucumber, courgettes, snow peas, baby onions and baby corn (using technologies which include freezing, canning and pickling).

**Vegetable Oils & Fats**

Products with key potential: processed crude and refined edible oil products, special preference being given to products made from locally grown raw materials.

**Grain Mill products**

Products with key potential: starch, corn syrup, cereal foods such as breakfast cereals, speciality flours, extruded products.

**Cocoa, Chocolate & Sugar Confectionery**

Products with key potential: sweets.

**Manufacture of Bakery Products**

Products with key potential: biscuits, cookies.

**Food Products Not Elsewhere Classified**

Products with key potential: Macadamia nuts, cashew nuts, bixa extracts, spices.

Products with Low export potential but high local market potential, economic and financial viability, crucial linkages to other local industries and foreign exchange saving capability and which should also be supported are:

**Prepared Animal Feeds**

Products with key potential: dairy cattle feed, poultry feed and pig feed.

**Sugar Industries**

Products with key potential: Mill white sugar, molasses.

In general, it can be stated that the planning and statement of the important Government intentions e.g. *Sessional Paper No. 2 Of 1997 On Industrial Transformation To The Year 2020* and others, is very well articulated, but there are inadequacies in actual implementation of these intentions. A few industrialists were seen to have perused these policy documents and more are encouraged to do the same. From the findings of the survey and review of current policies, in order to spur the development of the crop-based food industries into the next century, we give some policy recommendations in Chapter 7 of this report. In our view, what is required is a mix of implementation of existing policies, and new policy review measures. Implementation of these recommendations will set the pace for moving the crop-based food sub-sector into the path of industrialisation by the year 2020.

# CHAPTER ONE

## INTRODUCTION AND BACKGROUND TO THE STUDY

### 1.1. INTRODUCTION

The Ministry of Industrial Development (MID) in collaboration with Ministry of Planning and National Development (MPND) (the Clients) are in the process of implementation of Sessional Paper No. 2 of 1997 on Industrial Transformation to the Year 2020 and reviewing the implementation status of the policy and strategy framework for Small Scale and Jua Kali Enterprises (SSJKE) development which was outlined in Sessional Paper No. 2 of 1992.

This document presents the **Final Report** for the assignment: “**Private Sector Study on Crop Based Food Industry**” (the “consultancy” or “study”). This report has been prepared by **T.F. Express Ltd** (the “firm” or “Consultant”) who were contracted to carry out the study.

The report is set out in 7 chapters and the annexes as follows:

#### **Executive summary**

**Chapter 1-** Introduction and background.

**Chapter 2-** Objectives of the study.

**Chapter 3-** Approach and methodology.

**Chapter 4-** Overview of the subsector.

**Chapter 5-** Summary of the findings of the study and the stakeholders workshop.

**Chapter 6-** Conclusions.

**Chapter 7-** Draft Policy Recommendations.

**Annexes**

### 1.2. BACKGROUND

The Government of Kenya has adopted Sessional Paper No. 2 of 1997 which provides the basis for the transformation of the Industrial Sector to the status of a Newly Industrialised Country (NIC) by the year 2020. The Sessional Paper defines a 2 Phase industrial transformation strategy. The Phase I Industrialisation Strategy states that the focus will be on promotion of micro, small and medium scale industries which utilise and add value to local raw materials and require relatively modest capital investment. The Sessional Paper also states that there will be a focus on two levels of action - at the policy level and at subsector / sectoral level and that implementation of the industrialisation policy also requires the creation of a framework for dialogue, consultation and concerted action between public and private sectors. Thus a number of consensus building working groups known as Sectoral (Strategic) Consultative Groups (SCGs) will be established. Membership of an SCG will be drawn from stakeholders in a subsector i.e. industrialists,

suppliers of inputs and services and public sector support institutions.

Agro and food processing have been identified for promotion in the Phase I industrialisation strategy. The crop based food industry has been specifically identified as a priority subsector.

### **1.3 OBJECT OF THIS DOCUMENT**

This document is the final report on the consultancy assignment as conducted by the contracted Consultant. The document can be used as a summary of the findings of the present state of the crop based food industry subsector as per the investigations that took place. The recommendations in this report have included conclusions of the deliberations of workshop participants present at a stakeholders' workshop on 12<sup>th</sup> March 1998. At the workshop, the Consultant had tabled the preliminary recommendations, which had been prepared following a period of organised research work. Public sector stakeholders have been stated in section 3.3.4. Private sector organisations and Non-Governmental Organisations have also been stated in section 3.3.4. Commercially operating private sector stakeholders are participants in the subsector as highlighted (with the indicated roles) in the Subsector Map (chapter 4). Other commercially operating stakeholders form the bulk of the providers of the inputs and services indicated in the Subsector Map.

The circulation of this document to stakeholders will be added confirmation of the openness and commitment, by all concerned, toward the establishment of a long lasting mutual ***“Partnership in Progress”*** relationship between the public sector and the private sector.

## CHAPTER TWO

### OBJECTIVES OF THE STUDY

This consultancy aims at providing MPND, MID, other relevant public and private sector organisations and departments with working papers and background materials on Crop Based Food Industry which is a priority subsector for development. The consultancy will strengthen the capacity of the public sector industrial support institutions in their facilitative and promotional role for private sector development. The consultancy is to act as the initial kick-off for the GoK - Private Sector consultation process that has been mentioned in more than one of the current policies relevant to industrialisation and the SSJKE sector. It is envisaged that at the end of this exercise, an interactive policy framework comprising a consultative group for co-ordinating and monitoring SSJKE and industrial development in the subsector will have been established.

#### **SPECIFIC OBJECTIVES OF THE STUDY**

The specific objectives of the study were as follows:

To prepare a diagnostic study of the subsector.

To identify gaps in the policy and strategy framework.

To use the findings to draft recommendations for the appropriate review of policy and strategy framework.

To discuss the draft recommendations in a workshop for subsector stakeholders and use the workshop proceedings and conclusions to refine and finalise the recommendations.

To form the Sectoral Consultative Group for the subsector.

To prepare the final report and recommendations so that the Clients may prepare and submit the appropriate Cabinet Paper.

## CHAPTER THREE

### APPROACH AND METHODOLOGY ADOPTED

#### 3.1. APPROACH

The general approach adopted for the study was as follows:

Identification of the subsectors with most promising industry categories and high priority for immediate promotion.

Diagnostic study of the status within the target subsectors.

Analysis of competitiveness of the target subsectors from a global perspective.

Identification of the policy adjustments /recommendations and other actions needed to be considered for implementation immediately.

The following are the details of the steps in the methodology undertaken during the consultancy:

#### 3.2. RESEARCH

The Research comprised two steps, which are detailed below.

##### **3.2.1. Examination of Current GoK Policy As Regards Industrial Development And Making Recommendations On Their Suitability**

The Consultant perused the available documentation which spell out GoK policy on industrialisation including:

*Sessional Paper No. 2 Of 1997 On Industrial Transformation To The Year 2020  
The Eighth National Development Plan For The Period 1997 To 2001 On Rapid  
Industrialisation For Sustained Growth.*

*Economic Reforms For 1996 - 1998; The Policy Framework Paper, February  
1996.*

*Sessional Paper No. 2 Of 1992 On Small Enterprise And Jua Kali Development  
In  
Kenya, March 1992.*

Consultations on official policy were made with organisations, which have a role to play in support to enterprise and industrial development. The consultations brought an understanding of some key constraints and opportunities in the overall subsector and key issues on the global competitiveness of the subsector.

This information provided an early indication on the gaps in the policy and strategy framework. Section 5.3 of this report details the findings on the GoK policy on industrialisation and the assessment of their suitability.

##### **3.2.2. Examination Of Industrial Investment Practices In Kenya Vis-À-Vis Trend In The NICs.**

The firm carried out a comparative study on the investment practices and trends in the NICs and in Kenya. To achieve this, information from the following organisations was perused:

United Nations Industrial Development Organisation (UNIDO), World Trade Organisation (WTO), IPC, EPZA, EPC, KAM, KNCCI, Ministry of Industrial Development.

Section 5.4 of this report details the findings of this comparative study.

### **3.3 IDENTIFICATION OF TARGET SUBSECTORS FOR INVESTMENT IN THE CROP BASED FOOD INDUSTRY SUBSECTOR**

The rationale for the selection of the 8 subsectors above was in accordance with the following set of criteria:

The subsector should be one whose current industries are already producing exportable goods or are easily able to adapt to manufacturing competitive, exportable products. This is because the main power for industrialisation will come from internationalisation of Kenya's products.

- The subsector's individual industries should at least be present in numbers (or clusters) because it is more cost effective to support numbers of industries as opposed to one or two.
- The subsector should contribute positively to national economic development and, through various linkages, should support development of other agro-industrial and economic activities.
- The subsector's industries should be economically and financially viable including at expanded operating capacities. The expanded operating capacities will be necessary when marketing shifts from the domestic market limits to the international scale.

Out of the 12 subsectors stated in the Terms of Reference for this study, the Consultant identified 8 target subsectors to be given immediate priority for promotion as follows:

<i>ISIC No.</i>	<i>Subsector</i>
3113	Canning and preserving of fruits and vegetables
3115	Manufacture of vegetable oils and fats
3116	Grain mill products
3117	Manufacture of bakery products
3118	Sugar factories and refineries
3119	Manufacture of cocoa, chocolate and sugar confectionery
3121	Manufacture of food products NEC
3122	Manufacture of prepared animal feeds

The 4 subsectors which have not been proposed as targets for investment are as follows:-

3131	Distilling, rectifying and blending of spirits
3133	Malt liquors and malt
3134	Soft drinks and carbonated water industries
3240	Tobacco manufacture

Detailed research and field work in the above 8 target subsectors was specifically designed to derive useful information for verifying the validity of the selection, carrying out a prioritisation, and determining the policy measures that need to be put in place for creation of the enabling environment. Section 5.1 presents the findings in the individual target subsectors. Chapter 6 gives the concluding remarks on the target subsectors and their prioritisation and mentions specific industrial projects which have significant potential.

### **3.3.1. Information Sources For Firms And Stakeholders Of The Subsector**

The names of industrial firms and stakeholders were obtained from the following sources of information:

Registry of Industries in MID, Kenya Association of Manufacturers, Kenya Management Assistance Programme, Kenya Food Processors Association, GTZ Tree Crops Project and the Consultant's knowledge of the sector and its stakeholders.

Following below are the criteria used for the sampling process.

### **3.3.2. Criteria For Selection Of The Sample Of Registered Industrial Firms**

The firms should be from the 8 subsectors targeted for investment.

Firms which apparently already have products that are or are likely to be competitive in international markets.

The firms with apparent potential for the flexibility required to take up new challenges technologically and to meet new markets' demands.

Industries with appreciable numbers (or clusters) of similar firms.

Using the criteria, 73 industrial firms (31%) were shortlisted from the 231 registered firms in the registry of industries in the target subsectors.

### **3.3.3. Criteria For Selection Of The Sample Of Unregistered, Medium And Small Scale Industrial Firms**

The industries should be within the 8 target subsectors shortlisted above.

The firms should have demonstrated practical entrepreneurship and technological capability and be beyond the basic start-up level.

Firms already having products that are or are likely to be competitive in international markets should be accorded priority.

They should have the potential and the flexibility to take up new challenges in fields of technology and new markets.

They should be generally geographically clustered because thus, they can be supported relatively cost effectively.

The firms should include those which are owned by indigenous Kenya citizens.

Using these criteria, 22 unregistered medium and small-scale industrial firms were selected for possible review.

#### **3.3.4. Identification Of Stakeholder Organisations, Departments And Firms**

The Consultant sought information on which organisations, departments and firms hold any stake in the activities of the crop based food industry subsector. The following GoK departments and parastatals were identified: Kenya Industrial Research & Development Institute (KIRDI), Export Promotion Centre (EPC), Investment Promotion Centre (IPC), Kenya Institute of Business Training (KIBT), Kenya Agricultural Research Institute (KARI), Kenya Bureau of Standards (KEBS), Kenya Industrial Estates (KIE), Ministry of Agriculture, Livestock Development & Marketing (MoALDM), Kenya Industrial Property Office (KIPO), Ministry of Finance (MOF), Kenya Revenue Authority (KRA), Kenya Railways, Kenya Ports Authority (KPA), Public Universities, Kenya Institute of Public Policy Research and Analysis (KIPPRA), Kenya Posts & Telecommunications Corporation (KPTC), Kenya Power & Lighting (KPL), Ministry of Public Works (MPW), Local authorities, Directorate of Industrial Training (DIT), Kenya Sugar Authority (KSA), National Cereals & Produce Board (NCPB) and Kenya Anti-Corruption Authority.

The following Private sector and Non Governmental organisations were identified: Federation of Kenya Employers (FKE), Kenya Association of Manufacturers (KAM), Kenya National Chamber of Commerce & Industry (KNCCI), Kenya National Federation of Jua Kali Associations (KNFJKA), Kenya Food Processors Association (KFPA), Kenya Organisation of Micro Small and Medium Enterprises (KOSME), Kenya Management Assistance Programme (K-MAP), Small Enterprises Professional Services Organisation (SEPSO), FIT Resources Ltd, Kenya Rural Enterprises Programme (K-REP), ApproTEC.

The following commercially operating stakeholder classes of business were identified: Wholesalers, clearing & forwarding agents, commercial banks and other financial institutions, export brokers, Inland Container Depot, inland/ export freighters and transporters.

#### **3.4. FIELD WORK AND DATA ANALYSIS**

The fieldwork was carried out to a selected sample of industries and other stakeholders. The geographical locations covered were:

Nairobi and environs; Kiambu, Limuru and Thika areas; Murang'a, Nyeri, Embu, areas;

Nakuru, Naivasha areas; Njoro, Kericho, Kisii areas; Kisumu, Bungoma, Mumias, Webuye areas; Eldoret, Kitale areas; Mombasa and environs.

During the field visits, questionnaires were used for information gathering. Samples of the questionnaires are in the annex of this report.

Coded data from the questionnaires was entered into databases. Four databases were created as follows:

- Database 1: Information gathered from registry of industries.
- Database 2: Information gathered from interviews with existing industries, including unregistered, medium and small-scale firms.
- Database 3: Information gathered from interviews with commercial stakeholders.
- Database 4: Information gathered from stakeholder organisations / institutions.

The respondents for each database were as follows:

- Database 1: 25 firms (34% of the shortlist). The information needed from the remaining 66% of shortlisted firms was not available in the registry of industries.
- Database 2: 26 firms (48% of those contacted for interview)
- Database 3: 5 firms
- Database 4: 4 organisations

Statistical Analysis of the data in the four databases has provided the basis for the conclusions and recommendations in this report.

### **3.5. PREPARATION OF DRAFT REPORT**

The Consultant prepared a draft report and a discussion paper based on the draft report. The discussion paper was the basis for the deliberations and consensus building at the stakeholders' workshop for the subsector.

### **3.6 THE STAKEHOLDERS WORKSHOP**

The workshop was hosted by the Client on 12<sup>th</sup> March 1998 and was facilitated by the Consultant. Over 70 participants were present from a cross section of industries, private and public sector organisations. The Consultant presented the findings of the study and the draft recommendations and workshop participants added their contributions in plenary and group work sessions. This report incorporates the conclusions of the participants' deliberations in chapters 6 (Conclusions) and 7 (Draft Recommendations).

## CHAPTER FOUR

### OVERVIEW OF THE SUBSECTOR

#### 4.1 THE MANUFACTURING SECTOR

Within an international context, the *Manufacturing Sector* in Kenya is characterised by low relative value added, high relative employment, low export volumes and relatively low wages. In 1996, the sector employed about 13% of the total employment in the modern sector, and had a value added of 13% of the monetary economy's GDP (see Republic of Kenya, Economic Survey 1997). Growth in real output has been low averaging only 2.4% over the five-year period ending 1996. Not surprisingly, the growth of employment has been low, averaging 1.2% over 1991-1996. Export volumes have however been high with the quantum index over the same period growing by an annual 12% compared to imports of manufactured goods which have grown in quantum terms by 1.7% over the same period. To reach NIC status, Kenya would need to increase the manufacturing sector's contribution to GDP to 30%.

Historically, Kenya's industry went through a long period of import substitution industrialisation during the 1970s, 80s and 90s with the lead having been taken by public sector enterprises. This resulted in domestic market oriented industrialisation. The consequences were wide ranging and included technical inefficiencies, inconsistencies and lack of dynamism brought about by an overly regulated regime, poor industrial competitiveness manifested by the poor export performance, ageing equipment and inability to replace the same, and general inability to expand the scale of operations. The effects of this strategy are still evident.

The manufacturing sector remains predominantly an enclave sector catering for the local market. In order to build a self-sustaining industrial sector, it will be necessary to build linkages to the domestic economy where there is promising potential within manufacturing sector with metal-based industries (particularly small-scale metal fabricators), and outside the manufacturing sector with the catering, tourism and agricultural sectors.

In the agro-based manufacturing sector, there has been a general decline in output except for grain mill products and paper and paper products where the quantity indices were 360 and 183 in 1996 compared to 299 and 153 respectively in 1995 (see Table 4.1 below). Mainly due to the vagaries of weather, disease and the food-based manufacturing sector in general has not performed well over the last few years. Notable expansion were realised in clothing, rubber products, while there has been a notable contraction in output of textiles, leather and footwear, as well as petroleum and petroleum products. The main reason for reduction in domestic output in these sub-sectors is the competing imports, which in most cases are relatively cheap. A problem that plagues manufacturing in Kenya is that intermediate and capital goods industries are relatively underdeveloped. The lack of linkages between research and manufacturing exacerbates this problem. Indeed, the greater part of imports consists of raw materials, spare parts and capital goods

for the industrial sector.

Table 4.1: Kenya - Quantity Index of Manufacturing Output, 1991-96  
(1976=100)

	1991	1992	1993	1994	1995	1996	
Meat and Dairy Products		125	94	96	87	112	89
Canned Vegetables, Fish, Oils, Fats		363	339	384	275	291	307
Grain Mill Products	178	171	155	205	243	212	
Bakery Products	166	173	179	275	299	360	
Sugar and Confectionery		211	196	198	157	197	197
Miscellaneous Foods	227	237	220	227	232	256	
<i>Total Food Processing</i>	175	168	168	168	194	197	
Beverages and tobacco	204	236	235	219	231	205	
Textiles	219	219	252	187	137	137	
Clothing		324	321	292	184	153	149
Leather and footwear	102	97	88	97	66	68	
Wood and cork products		73	74	74	76	73	74
Furniture and fixtures	71	47	50	51	53	58	
Paper and paper products		215	258	181	156	153	183
<b>TOTAL MANUFACTURING</b>	<b>242</b>	<b>245</b>	<b>250</b>	<b>255</b>	<b>264</b>	<b>273</b>	

Source: Republic of Kenya, *Economic Survey*, various issues.

In terms of competitive advantage, a survey on 38 African countries (UNIDO 1997) shows that over 50% have a positive cost advantage in food manufacturing, leather products and footwear manufacturing, and wood / furniture manufacturing. One of the key reasons for the competitive advantage, which also applies to Kenya, is low labour cost.

## 4.2 THE CROP BASED FOOD INDUSTRY SUBSECTOR

Within the manufacturing sector, the crop based food industry is the strongest forward linkage to agriculture in Kenya. Agriculture is the source of livelihood for 80% of Kenya's population. Industrial firms in the subsector are found in seven provinces i.e. Nairobi, Central, Eastern, Rift Valley, Nyanza, Western and Coast. From the information available there was no evidence of the firms in North Eastern province.

Table 4.2 Distribution of industrial firms in the target subsectors.

Subsector	Main cluster areas	Major concentrations
3113 Canning and preserving of fruits and vegetables	Nairobi, Central, Eastern, Rift Valley, Coast provinces.	Nairobi, Thika, Nakuru, Machakos/ Athi River.
3115 Manufacture of vegetable oils and fats	Rift Valley, Nairobi, Nyanza, Western, Coast and Central provinces.	Nakuru, Eldoret, Kitale, Nairobi, Kisumu, Mombasa.
3116 Grain mill products	Rift Valley, Nairobi, Nyanza, and Central provinces.	Nakuru, Eldoret, Nairobi, Kisumu.
3117 Manufacture of bakery products	Nairobi, Central, Nyanza, Coast, Rift Valley provinces.	Nairobi, Eldoret, Kisumu, Thika.

3118	Sugar factories and refineries	Western and Nyanza provinces.	Mumias/ Bungoma, Muhoroni / Chemelil, South Nyanza.
3119	Manufacture of cocoa, chocolate and sugar confectionery	Nairobi and Nyanza provinces.	Nairobi, Kisumu.
3121	Manufacture of food products NEC	Rift Valley, Coast, Central, and Nairobi.	Nairobi, Nakuru, Mombasa.
3122	Manufacture of prepared animal feeds	Nairobi, Rift Valley, Central, Eastern and Nyanza.	Nairobi, Thika, Eldoret, Meru.

In general, enterprises processing fruits, milling grains and processing edible oils are the most numerous of the target subsectors. These three groups have lower investment cost barriers, have wide raw material bases, lower skill requirements, and have technologies that have already been adapted for low operating through puts.

Section 4.4 presents a subsector map which shows the interaction of key stakeholders and their activities and the key services and inputs which are brought in to enable performance of the activities. An overview of the current status of each target subsector follows.

**Canning and Preserving of Fruits and Vegetables** – The existing large-scale enterprises were mainly established over 20 years ago. The earliest group which mainly produce fruit preserves, drinks and sauces were established for the local market and have continued to do so even as ownership has changed over the years. The newer large-scale firms were mainly set up with the export market in mind and have been focussed on fruit concentrates and french beans canning. Medium enterprises are mainly manufacturing products for the local market (preserves, fruit drinks and sauces). Micro and Small and scale enterprises have had mixed fortunes with many having closed (or remained without any growth) due to difficulties with raw materials such as sugar, declining demand from the reduced purchasing power of local citizens and high finance costs.

**Manufacture of vegetable oils and fats** – The largest firms were built for the purpose of refining imported crude palm oil into a wide range of edible oil products for the Kenyan and Eastern Africa region. About 225,000 metric tons worth over Kshs 7.5 billion is being imported into the country for this purpose. The medium enterprises have the capability of processing oilseeds and are taking advantage of the growing raw material base in the country e.g. maize germ, sunflower, sim sim, safflower and rapeseed. Some of the medium firms produce semi finished oil products which are exported to the countries of the region while the seed cakes are converted to animal feeds whose demand is presently very significant. Available for the SSJKE operators is manual oil pressing technology (requiring a total investment of approximately Kshs 30,000) which is now widespread especially where sunflower is grown.

**Grain mill products** – The existing large-scale firms are milling maize, wheat and rice

into various flours and grain rice for the local market. By-products of the milling are used for oil extraction in the case of maize, and formulated feeds. Rice husks is still largely unutilised. Medium scale millers are operating in much the same way as the large-scale operators. SSJKE operators are producing posho flour or grade 1 and 2 extracted flour from maize. Total investment level required for SSJKE operators is in the region of Kshs 200,000.

**Manufacture of bakery products** – The existing industries are in a cross-section of large medium and small scale and there is little participation of SSJKE. The large manufacturers are producing bread and biscuits en masse while medium operators are producing cakes, cookies, biscuits and small operators are mainly producing cookies and cakes (including individual personal orders).

**Sugar factories and refineries** – There are five main sugar factories which are currently operating and they are located in the cane growing areas in Western and Nyanza provinces. Each factory has its outgrower scheme and their capacities are generally in excess of 1700 Tons of cane per day. According to 1996 estimated figures, domestic consumption of sugar was 580,000 MT compared to a local production of 419,000 MT. The only medium or small-scale factories available are jaggery producers and they are also located in the sugar belt especially in Western province. In 1995/6 there were 13 licensed jaggery factories.

**Manufacture of cocoa, chocolate and sugar confectionery** – These products are largely produced by a few large-scale manufacturers. Chocolate manufacture is dominated by one firm located in Nairobi. Cocoa is produced from imported raw material base by several firms located in Nairobi. The sugar confectionery is mainly sweets which are produced using locally produced sugar and glucose. The sugar confectionery factories are clustered in Kisumu, which is near the source of the sugar and relatively close to the source of glucose, which is in Eldoret.

**Manufacture of food products NEC** – The present categorisation of firms at the Registry of Industries classifies tea and coffee processing and nut processing in this subsector. Large-scale processors dominate in Tea and coffee. Medium scale semi-processors exist in the larger coffee estates. The co-operative sector has a strong presence in the coffee processing and marketing while tea is processed and marketed by large-scale private firms and the parastatal sector in roughly equal proportions. Nut processing is growing at a fast rate particularly with macadamia nuts, which are able to find export market.

**Manufacture of prepared animal feeds** – With the liberalisation of the dairy sector, the demand for animal feed is growing very significantly because of the improved efficiencies and dynamism that have become possible in milk processing, marketing and distribution. Animal feeds are currently being manufactured by several firms which have access to the feed components especially by-products from other processing such as oilseed cake, grain bran and pollard. The co-operative sector is playing an active role in processing of animal feeds especially in Central and Eastern provinces. SSJKE operators

are not able to produce a standard quality of formulated animal feeds because they do not have a steady supply of feed components unlike the larger operators.

### 4.3 THE SMALL SCALE & JUA KALI (SSJKE) SECTOR

Sessional Paper No. 2 of 1997 recognises that the SSJKE or informal sector, comprising enterprises with 20 employees or less, provides over 50% of total national employment. Growth in employment in the sector has been about 70% in the last four years and that manufacturing enterprises engage 27.5% of the total employment in the sector. The remaining 72% employed in the sector are engaged in what may be loosely described as services. The Paper also recognises that this sector provides the “point of entry” and “testing ground” for many Kenyan entrepreneurs and upcoming industrialists and that the sector is well distributed throughout the rural and urban areas of the country.

Due to this importance of SSJKE, this study investigated the present activities and potential opportunities available for entrepreneurs of the sector. SSJKE operators are actively involved as manufacturers; in raw material and packaging production; finished product retail and wholesale trade; and transport. The SSJKE manufacturers in the target subsectors of crop based food industry are described in table 4.3 which follows. Most SSJKE manufacturers are processing fruits, milling grains or processing edible oils and this is a reflection of the lower entry barriers (investment cost and access to appropriate technology) and the availability of the raw material base as described in 4.2 above.

**Table 4.3 Distribution of SSJKE Manufacturing firms in Target Subsectors**

<b>Subsector</b>	<b>Main Manufacturing Opportunities / Product Lines</b>	<b>Indicative Distribution</b>
3113 Canning and preserving of fruits and vegetables	Preparation of fruit flavoured drinks, tomato sauces, jams, potato and other crisps, sun dried fruit.	Nairobi, Central, Eastern and Western provinces.
3115 Manufacture of vegetable oils and fats	Cold pressed vegetable oil from sunflower, sim sim, and groundnut.	Nyanza, Western and Eastern provinces.
3116 Grain mill products	Posho and other flours from maize.	Nairobi, Central, Eastern, Nyanza, Western, Rift Valley, Coast provinces.
3117 Manufacture of bakery products	Bread, cakes and cookies	Nairobi, Rift Valley, Nyanza, Western, Central provinces.

Sugar factories and refineries	Jaggery.	Western and Nyanza provinces.
3119 Manufacture of cocoa, chocolate and sugar confectionery	Sweets	Nairobi, Western and Nyanza provinces.
3121 Manufacture of food products NEC	Groundnut and sim sim products, popcorn.	Nairobi, Western, Nyanza provinces.
3122 Manufacture of prepared animal feeds	Oilseed cake from sunflower.	Eastern, Central, Nyanza, Western provinces.

In section 5.1 below, the findings of each target subsector provide additional information on other possible business opportunities for SSJKE.



## CHAPTER FIVE

### SUMMARY OF THE FINDINGS OF THE STUDY

#### 5.1 FINDINGS OF THE IN-DEPTH DIAGNOSTIC STUDY

The study reviewed a total of 58 respondents. 49 of the respondents were industrial firms and 9 were non-industrial stakeholder firms and organisations. Using a scale classification based on total employment in industrial firms (whereby 1-10 employees is micro enterprise scale, 11-49 is small scale, 50-99 is medium scale and over 100 employees is large scale), 2 respondent firms were micro enterprises, 9 were small scale, 12 were medium scale and 26 were large scale enterprises. The non industrial stakeholder firms which were interviewed were 5 i.e. 1 wholesaler, 1 commercial bank, 1 tea broker, 1 road / sea freight company and 1 port services provider. The 4 stakeholder organisations visited were in the fields of export promotion, agricultural research, industrial finance and industrial research.

The industrial firms that were physically visited in the target subsectors were as follows:

- ISIC No. 3113 Canning and preserving of fruits and vegetables (7 firms)
- ISIC No. 3115 Manufacture of vegetable oils and fats (4 firms)
- ISIC No. 3116 Grain mill products (5 firms)
- ISIC No. 3117 Manufacture of bakery products (2 firms)
- ISIC No. 3118 Sugar factories and refineries (2 firms)
- ISIC No. 3119 Manufacture of cocoa, chocolate and sugar confectionery (2 firms)
- ISIC No. 3121 Manufacture of food products NEC (3 firms)
- ISIC No. 3122 Manufacture of prepared animal feeds (1 firm)

Annexe 1 contains the Analysis Of Findings On Subsectoral Basis. The information contained therein is a summary of the findings of physically visited firms which are engaged in Canning & Preserving of Fruits and Vegetables, Manufacture of Vegetable Oils and Fats, Grain Mill Products and Manufacture of Food Products Not Elsewhere Classified. The percentages shown represent the percentage of respondents who gave the indicated answer. The findings of the study of the target subsectors are summarised very briefly in the sections that follow.

#### 5.1.1 ISIC No. 3113: Canning And Preserving Of Fruits And Vegetables

##### **Constraints Facing The Subsector**

The firms interviewed reported that they are not operating satisfactorily at present principally due to:

A policy environment which is characterised by too many licenses, permits and levies; does not effectively curb importation of competing products which have not met requisite duty and tax obligations; slow rate of refund of VAT from GoK; lack of policy actions to facilitate lowering of interest rates; cases of misinterpretation of imported capital equipment as spare parts resulting in erroneous tax application.

SERVIC

Inspectio  
Certific

Distributio

Inspectio  
Promo

Transp

Technology,  
Packaging,  
Local/Import  
Utilities, La  
Finance, Qu  
(KEBS), Inc  
Transportat

Agricultural  
Extension A  
(MoALDM,  
Farm Input  
Finance, La  
Seed, Natur  
Chemical I  
Mechanisati

Inadequate financial resources exacerbated by an environment that does not provide adequate access to finance for the needs of the industrialist particularly the small firms.

Inadequate raw material supplies due to low crop yields, inadequate research on plant diseases (e.g. in citrus), unfavourable weather and competition from fresh market demands. Poor infrastructure, which has caused increases in marketing costs, reduced competitiveness, hampered production and reduced efficiency in the firms.

### **Raw Material Sources And Supply**

All the firms visited source their raw material principally from outgrower farmers. The key fruit and vegetable growing regions of the country are Central province, Rift Valley, Eastern and Coast province. Some parts of Nyanza province (Kisii and Sotik) and Western province (Busia and Kakamega) are also significant fruit producing areas. A few large-scale firms such as Del Monte rely on nucleus estate production while most of the other firms of the subsector rely on outgrower sourcing.

### **Capacity Utilisation, Market Orientation And Potential For Export**

All the firms visited stated that they are operating at less than 50% of their installed capacity and half of them were operating at less than 25% installed capacity. Although half of the firms had ventured into exportation, only 16% were exporting more than half of their output showing that the market orientation is still largely for the local market. Half of the firms stated that they could use available capacity to double their exports. 67% of the firms stated that they know of markets especially in non-traditional export destinations. Constraints to the exploitation of these markets were identified as high input prices, lack of adequate supply of raw materials, the lack of COMESA tariff application in Tanzania. Large-scale processors of pineapple passion and vegetables are mainly export market oriented. There is potential for expansion of the exportation of these products. In addition, aggressive export market promotion can reveal new market opportunities for the subsector.

### **Potential For Employment Generation Direct And Indirect**

50% of the firms envisaged an increase in direct and indirect employment by 50% within the next year of operations. This was as a result of increases in capacity utilisation, which are expected. The subsector's potential for employment generation can be significantly enhanced if more export opportunities can be found.

### **Appropriate Technology Within The Subsector And Technology Needs**

85% of the firms reported that their existing technology is appropriate for the present markets they are exploiting. Half of the firms stated that the technology they have is not appropriate for exploitation of external markets, many of which are known. 33% of the firms stated that their technology is appropriate for some known export markets. However, this can only be proved by more thorough research on the export market needs vis a vis the existing technology for each product.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The key requirements stated by the firms were:

Improved infrastructure and utilities.

Imposition of appropriate variable duties on competing imported finished goods.

Proper enforcement of existing tax laws and prompt refund of VAT.

Removal of the ambiguities that currently exist in the import schedules regarding capital equipment and parts.

Increase available sources of industrial finance. 50% of the firms particularly the smaller ones stated that they do not know where to source the finances that they require for the industrialisation process.

### **Potential Benefits And Costs To The Nation**

The main benefits are:

Employment creation

Creation of market for farmers' produce

Earning of foreign exchange.

### **Targets For The Industry**

67% of the firms indicated that they hoped to increase their productivity within the next year. However none could quantify the specific targets that they were planning on. In order to expect substantial increases in productivity, export opportunities need to be found.

### **Potential Additional Benefits In Linkage Industries**

The operation of firms in the subsector creates a substantial market for packaging manufacturers especially cans, drums, cartons and plastic containers. The tourism and airline industries are bolstered through the availability of quality tropical fruit and vegetable products.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

83% of the firms acknowledged that their operations affect the environment and 67% are taking action to reduce the impact on the environment. However was noted that the other 33% stated that they were not sure what measures they should implement and they needed information on environmental damage control. Industrial land was said to be needed especially by the smaller firms.

### **Mechanisms To Assist "Infant Industries"**

In addition to the need for industrial land, the smaller firms also need a level playing field especially with competing imported products and that an affordable, fair mechanism of providing industrial finance must be made available if they are to grow.

### **Skills Generation And Training**

It was noted that firms at the SSJKE level are now accessing staff with professional level of training (polytechnic level) in the processing of foods. On the whole, training was not cited as deficient by the firms interviewed.

### **Economic And Financial Viability Of The Firms**

50% of firms stated that they are operating viably. The firms who stated that their operations are not viable said that this was because their operations are still new and being subsidised by their owners from other interests, or that they are already divesting into other sectors. The reasons given for divestiture were competition from imported finished goods for which requisite taxes have not been paid or because they could not access competitive packaging materials.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

All firms visited stated that there are opportunities for SSJKE operators especially in raw material production, retailing, subcontracting, transportation, distribution / wholesaling and also as operators of processing enterprises. The Consultant learned of a planned subcontracting arrangement between PRIDE Africa-Job Link (an NGO) and House of Manji Ltd. House of Manji intends to purchase tomato sauce manufactured by several different clients of the NGO and then, using a well designed label, market the product nationally.

## **5.1.2 ISIC No. 3115 Manufacture Of Vegetable Oils And Fats**

### **Constraints Facing The Subsector**

50% of the firms visited in this subsector reported that their businesses are not operating satisfactorily due to:

Inadequate supply of locally grown raw materials.

Importation of competing finished goods without payment of duties and taxes.

Poor infrastructure especially road transport and telecommunications which have adversely affected marketing.

### **Raw Material Sources And Supply**

Although the major large scale processors use palm oil base raw material imported from Asia (total quantity of 215,000 MT valued at Kshs 7.44 billion in 1996), the medium and small operators are oriented to utilising locally grown oil seed crops (especially sunflower, cotton seed, rape seed, safflower mainly from Nyanza, Western and Eastern provinces) whose production does not yet meet the demand. One large processor / refiner utilises maize germ. Maize demand in Kenya regularly outstrips production (especially due to adverse weather conditions) and the firm often has to rely on imported maize.

### **Capacity Utilisation, Market Orientation And Potential For Export**

All firms visited (all of which utilise locally grown raw materials) were operating below 50% capacity especially due to inadequate raw material. Half of the firms were not exporting and those exporting were exporting less than 25% of their production. It was however noted that substantial unrecorded amounts of products are exported through informal channels to the countries of the region. There is substantial existing capacity in the large firms with refineries and, according to firms interviewed, this capacity is in excess of the East African market's needs. 67% of the firms indicated that they can export 25% more of their production while the remaining 33% stated that they could export more than 50% more of their current production. Half of the firms indicated that they know of markets in Ethiopia and Sudan but they are constrained by inadequate supply of locally grown raw material such as sunflower. Information from Central Bureau of Statistics indicates that in 1996 Kenya exported 780 metric tonnes of crude sunflower oil (worth Kshs 32m.) to Uganda and 2,237 MT of refined sunflower oil (worth Kshs 125m.) to Tanzania and Uganda (approx. 50% to each country). This implies that there is developing market in the region for Kenya refined and crude sunflower oil. Food And Organisation (FAO) estimates that local edible oil demand in Kenya is increasing at the rate of 5% per annum.

### **Potential For Employment Generation Direct And Indirect**

While direct employment potential is dependent on increase in number of firms or expansion of production capacity in existing firms, expansion of the utilisation of locally grown oil crops will result in very significant increases in indirect employment. The firms estimated that they could increase their direct and indirect employment by a further 25% within the next year of operation.

### **Appropriate Technology Within The Subsector And Technology Needs**

The firms reported that they have adequate technology for the local market demands and for the export markets that they have identified. The oil extraction technology available ranges from the locally produced manual ram presses, imported small electric expeller types, to large industrial screw expellers and solvent extraction. High capital investment oil refining equipment is found in the large oil refineries.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The key needs are:

Improvements in transport and telecommunications infrastructure, provision utilities principally water and electricity, and fuel.

The exercising of prudent controls on imported finished products.

Enforcement of existing tax policies fairly for all in Kenya.

75% of the firms interviewed stated that they could identify sources of finance for their firms for the industrialisation process.

### **Potential Benefits And Costs To The Nation**

The key benefits to the nation are:

Employment creation

Creation of market for farmers' produce

Earning of foreign exchange.

### **Targets For The Industry**

75% of the firms stated that they are likely to expand their operations within the next year of operation by 25%. Therefore indications are that the subsector's firms will experience growth.

### **Potential Additional Benefits In Linkage Industries**

This subsector contributes very significantly to the animal feed subsector and the livestock production sector through the oilseed cake, which is an important protein, and energy raw material for formulated livestock feeds. The more the processing of locally grown oilseed crops, the greater will be the availability of quality livestock feeds and the greater will be the consequent milk, meat and egg production in the country and this will not only boost national incomes but it will improve health standards especially for young Kenyans and increase the already developing export potential in meat products. The vegetable oil subsector has also very significant, positive linkages with the soap and detergent industry, the cosmetic subsector and the bakery industry.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

75% of the firms acknowledge that their activities have an impact on the environment and 25% have taken measures to treat their effluent. The utilisation of soap stock in soap making also helps reduce the accumulation of by-products and wastes. 75%% of the firms felt that they have adequate land available for their businesses.

### **Mechanisms To Assist "Infant Industries"**

Operators felt that it is necessary to eliminate special tax waivers on imports, which had resulted in flooding of the market with lower priced products.

### **Skills Generation And Training**

75% of the firms felt that training is adequate. 20% of the firms felt that more technical training is needed for employees especially at institutions such as the Polytechnic. See chapter 7 for recommendations on education and training.

### **Economic And Financial Viability Of The Firms**

75% of the firms reported that they are making positive returns in their businesses. SSJKE operators are also making profits as they run their manual press businesses.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

All firms visited stated that there are opportunities for SSJKE operators particularly in transportation, as retailers and distributors / wholesalers. SSJKE operators can also be industrialists pressing edible oil through the use of the manual oil press or manufacturing soap from soap stock available from the large scale edible oil refineries.

#### **5.1.3 ISIC No. 3116 Grain Mill Products**

##### **Constraints Facing The Subsector**

20% of the firms interviewed stated that they are not operating satisfactorily. Key constraints stated were raw material shortages and marketing & distribution problems. The raw material problem is exacerbated by the fact that Kenya's production quantity of maize, wheat and rice does not meet the demand because of unfavourable weather conditions, insufficient research for the improvement of yields of the crops and the fact that increase in production is not keeping up with the increase in the expanding population's demands. Growers of these crops also occasionally suffer from suppressed prices owing to over importation of the same when there is a shortage.

##### **Raw Material Sources And Supply**

Rift Valley province, Eastern, Western and Nyanza provinces are the key sources of raw material (chiefly maize, wheat and rice) for the grain millers.

##### **Capacity Utilisation, Market Orientation And Potential For Export**

80% of the firms reported that they are operating at above 51% of installed capacity. In 80% of the cases, production is destined for the local market. 20% of the firms are operating at 25 – 50% capacity. The 20% who are exporting are exporting less than 25% of their output.

One fifth of the firms stated that they know that there is export market potential in the East African countries. The potential for export in those firms was 25% to 50% of the present production. Products with significant export potential are cereal foods, speciality flours, starches, syrups and relief foods.

##### **Potential For Employment Generation Direct And Indirect**

The firms interviewed did not have any short term plans for expansion and it was therefore not possible to estimate the forthcoming opportunities for new employment.

##### **Appropriate Technology Within The Subsector And Technology Needs**

The firms stated that the existing technology was appropriate for the local markets demands and only 60% stated that they had technology that is appropriate for production for export.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

Policy should specifically aim at increasing the availability of raw material. The firms also stated that the infrastructure specifically in road transport, telecommunication and supply of utilities (water and electricity) and fuel should be attended to urgently and improved. The firms reported that they need Kshs 10 to 50 million for expansion and development for the industrialisation process. Half of them knew how they would source these funds.

### **Potential Benefits And Costs To The Nation**

The key benefits:

Employment creation.

Contribution to food self-sufficiency particularly because maize and wheat flours and rice are major the staple foods in Kenya.

Providing market for farmers produce.

### **Targets For The Industry**

It was not possible to estimate the targets that the firms could aim at achieving due to the present limitations they are experiencing from raw material availability.

### **Potential Additional Benefits In Linkage Industries**

Grain milling has strong linkages to the bakery subsector through providing the raw material. Grain milling enterprises are also the major source for the energy and fibre components of formulated livestock feeds. There is therefore a strong and positive linkage to the livestock industry, which is in turn significantly important for meeting national nutritional needs and boosting the potential for meat exports.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

Although it was acknowledged that there are effluents from the firms, those who stated that they are taking measures to control environmental damage, stated that they are mainly trying to exercise strict management of the composition of the effluent. 60% of the firms stated that they have access to adequate amount of land and that there could be opportunities for the establishment of additional firms in the areas where they are located.

### **Skills Generation And Training**

80% of the firms stated that the present level of training was adequate. The others stated that additional training should focus on training apprentices on production operations.

### **Economic And Financial Viability Of The Firms**

80% of the firms reported that their operations are financially viable. Economic viability could

be enhanced with greater raw material availability.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

The firms indicated that there are opportunities for SSJKE operators especially in transportation, as industrialists (flour and posho milling), as retailers, distributors / wholesalers, and as subcontractors.

#### **5.1.4 ISIC No. 3117 Manufacture Of Bakery Products**

##### **Constraints Facing The Subsector**

The firms visited in this category stated that they are not operating satisfactorily due to inadequate raw material, financial constraints, and infrastructure problems resulting in marketing and distribution constraints. Wheat is the major raw material for the bakery subsector and as in the case of maize, the country does not produce enough for the national needs.

##### **Raw Material Sources And Supply**

The major raw material, wheat, is obtained from Rift Valley and Eastern provinces. Periodic imports enter the country to meet the shortfall in domestic wheat demand. Locally based wheat mills pre-process the wheat into various bakery flours prior to supplying the bakeries.

##### **Capacity Utilisation, Market Orientation And Potential For Export**

Half the firms stated that they are operating at over 50% capacity while the other half stated that they are operating at 25-50% capacity. Half of the firms stated that they have ventured into exports but at present less than 25% of the production is being exported. The market orientation of most firms in the sector is largely local marketing and less than 25% of all firms are actually exporting. The main export destination is the East African region. The potential for export is largely in the non-perishable products such as biscuits. Some of the firms are aware of existence of market for their products in non-traditional export markets but they are constrained from exploiting them by the high cost of production making the products relatively uncompetitive.

##### **Potential For Employment Generation Direct And Indirect**

Half of the interviewed firms reported that they are likely to expand their capacity utilisation by 50% in the short term and this would result in a 25% increase in direct and indirect employment.

##### **Appropriate Technology Within The Subsector And Technology Needs**

The firms reported that the present technology is appropriate for the present market needs but one firm stated that their technology was also appropriate to export market needs.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The firms stated that policies that enable increased availability of raw material, stabilisation of raw material prices, reduction of interest rates and improvement of the infrastructure (particularly telecommunications, road transportation and utility supplies) are required. In order to facilitate improvement of competitiveness of the products in the already identified potential markets, it was suggested that taxes on inputs should be reduced.

### **Potential Benefits And Costs To The Nation**

The key benefits:

Employment creation.

Contribution to food self sufficiency

Providing market for farmers produce.

### **Targets For The Industry**

Since half of the firms stated that they are likely to increase their capacity utilisation in the short term it could be expected that there will be some overall growth in the subsector. Targets may however be difficult to establish at present.

### **Potential Additional Benefits In Linkage Industries**

The packaging industry stands to benefit substantially as this subsector grows. The sector also links with relief operations (which are periodic in Eastern and Central Africa) through the production of high nutrition biscuits.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

Accumulation of packaging material such as bread wrappers has an impact on the environment. One firm was reducing this impact by organising the physical collection of the wrappers. Effluent treatment was reported to be taking place at some firms.

### **Skills Generation And Training**

50% of the firms reported that production staff need additional training on improved and more efficient production methods.

### **Economic And Financial Viability Of The Firms**

Although some firms reported that businesses were operating profitably, some firms stated that financial viability was only being achieved through economies of scale. This implies that small-scale manufacturers would not be able to break even.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

The opportunities identified for possible exploitation by SSJKE operators are in distribution / wholesaling, retailing, and subcontracting.

#### **5.1.5 ISIC No. 3118 Sugar Factories And Refineries**

##### **Constraints Facing The Subsector**

The firms interviewed stated that their operations are not satisfactory because of constraints in: Infrastructure, especially poor telecommunications and road transport, which affect finished products marketing.

Marketing and distribution of their products, affected by unfair competition from imports.

Weak financial position due to serious indebtedness accumulated from past mismanagement caused by officially appointed incapable managers.

Staff problems.

##### **Raw Material Sources And Supply**

The firms source their raw material from their nucleus estates and nearby outgrower farmers' schemes (Western and Nyanza provinces). The supply of the raw materials is not a constraint to the sugar industries.

##### **Capacity Utilisation, Market Orientation And Potential For Export**

One firm, Mumias Sugar Co. which is the largest sugar factory in Kenya, reported that they were currently operating at over 50% capacity utilisation. However none of the firms interviewed were exporting any of the sugar produced and they are oriented to the local market. Nzoia Sugar Co. stated that there is the possibility of an export market in the region but they are not able to adequately increase production due to lack of working capital exacerbated by the crippling debt position. Due to the fact that local demand (1996 consumption estimate was 580,000 MT) exceeds local production (1996 production estimates 419,000 MT) and the fact that the quality of the local sugar is fully acceptable in Kenya (while not fully competitive in the international market), the subsector's orientation is expected to continue to be local.

##### **Potential For Employment Generation Direct And Indirect**

Nzoia is unlikely to expand operations in the short term if the debt problem is not reduced and therefore they are unlikely to increase employment while Mumias intends to expand production and consequently effect a 25% increase in direct and indirect employment.

### **Appropriate Technology Within The Subsector And Technology Needs**

Technology is appropriate for the local market needs and, in the case of one firm, the technology is stated to be appropriate for the East African market. The firms did not indicate any need for replacing, re-engineering or rehabilitating the existing technology.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The firms in the subsector identified the following requirements:

Removal of presumptive tax on sugar cane as this would reduce prices and make the product price more competitive.

Enforce taxation on imported competing products as stipulated in the law.

Impose the variable duty on consignments of imported sugar.

Nzoia Sugar Co. specifically requests the write off of the accumulated debts of the company.

Improvement of the infrastructure especially telecommunications, transportation (including feeder roads for cane transport) and electricity.

### **Potential Benefits And Costs To The Nation**

The key benefits are:

Contribution to tax revenue.

Development of infrastructure around where the factories are located.

Contribution to national food self-sufficiency.

Employment creation.

Improvement of standards of living and creation of amenities for local communities.

Contribution to power alcohol generation which saves foreign exchange by substituting part of the nation's petroleum requirement.

### **Targets For The Industry**

It is not possible to estimate the production targets for the firms in the short run due to the various constraints they have been facing.

### **Potential Additional Benefits In Linkage Industries**

The existence of a steady supply of sugar is a significant positive contributor to the development of food industries in the country. This is because many food processors use sugar as a crucial ingredient particularly in fruit and vegetable processing, dairy products, bakery and confectionery. Development of the local sugar industry will result in a steady supply of stable quality, stable priced crucial ingredient for the existing and emerging food industries in the country. Some of the food industries which benefit from this linkage have significant export potential examples being sweets and other confectionery and bakery products. Molasses is a by-product which has potential to alleviate the shortage of energy component ingredients in the animal feed subsector.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

The potential environmental hazard of the sugar firms is pollution of river water with factory chemicals in the waste water. The firms have taken the measures of treating the waste water. The firms have adequate land for their operations and they indicate that an additional factory could be established in Lugari area of Malava district.

### **Mechanisms To Assist “Infant Industries”**

Local firms need measures that enable local sugar to be even more competitively priced i.e. a requisite variable tax on imports, strict enforcement of tax regulations on all imports, reduction of taxes and levies on local raw material and finished products. The monopolistic actions particularly in sugar importation and marketing by local firms and individuals should be discouraged and brought under full control.

### **Skills Generation And Training**

The interviewed firms indicated that the skill levels are not adequate and that training is required for management staff and supervisory staff in management skills and supervisory skills respectively. In addition unionisable staff need training in technical and clerical topics. Apprentices need training in technical and craft work.

### **Economic And Financial Viability Of The Firms**

Economically, the sugar firms producing mill white sugar are viable in Kenya because of the following:

A sustainable raw material base is available.

The market demand is in excess of production.

The local sugar quality is acceptable in the country for nearly 100% of all users including the above mentioned food industries.

The market demand is relatively inelastic.

Economies of scale will start to be experienced if capacity utilisation of existing factories is enhanced by a greater rightful share of the local market.

Kenya Government's investment in sugar factories in the form of equity in 1994 stood at Kshs 700 m. The sugar firms interviewed stated that their businesses are financially viable. Financial viability is also evident because the existing factories have been freely setting their prices since the liberalisation of sugar prices in 1991. During the intervening period, the factories have been able to remain financially viable despite operating at capacities which are below optimal. Further, reports indicate that imported sugar (which costs up to Kshs 5 billion in foreign exchange annually) rarely reaches the end consumer at a price equal to local sugar and more often it is known to sell at a higher price than local sugar. Therefore, the imported sugar does not take its share of the local market through being more price competitive nor because of any specific quality characteristics. It would follow that it is non-market forces (e.g. non-payment of duties) which are playing their part in sugar marketing and therefore making importation highly profitable undertaking. It also implies that local sugar firms would be even more financially viable than they are presently if the playing field was level vis a vis the imported sugar.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

Additional opportunities identified for SSJKE operators are in distributorship / wholesaling, retailing, transportation, and subcontracting of subsidiary activities for existing sugar factories.

#### **5.1.6 ISIC No. 3119 Manufacture Of Cocoa, Chocolate And Sugar Confectionery**

##### **Constraints Facing The Subsector**

The firms interviewed in this subsector stated that their businesses were operating satisfactorily. However, there was mention of the state of infrastructure and utilities needing improvement. It was also stated that sugar (a key raw material) supply and price in Kenya should be stabilised by creating a more fluid market environment with a level playing field among the actors.

##### **Raw Material Sources And Supply**

Sugar is one of the key raw materials and others include cocoa, cocoa butter, glucose, corn starch and dairy milk. Channels of supply have been established for these raw material with the only difficulty being experienced with sugar as explained under current constraints above. Sugar is purchased ex-factory or through distributors. Milk is sourced through dairies while glucose and corn starch is purchased from Eldoret where there is a maize wet-milling factory.

##### **Capacity Utilisation, Market Orientation And Potential For Export**

The present capacity utilisation witnessed in the firms interviewed is above 50% and one firm had plans to increase further within the next year. The levels of export witnessed were between 25 – 50% of total production and over 51%. The export of sugar confectionery (sweets in particular) is largely destined for the East African market. The firms were not aware of other potential markets for their products. Therefore export market promotion will benefit the firms significantly.

##### **Potential For Employment Generation Direct And Indirect**

From the firms interviewed, the potential for additional employment generation was not substantial (one firm estimated a possible 25% increase in direct and indirect employment) but the scenario could change if additional market opportunities were to be found.

##### **Appropriate Technology Within The Subsector And Technology Needs**

The firms reported that their present technology was appropriate for the present markets and for export market as well. However, this can only be verified after a detailed analysis of the export market's needs and the existing technologies.

##### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The following requirements were mentioned:

The need to make VAT rates uniform for all VAT-able items.

Infrastructural improvements are needed in transport and telecommunication and utilities (especially water supply).

Increase in the general state of security.

Measures to stabilise the supply and price of sugar in Kenya which is a major raw material for the subsector.

### **Potential Benefits And Costs To The Nation**

The key benefits cited were:

Employment creation.

Contribution to tax revenue.

Contribution to variety of product (beverages) options.

### **Targets For The Industry**

To establish the targets for the subsectors industries, market research needs to be carried out by the firms, especially with the assistance of Export Promotion Council, to determine what potential market (and the product types and quantity requirements thereof) destinations there are and then project the indicative targets.

### **Potential Additional Benefits In Linkage Industries**

The products of this subsector help to bolster the social aspects of society especially during festivities. The products are also inputs in the bakery subsector.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

Firms reported that the level of impact on the environment is minimal. However, the firms are stressing awareness in the avoidance of litter. This awareness campaign targets the consumers of the products.

### **Mechanisms To Assist “Infant Industries”**

The policy requirements stated by the firms would facilitate the growth and sustainability of young industries. In particular, reducing the variability of prices of sugar would mean that products can be manufactured at a stable price and therefore certain sectors of the market can be targeted sustainably.

### **Skills Generation And Training**

Firms interviewed stated that the level of skills available was adequate for present needs. However, in the drive towards industrialisation and new markets, close assessment will need to be undertaken to establish the evolving training needs.

### **Economic And Financial Viability Of The Firms**

The firms reported that their operations are economically and financially viable.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

In addition to the industrial opportunity of manufacture of sweets and candies at micro and small enterprise level as indicated in Table 4.3 above, opportunities for SSJKE actors are to be found in retailing of the products of the subsector.

### **5.1.7 ISIC No. 3121 Manufacture Of Food Products NEC**

The current ISIC No. 3121 classification of industrial firms in the Ministry of Industrial Development Registry of Industries lists tea, coffee, nuts and bixa processing firms in this subsector. See the recommendations in chapter 7 of this report.

### **Constraints Facing The Subsector**

Two third of the firms interviewed in this subsector reported that their businesses were operating satisfactorily. The key constraints that were identified were:

Infrastructure (roads, which hamper collection of raw materials, and electricity).

Law courts. Justice is not being dispensed expediently.

Police services are not providing adequate security.

Training of graduates is inadequate especially for entry into industry. Artisans' training is also of low standards.

Poor financial position leading to inability to afford appropriate technology.

Some export destination countries have duties and legislation that hinder importation of Kenyan products such as tea.

### **Raw Material Sources And Supply**

There is adequate raw material base for the installed capacity of firms in the tea industry but those interviewed stated that collection is hampered by poor road infrastructure in the growing areas. Most firms in the subsector are located in the raw material growing areas in Rift Valley, Central, Eastern, Coast and Nyanza provinces. Quality characteristics of the raw material are in most cases optimal to the needs of the firms. Macadamia nuts cultivation should be encouraged in parts of Kenya such as Western and Nyanza provinces and Taita Taveta district.

### **Capacity Utilisation, Market Orientation And Potential For Export**

Two thirds of the firms were utilising over 51% of their capacity utilisation. Over 51% of the firms' output is destined for the export market in semi finished bulk packaged form. There is room for expansion of the exportation but this would have to be in tandem with expansion of raw material production. For instance the export of macadamia nuts at present can only expand by about 25%. This is because the present national production can not avail more than 25% more raw nuts. However, one concerned firm is aware of additional untapped markets in overseas destinations such as Central and Eastern Europe, China, Britain, USA and Middle East. A request from a tea firm is for the Tea Board of Kenya to negotiate for opening of markets for Kenya tea in Central and Eastern Europe and Russia.

### **Potential For Employment Generation Direct And Indirect**

Presently the firms do not envisage a substantial additional employment potential. They estimate that new employment opportunities (both indirect and direct) would not exceed 25% in the short term.

### **Appropriate Technology Within The Subsector And Technology Needs**

The need for a modern boiler for a macadamia processing factory in Murang'a was identified as crucial for improvement of the production process and consequent improvement of the product quality. Other firms stated that their technology was appropriate for production for the local and export market.

### **Requirement For Fiscal And Other Public Policy Support (Including Financial & Budgetary Requirements)**

The requirements stated were:

Review of the Tea Act by Parliament, which has been delayed for several years.

Immediate refund of VAT or introduction of a VAT offsetting procedure.

Reduction of tax on imported machinery.

Parastatals should be privatised to enable development of the respective subsectors where they have been operating by the private sector.

Elimination of official corruption, which is a disincentive to new industries and causes damage to existing ones.

### **Potential Benefits And Costs To The Nation**

The key benefits are:

Employment creation.

Providing training to personnel.

Contribution to tax.

Contribution to GDP.

Control of soil erosion.

Promotion of rural industrialisation.

Earning of foreign exchange.

Contribution to agricultural development.

### **Targets For The Industry**

The crop raw material bases for the industries of this subsector match well with the current operating capacities of the existing industrial firms. The crops themselves are largely long maturing perennials and it is therefore difficult to expect a significant increase in processing through-put in the short term without a substantial time lapse for raw material generation. The products are world market trend dependent. However, as farmer's earnings improve, their output will increase and capacity utilisation of the factories will be enhanced.

### **Potential Additional Benefits In Linkage Industries**

The additional benefits from the subsectors' industries are that they provide waste by-products (such as pulp and husks) which can be converted to compost especially for the rapidly growing organic farming market.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

The industries produce industrial effluent and they promote fertiliser application in soils. The measures that are being undertaken include the use of nut shells for firing factory boilers, avoiding felling of forest trees, and soil conservation measures.

### **Mechanisms To Assist "Infant Industries"**

Measures need to be undertaken to enable an organised transfer of publicly owned factories to the producers so as to reduce exorbitant management costs and inefficiencies and make products more competitively priced. This would also have the effect of building the capacity of local personnel in management and decision making skills. At the same time organisations which are charged with finding markets for the sector should increase their efforts in finding new markets so that the upcoming industries can obtain niches for themselves.

### **Skills Generation And Training**

Training of agriculture and engineering graduates and artisan training should be improved by enabling the students or trainees to have an industry orientation.

### **Economic And Financial Viability Of The Firms**

All firms interviewed stated that their businesses are financially and economically viable. Co-operatives are active in coffee industry as pre-processors and millers of coffee. The gradual improvement of management efficiency in the farmer's co-operatives has helped to improve viability of their operations as processors of coffee. The competition brought about by alternative private milling of coffee may stimulate greater efficiency in the co-operative-run coffee milling.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

In addition to the processing opportunities described in Table 4.3 above, the opportunities available for SSJKE operators are in raw material production, transportation, and subcontracting of production operations e.g. pre-cleaning and grading of nuts prior to factory processing, or subcontracting of subsidiary activities for the firms of the subsector.

### **5.1.8 ISIC No. 3122 Manufacture Of Prepared Animal Feeds**

#### **Constraints Facing The Subsector**

The constraints facing the sector are:

Supply of raw material for the energy component of feeds.

Lack of spare parts.

High cost of credit.

Infrastructure (particularly telecommunications, road transportation, utilities such as water, electricity and fuels).

VAT charged on raw materials for animal feeds causes an over pricing of the end product.

#### **Raw Material Sources And Supply**

Although most raw materials are available (from Nyanza, Western, Rift Valley and Nairobi), there is irregularity of supply and price on energy component raw materials. This is because such materials are also largely used for human food especially maize and wheat.

#### **Capacity Utilisation, Market Orientation And Potential For Export**

Capacity utilisation of factories is between 25-50% and this figure is on the increase as the demand for feeds especially dairy cattle feed increases. Presently the production of the firms is oriented to the local market with most farms not exporting anything. The local market potential is significant given that milk marketing has been liberalised and local dairy farmers are able to obtain a quick and high return on their milk sales. The potential for export does not appear substantial even within the region because dairy farming standards in the neighbouring countries has not reached very significant levels.

#### **Potential For Employment Generation Direct And Indirect**

As the firms expand their operations, there will be an increase in employment. One firm estimates a 25% increase in direct and indirect employment in the short term.

#### **Appropriate Technology Within The Subsector And Technology Needs**

The technology in existing firms is appropriate for the local markets needs. It was also established that local machinery fabricators are able to produce animal feed mixing equipment, which is suitable for production of 60 metric tons of feed per day. The locally fabricated machinery is contributing to a saving on foreign exchange.

#### **Requirement For Fiscal And Other Public Policy Support (Including Financial &**

### **Budgetary Requirements)**

The requirements are:

Agricultural research and development should speed up and assist in the development of alternative sources of energy component e.g. yellow maize in the dry lands.

Reduction on the high cost of credit.

Improvements are needed in infrastructure (particularly telecommunications, road transportation, utilities such as water, electricity and fuels).

Remove VAT charged on raw materials for animal feeds so as to make feeds more competitive.

### **Potential Benefits And Costs To The Nation**

Key benefits are:

Contribution to tax revenues.

Contribution to boosting farming (livestock production) potential for small and large scale farmers and in the nation.

Employment creation.

### **Targets For The Industry**

The animal feeds industry is already on a growth path, which is rightly being stimulated by a sustainable demand. Although not seeming to have a direct export potential, the livestock sector that benefits from this industry will grow substantially and this will lead to satisfaction of the local market and expansion of exports of high quality products.

### **Potential Additional Benefits In Linkage Industries**

By boosting livestock production, the subsector will indirectly contribute to greater human food self sufficiency in animal protein intake which is an area that has been unaffordable by the vast majority of Kenya citizens. This will lead to a healthier, more productive citizenry. Yet to be exploited are the benefits of putting to economic use drier lands for the cultivation of desert resistant crops, such as yellow maize, for livestock feeds.

### **Environmental Impact, Environmental Damage Control And Spatial Dimensions**

The subsector mainly utilises the by-products of other industries thus helping to reduce accumulation of materials in the environment. In addition, physical processes are used in the formulation of the feeds with very low possibility of harmful wastes being produced. Animal feed firms are located in the livestock production areas and in the areas where there is an abundance of agro-industrial raw materials whose by-products can be processed into feeds.

### **Mechanisms To Assist “Infant Industries”**

Young industries need to be assisted with training on proper feed formulation and quality because it is potentially hazardous to the market if proper quality cannot be maintained (such as risks of aflatoxin poisoning of livestock).

### **Skills Generation And Training**

Students and trainees should receive adequate exposure in industrial operations and environments so that they can easily apply their knowledge in industry upon graduation.

### **Economic And Financial Viability Of The Firms**

The existing feed manufacturing businesses are financially viable. Greater economic viability is achieved from a combination of milling food grains and using the by-products to formulate feeds as is the case with the large scale operators such as the Unga Group and co-operatives such as Meru Central Farmers Union. The viability of such co-operatives is further enhanced by the fact that they have a captive market of member farmers who have merchandise such as milk or coffee that they regularly sell through the co-operative. This enables the co-operative to sell the feeds on credit in exchange for deductions on the farmers' periodic payments due for the produce sold. It was also noted that co-operatives which do not have grain milling facilities are also formulating their own feeds for sale to member and non member farmers in Central province.

### **Small Scale And Jua Kali Enterprises Sector (SSJKE)**

The opportunities for formulation of feeds by SSJKE operators are limited primarily because the operators do not have a reliable affordable supply of the component raw materials and they therefore cannot make a feed of consistent quality. SSJKE operators who are processing agricultural raw materials which produce a by-product such as oilseed cake can market the same as a feed additive to be combined by farmers with other livestock feeds such as fodder. Other opportunities identified for SSJKE operators would be in raw material production (cultivation), feed distribution / wholesaling and retailing, transportation or subcontracting (such as producing or sourcing seed cake) for the subsector industries.

5.2

## ASSESSMENT OF OVERALL EFFICIENCY AND GLOBAL COMPETITIVENESS OF THE SUB-SECTOR

Traditionally, this sub-sector has been one of the most competitive within Kenya's manufacturing sector. In terms of efficiency of production and global competitiveness, an indicator that is often used is the Domestic Resource Cost (DRC). To the extent that it is a simple ratio of the value of opportunity cost of domestic resources used in an activity compared to the value added in the same activity at world prices, it gives an indication of the competitiveness of the domestic production of the goods. Due to the short duration of this assignment it was not possible to undertake comprehensive product level assessment of DRCs for the sub-sector. However, as an indication of the nature of competition in the sub-sector we wish to point out indicative figures from the 1987 World Bank study<sup>1</sup>. For the food processing activities as a group, it found that the actual capacity utilisation rate was a reasonably high 89%, while the actual short-run DRC was 0.37<sup>2</sup> indicating an acceptably high efficiency of production in the sector. Moreover, even allowing for a 20% overvaluation of the Kenya shilling, the **long-run** DRC for food processing was found to be only 0.59. Selected product-level indicators are given in the table below. It can be seen that while local production of confectionery is unlikely to be globally competitive, the production of animal feeds and fruits is highly competitive.

**Table 5.1. Indicative DRCs for the Sub-sector**

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<sup>1</sup>See World Bank (1987) - "Kenya: Industrial Sector Policies for Investment and Growth", Vol. II: Main Report, June 1987.

<sup>2</sup> Of course the lower the ratio, the more efficient the local production of the product.

<b>Product</b>	<b>Actual Capacity Utilisation (%)</b>	<b>Actual Short-Run DRC</b>	<b>Long-Run DRC</b>
Poultry feeds	67	0.20	0.47
Cattle feeds	67	0.10	0.24
Confectionery	26	1.81	5.04
Canned pineapples	67	0.10	0.27
<b>Overall Food Processing</b>	<b>89</b>	<b>0.37</b>	<b>0.59</b>

In absence of more recent product-specific studies, in order to provide an indication of whether the long-run DRCs may still be valid in the 1990s there would be need to correct for the numerator in the ratio of which labour costs is the main element of cost that has been greatly affected by cost-inflation in the 1990s. To the extent that average earnings in the sector have risen by only about 30% in the last 9 years, it is unlikely that labour costs have significantly increased the long-run DRC for the sector.

In our findings, the smaller firms felt that they needed a level playing field especially with competing imported products and that an affordable and fair method of industrial finance must be made available if they are to grow.

The firms themselves felt that they would be adequately competitive and that they would tap the unexploited export markets if GoK's, in its enabling role could: Improve infrastructure and communications, facilitate the reduction of prices of raw material inputs, promote wider cultivation of the raw materials in the country and negotiate with Tanzania Government for the application of COMESA tariffs on Kenyan products.

## **5.3 FINDINGS OF THE ANALYSIS OF THE GOK POLICY RELEVANT TO INDUSTRIALISATION AND ASSESSMENT OF THEIR SUITABILITY**

### **5.3.1. Trade Policy And Export Promotion**

#### 5.3.1.1. Introduction

It must be appreciated that in recent years it has become evident to economic planners that a country's ability to meet its growth and development targets is the extent to which it can export to world markets. Hence, the promotion of trade, and exports in particular, has been central to Kenyan liberalisation and reform policy for many years through creation of various organisations to promote exports.

While the effect of import liberalisation has been generally favourable, 27% of the firms who reported that their business was not doing well, indicated that there should be more effective implementation of import control. Manufacturers argue that while there is nothing wrong with competing imports of good quality, there should be proper enforcement of tax laws on imports. There was a general belief amongst the vegetable oil processors that Kenya has been the victim of unfair trade practices particularly by South East Asian trading partners through e.g. the use of hidden subsidies to their own producers. In such cases, there is need for Kenya to invoke countervailing duties in place as allowed for under WTO rules. In other sub-sectors e.g. maize and sugar a similar problem exists though there the problem is more of domestic importers avoiding to pay duties and taxes. What needs to be done as a matter of routine is to put into place mechanisms which can invoke countervailing duties with speed, and in the case of e.g. duty free imports of sugar such imports must pay the requisite duties and taxes before releasing such produce into the local market.

An important element of Kenya's industrial policy since 1986 is the desire to create an export thrust in the economy, especially through the promotion of manufactured exports. Three main schemes are now in place to encourage investment in manufactured exports: duty/VAT exemption; Export Processing Zones (EPZ); and Manufacturing Under Bond (MUB). However, these schemes have tended to favour non- food processing firms and indeed were primarily designed for such firms.

MUB was established in 1986 and had such incentives as duty and VAT exemption on imported plant, machinery, equipment, raw materials and intermediate inputs, and investment allowances of 100 per cent on immovable fixed-assets. While such production is to be exported, in certain cases and with the approval of the Commissioner of Customs and Excise, goods may be sold in the domestic market subject to the payment of normal duties and taxes plus a 2.5 per cent surcharge. The main sub-sector to have benefited from this scheme is the textile sub-sector and the Consultant is not aware of any crop-based food industry participating in the scheme.

An important element of trade relations is the efforts to establish good trading relations with its neighbours and the international community. Kenya, is a participant in Lome Convention and is a member of the World Trade Organisation (WTO), as well as several trading blocs closer to home such as the East African Co-operational Council (EACC), and Common Market for East

and Central Africa (COMESA).

Whereas Kenya has ratified these treaties, there is a need to be more aggressive in pushing for more reciprocal concessions to Kenya's exports along the lines agreed upon in these agreements.

A case in point cited in the survey is the lack of implementation by trading partners in terms of COMESA tariffs for Kenya's exports to the region.

#### 5.3.1.2. Role of Export Promotion Council (EPC)

The Council was established as a company (CAP 486 of the Laws of Kenya) in August 1992 principally to get rid of the bureaucracy inherent in the Ministry with respect to development of commerce and industry in the promotion of export trade.

##### Roles and Functions of the Council

The Council is charged with the responsibility of enhancing export development by dealing with matters pertaining to policy, structural, Infrastructural and operational reforms in addition to marketing strategies. It collaborates with relevant bodies in the private and public sectors in order to remove bottlenecks facing export efforts. The Council operates independently with Board members drawn from private and public sectors' senior officials. The officials are appointed by the President and they are 13 including the Chairman. Eight are from the Private Sector, three are Permanent Secretaries representing the Ministry of Commerce and Industry, Ministry of Agriculture, Livestock Development and Marketing and the Ministry of Finance. There is also the Governor of the Central Bank and the Secretary/Chief Executive of the Council.

##### Organisation Structure

The Council operates through eight sectoral panels of which each panel consists of ten members drawn from both the private and public sectors. The panels are charged with the responsibility of examining and identifying constraints for exporters, setting export targets, recommending incentives to exporters and suggesting sector-specific export strategies. The Council is therefore divided thus:

- (i) Economic Policy
- (ii) Agricultural Sector
- (iii) Manufacturing
- (iv) Tourism and Other Services
- (v) Finance, Administration and Training
- (vi) Public Relations
- (vii) Legal Services
- (viii) Computer Services

#### Assessment of Effectiveness

In our assessment, EPC had started off on a slow footing and has only recently started impacting on enhancing export development. However, in terms of policy development, there is still a lack of clear delineation of responsibilities between the Council and the parent Ministry of Trade. At times, this has led to inaction in terms of decisiveness in taking responsibility for quick actions that may be beneficial to exporters. In terms of development of infrastructural and operational reforms beneficial to exporters, again not much has been achieved, chiefly due to the high cost of financing needed for infrastructural facilities though, the Council co-operates with other relevant Government agencies e.g. EPZA in promotion of such facilities. In terms of developing marketing strategies and assisting exporters with development of export markets, it is this area where the effects of the Council's activities are beginning to be felt. Through organisation of short specific courses for exporters, the Council has paved the way particularly for small exporters to better appreciate the intricacies of the export market. In addition, the Council's collaboration with relevant bodies in the private and public sectors in order to remove bottlenecks facing firm-level export efforts is an important intervention for promotion of exports.

#### 5.3.1.4 Export Processing Zones Authority (EPZA)

EPZA programme, was inaugurated in 1990 with the enactment of the Export Processing Zones Act (Cap 517, Laws of Kenya). The Programme was designed to promote export-oriented industrial investment within designated areas.

#### Roles and Functions of EPZA

The mandate of the Authority is to promote investment particularly through the establishment and promotion of duty free zones countrywide. Sameer Industrial Park, a subsidiary of Firestone (E.A.) Limited was the first export processing zone to be established in the country. By December 1996, 14 zones had been designated in the towns of Nairobi, Mombasa, Athi River and Nakuru. Of the 14 Zones, only two are developed and managed by licensed EPZA developers. Athi River is the largest Zone and is publicly owned. Another publicly owned Zone is planned for Mombasa and land has already been identified.

Of the 14 Zones 6 are already housing enterprises, 3 have been completed and ready to house enterprises while 4 are under construction.

(b) Organisation Structure - EPZA operates through six departments as follows:

- (i) Administration
- (ii) New Investments
- (iii) Operations
- (iv) Customs
- (v) Research, Policy and Planning
- (vi) Legal Affairs

#### Assessment of Effectiveness

Though it is not possible to currently establish the cost effectiveness of Kenya's processing zone strategy, it may be pointed out that such establishments have not been economically useful in

other parts of the World where comprehensive cost-benefit analyses have been done. The main argument against EPZs is that they are sub-optimal alternatives to addressing the general unattractiveness of macro economic investment policies for the rest of the economy in the main economies of the enclaves where such EPZs have been set-up.

For purposes of promoting crop-based food industries, it can be said that the EPZs are irrelevant to the extent that they rely on almost complete importation of raw materials and other inputs, while crop based food industries in Kenya are almost invariably based on domestic inputs.

### **5.3.2. Monetary Policy**

In its efforts to maintain monetary discipline, the Central Bank is striving to increase the range of tools available for these efforts and thus its overall effectiveness. Budget deficits in Kenya were traditionally financed directly through overdrafts at the CBK. In recent years, however, several new methods have been developed. Treasury bills and notes with varying maturities have been introduced and secondary markets in these instruments encouraged. In addition, interest rates have been fully liberalised giving the CBK a far more sophisticated means to conduct policy. Through its open market operations, the CBK may now finance the budget deficit without necessarily raising the money supply.

Such open market operations in Kenya, however, are limited in their effectiveness. To date, the secondary market in Treasury instruments is not large and thus transactions changing the rates of interest on Treasury securities do not immediately, or efficiently, translate into changes in the savings and lending rates of commercial banks. In order to expand the market and thus make it more effective, the CBK which is now running a campaign aimed at individual investors to encourage their participation in Treasury securities, is lowering the denomination of the securities on offer and has appointed the commercial banks as agents for the sale of Treasury securities. There is also a push to expand the trading of Treasury instruments on the Nairobi Stock Exchange.

### **5.3.3. Policies To Promote Industrial Technology**

A critical component of Kenyan industrial policy is the promotion of industrial technology. Kenyan industry will only be able to compete on world markets if it has the same advantages of modern and new technologies as other countries. To assist in the transfer of technology from the developed economies to Kenya, the government established a National Council for Science and Technology. This is in the process of formulating an industrial technology policy. While not yet complete, they aim to create a policy that will:

- Build local technological capacity and culture with a strong national inclination.
- Provide guidelines on technological development, choice and transfer and the adaptation of technology.
- Streamline and strengthen institutional arrangements and linkages and build capacity.
- Promote private sector participation in the development of industrial technology.

The primary technological institution in Kenya is the Kenya Industrial Research and

Development Institute (KIRDI). It was established in 1979 by the Science and Technology Act and comes under the Ministry of Research, Science and Technology. KIRDI is a multi-disciplinary institution conducting research in industrial and allied technology in the areas of civil and chemical engineering, electronics, mechanical engineering, textiles, fibres, plastics, ceramics, clays, foods and chemicals. It also conducts research in the field of mining and power resource development.

#### 5.4. FINDINGS OF THE EXAMINATION OF INDUSTRIAL INVESTMENT PRACTICES IN KENYA VIS-À-VIS TRENDS IN SELECTED NICs

From our assessment, it does not appear that a rapid and sweeping liberalisation of imports (**so that within a period of three to five years the industrial sector will be exposed to import competition with moderate and uniform tariffs of around 15, leaving at the end no room for further protection to encourage industrial diversification**), could be applied to Kenya's industry. On the contrary, the pattern of structural adjustment observed in most successful Asian NICs (where liberalisation was gradual, geared to the differing needs of different industries, and in the position to retain the scope for promoting new infant industries at the end of the adjustment period) seems to be more adaptable to the Kenyan case.

The adoption of the Asian adjustment approach is justified on the grounds that the restructuring needs of Kenya's industry require a gradualist and pro-active approach to liberalisation rather than the sweeping and non-discriminatory exposure to international market forces. This is because not all industries are presently uncompetitive are basically uncompetitive in the longer term if they are given the time and resources to develop new skills and master new technologies. There are certainly some inherently uneconomic activities that deserve to be closed down immediately, and some, at the other extreme, that can be exposed immediately to international competition. In between lies the bulk of manufacturing activities, which have to undergo a process (varying in duration and intensity) of relearning and new capacity acquisition, after which it can cope with import competition and establish a position in export markets. These activities have already invested a great deal in them, and may have accumulated a substantial base of technical and non-technical skills. If exposed suddenly to import competition without having the time and support to cope with, they can die and their physical and human investments dissipate.

The lack of specific (especially technical and managerial) skills is something that industry has to work with because the pace of liberalisation is generally much faster than any economy is able to provide with the new skills and capabilities that industry needs. The skills that deserve immediate attention are the provision of better and more training in specific industrial skills for the most important industry clusters that would form the dynamic edge of industrial growth. This need not wait for longer-term investments in education and vocational training, and should be dealt with directly and forthrightly.

Industrial upgrading requires technological improvements. The rapid pace of technological change means that all industries have to be geared to coping with new products, processes, equipment and organisational systems. Individual firms often lack the ability to undertake such efforts on their own, and the tremendous amount of subsidies and effort invested by Asian NICs in raising firm productivity suggests that the market failures involved are indeed enormous (information is lacking, costs and returns are risky and unpredictable, there are massive externalities and institutional support is weak). This is indeed the case for strong promotional and support efforts by the Government. This requires a package of skills, information, equipment, training and finance, provided along with a change in the incentive regime (e.g. tax credits for R&D expenditures, technology development funds) with considerable persuasion from the government.

The cost effectiveness of investment in productivity enhancement depends on correctly identifying the sources of increased efficiency. But allocating resources to this end does not necessarily make any economic sense for private entrepreneurs. No matter how much effort management may (or intends to) make towards technological upgrading and cost reduction, overall economic conditions, external diseconomies and regulatory distortions may nullify it. It is, therefore, of utmost importance that the government starts to adequately address such factors under its direct control (infrastructure, regulatory distortions and inconsistency in the incentive system) to clear the way for private-sector investment in medium and long-term productivity gains.

## **5.5. THE IDENTIFIED GAPS IN CURRENT POLICIES AND REGULATIONS**

The key to strengthening Kenya's export competitiveness will be found in a mixture of interventions of which a key area is the improved performance in the acquisition of new technologies. This in turn will first require increased skills at the level of enterprises, since the past record has many examples of technology transfer arrangements which have not added to the domestic technology capacity of Kenyan groups. Working through in a participatory and consensus-building manner like in the proposed National Industrial Development Council (NIDC), the Consultant suggests that an agenda of implementable actions for filling the gaps in measures to support export-led industrialisation programme should have the following principle components:

### **5.5.1. Promotion Of Internal And External Competition**

Promotion of internal competition requires an efficient Monopolies Commission that is well staffed and is able to investigate cases of contravention of the rules and regulation governing fair trade and practices. In our findings, manufacturers in the sub-sector complained of periodic shortages of critical raw materials and inputs e.g. sugar, which is partly due to deliberate hoarding and manipulation of supply by some businessmen. These are the types of cases that impede internal competition and should be investigated by the staff of the Commission. Secondly, there are manufacturing sector policies that are needed to increase the competitiveness of products. For example, Kenya does not have a technology policy, which given the state of technology and techniques of production in the sector, a policy is needed that deliberately encourages new technologies and techniques of production. In addition, there is very little R&D for the sub-sector that is conducted internally.

In terms of external competition, the macro economic situation and deliberate export promotion activities influence the competitiveness of Kenya's products in the external market. A significant aspect of macro economic stability is the level of money supply and Government borrowing where the Sessional Paper No. 2 of 1997 clearly acknowledges the need to balance the budget (pg. 86). Whereas the Country has managed to maintain inflation to low levels, recent heavy Government borrowing is pushing up the level of interest rates, and hence the general cost of borrowing by manufacturers.

### **5.5.2. Improvement In Export Incentives, International Trade Logistics And Procedures**

Whereas external export promotion has just been revitalised by the EPC, more needs to be done to expose manufacturers to the export markets and make it easier to venture into the export market. Despite various pronouncements, there has not been established an Export Credit and Guarantee scheme, which might assist new and genuine exporters to venture into the export market.

### **5.5.3. Rationalisation Of The Tariff And Tax System**

The tariff regime has been greatly rationalised over the last five years and various categories of imports are now properly listed under the correct tariff codes. However, there are still a few

cases where there are ambiguities by Customs Officers in terms of classification of certain items in the import code book.

For example, in our findings metal process tanks which are part of plant and equipment for processing fruits and vegetables are treated the same way as normal containers, which attract a much higher rate of duty.

#### **5.5.4. Reform Of The Legal Framework For Industrialisation**

##### 5.5.4.1. Coordination Of Ministerial Responsibilities In Respect Of Availability Of Raw Material Inputs For The Sub-Sector

As discussed in Chapter 5, the problem associated with availability of raw materials is one of the main constraints faced by firms in the sub-sector. Currently, there is no clear cut delineation of the Ministerial responsibilities in respect of promotion and availability of raw materials for the manufacturing sector as opposed to the growing of crops in general. Whereas the Ministry of Agriculture, Livestock Development and Marketing see their role as promoting crop production in general, there is no clear cut responsibility in respect of availability of agricultural raw materials from the perspective of manufacturers, either through coordinated assurance of alternative imports in times of domestic shortage; or in terms of provision of incentives for local growing of such crops with the needs of manufacturing industry in particular. In this regard, the Agriculture Act is not clear on this delineation of responsibilities from the perspective of manufacturers, which should naturally be the perspective taken by the Ministry of Industrial Development. In the 1997-2001 National Development Plan, this issue is appropriately acknowledged and indeed the Plan proposes the establishment of a Crop Development Council by 1998 (pg.227).

In the view of the Consultant, the above-mentioned intention is a step in the right direction since such a Council would specifically be focused on development of crops from a holistic perspective taking into account the needs of all actors who supply and demand crops. It is important that the responsibility of establishing and coordinating the activities of the Council should not be narrowed down to the Ministry of Agriculture, Livestock Development and Marketing alone; but should include all pertinent Ministries, inclusive of the Ministries of Finance, Research, Science and Technology and Industrial Development. The enactment and establishment of the Council should be embarked upon as soon as possible.

##### 5.5.4.2. Proliferation of data requirements from manufacturers

The Registry of Industries database is not up to date on most of the registered firms in the subsector. The latest data on some firms is 1988! The filling of the forms, although on a standard format, is not complete for all the firms and therefore some firms do not submit part of the information. The purpose of registration does not appear clear to firms and therefore it is treated as one of the very many tiresome processes that entrepreneurs have to go through in running their businesses. From our findings therefore, manufacturers are generally unwilling to provide comprehensive and correct information as required under the Industrial Registration Act. One suggestion from an industrialist is that there should be a unified (one stop) registration/ licensing process which should gather most of the information required by the various arms of GoK and

Local Government so that the industrialists can have more time to concentrate on their enterprises.

In our view however, the Department is well placed to collect and analyse manufacturing sector information that can provide a sound basis both for industrial planning but more importantly for use by the manufacturers themselves.

It is known that the Department is in the process of publishing the 1st. National Directory of Industries which could be available to users before the end of May 1998. In the view of the Consultant, this useful publication would serve two very important purposes: Firstly, it would demonstrate to the manufacturers that the information collected from them can be used in a confidential manner but still be publishable in a form that does not compromise the business secrets of the providers of the information. Secondly, it would be the first comprehensive directory of industries that gives an indication of the manufacturers present on a sectoral basis, and like all business directories would be very useful to the manufacturers themselves. By making the publication of the directory a regular event, it would grow to be an authoritative document on the spatial and sectoral distribution of manufacturing firms in the Country. Verification of information given in the Directory would be easier since the Department would follow-up on the information on an annual basis before publication of the next issue.

Since the publication of a Directory is not necessarily all that is expected of the Department, it would go a long way to establishing the confidence of the manufacturers in the Department. It is sufficient to point out that the provision of accurate and regular information to the Department can only be achieved if the manufacturers are able to see a clear use for which the information is being put and not obtaining the information on vague grounds of "economic planning".

#### **5.5.5. Technology Policy and Promotion of Domestic Research and Development (R&D) Activities**

In our findings, the main concern of smaller growing firms was not protection that may invoke traditional "protection" under the "infant industry" argument, but to be assisted in terms of facilities that may make them compete in the world market. In terms of the possibility of small firms competing in the international market, it was established that a major constraints is research and development (R&D) and it is known that over 90% of the manufacturing firms in Kenya do not have any in-house R&D facilities. This is partly due to the early history of promotion of foreign direct investment (FDI) in the manufacturing sector, which led to reliance on overseas R&D facilities.

It was reported that the sole Institute charged with R&D for the manufacturing sector is not adequately funded, and the staff is not well motivated. In addition, there are no private R&D facilities for the crop-based food industries, and it was also noted that there are hardly any innovations in the sector. In addition, many firms are unaware of sources of funding for R&D. It was found that even the firms that stated that they have the appropriate technology for export production, had not made the attempt to venture into the export market partly due to the costs involved in test marketing.

A rejuvenated KIRDI that is more autonomous is well placed to play the following critical roles in the field of technology development and management in conjunction with firms in manufacturing in general and food crop based industries in particular:

Provision of firm-level management of R&D services.

Provision of product innovation services, particularly design for disassembly (DFD), i.e. reprocessing for reuse or safe disposal of by-products e.g. in most chemical industries.

Provision of services for diagnosing technological competitiveness position of companies and subsequent definition of technological strategies for improved competitiveness focusing on R&D and technology transfer activities.

Assisting firms with management of technology transfer negotiations and agreements, particularly technology absorption and adaptation.

Provision of technology information, particularly on clean technologies.

The above are just an indication of important relevant services currently needed by the private sector, for which a well-funded and efficiently operating industrial technology Institute should be able to offer on a market-linked basis. Hence, in order to provide an institutional basis for KIRDI to provide these services, it is important to consider giving an element of autonomy for the Institute, initially with part of overhead costs being met from the Exchequer, but gradually being phased out as full autonomy is given to the Institute. The Institute would then be expected to gradually obtain increasingly higher amounts of its overhead and operating expenses as its services to the private sector become appreciated and it proves its worth in the market.

#### Private Technology Providers

There is a growing number of private sector and NGOs that assist entrepreneurs through identification and development of technologies that are appropriate for the establishment of viable small-scale enterprises. A main activity of such organisations is to ensure that there is local availability of machinery and equipment through training Kenyan manufacturers to make the equipment in the country. In this way such equipment are readily available throughout the country and can be easily repaired by local workshops.

Such technology providers are located in the main towns and e.g. Africa Now and ApproTEC. They have a network of trained manufacturers around the country that manufacture and repair the equipment. Operations are purely in the private sector domain and trainees once trained at a small cost by the technology NGOs, are free to manufacture the equipment(s) and sell them according to the dictates of the market. A key technology promotional role is usually executed by the NGOs themselves through programmes funded by bi-lateral and multilateral donors.

## CHAPTER SIX

### CONCLUSIONS

In the Consultant's view, the information obtained from the research and field survey provides an insight into what is currently happening in the crop based food industry subsector. As illustrated in section 5.1, the findings, effort was made to cover a wide cross section of firms spread across the country. Interviews were held with a cross section of classes of respondents both in the private and public sector. Although it was 48% of the industrial firms contacted which actually facilitated interviews, in our view, the quality of the data received was reliable and therefore the results are conclusive.

The discussions of the in-depth analysis of the pre-selected 8 target subsectors reveal that each of them in practice meet several of the original selection criteria. For the purposes of current official strategy on industrialisation, the prioritisation of criteria of subsectors and industries has been seen as follows:

**Export potential**  
**Economic and financial viability**  
**Linkages**  
**Clustering**

Using this rationale, the order of prioritisation of target products is:

**Tea and Coffee**

Products with key potential: made tea and green coffee.

**Fruit and Vegetable products**

Products with key potential: processed tropical fruit including pineapple, passion, mango, papaya, avocado (using technologies which include freezing, concentration, and canning) and processed vegetables especially french beans, baby carrots, cucumber, courgettes, snow peas, baby onions and baby corn (using technologies which include freezing, canning and pickling).

**Vegetable Oils & Fats**

Products with key potential: processed crude and refined edible oil products, special preference being given to products made from locally grown raw materials.

**Grain Mill products**

Products with key potential: starch, corn syrup, cereal foods such as breakfast cereals, speciality flours, extruded products (e.g. relief foods).

**Cocoa, Chocolate & Sugar Confectionery**

Products with key potential: sweets.

**Manufacture of Bakery Products**

Products with key potential: biscuits, cookies.

**Food Products Not Elsewhere Classified**

Products with key potential: Macadamia nuts, cashew nuts, bixa extracts, spices.

The following products have Low export potential but because of high local market potential, economic and financial viability, crucial linkages to other local industries and foreign exchange saving, they should also be supported:

**Prepared Animal Feeds**

Products with key potential: dairy cattle feed, poultry feed and pig feed.

**Sugar Industries**

Products with key potential: Mill white sugar, molasses.

It is therefore concluded that the above subsectors need priority support because, crop based food industry, they have the greatest potential for achieving the industrialisation goals.

While deliberating on the results of the research and field work and the Consultant's preliminary recommendations, the stakeholders workshop developed a consensus firstly on the policy measures needed and secondly on the nature of the interactive framework within which stakeholders and the public sector will operate for the continual development of the subsector.

In general, it can be stated that the planning and statement of some of the important Government intentions (e.g. as outlined in Sessional Paper No. 2 Of 1997 On Industrial Transformation To The Year 2020) are very well articulated, but the actual implementation of these intentions is sometimes far from adequate. From the findings of the survey and review of current policies, in order to spur the development of the crop-based food industries into the next century we give some policy recommendations (in Chapter 7 below) for consideration. In our view, there is a mixture of both purely implementation and policy-review related measures that need to be taken in order to set the pace for moving the crop-based food sub-sector into the path of industrialisation by the year 2020.

## CHAPTER SEVEN

### RECOMMENDATIONS

#### 7.1 RECOMMENDATIONS REGARDING BETTER IMPLEMENTATION OF EXISTING POLICIES

From the findings of the study, specific support is required for the target subsectors by implementing already existing policies in the following areas. Although the following recommendations touch on policy that have been stated in the *1997-2001 National Development Plan and the Sessional Paper No. 2 of 1997*, lack of implementation to date have been specifically constraining the firms in the target sub-sectors.

##### 7.1.1 Raw Material Sources, And Supply Problems

It is recommended that:

- i) The Ministry of Trade in conjunction with the Monopolies Commission should eliminate the speculative controls from some sectors on some critical raw materials e.g. sugar and cereals. Removal of these forces would render these materials more readily available for use by industrial firms who use them as ingredients for manufacture of other products e.g. juices, squashes, jams and bakery products.
- ii) The Ministry of Research, Science and Technology in conjunction with the Ministry of Agriculture, Livestock Development and Marketing should strengthen agricultural research through better funding of the existing institutions particularly KARI. This will lead to a general improvement in crop productivity thus increasing the availability of quality raw materials for the sector whilst enhancing food security for the population. The possibilities of strengthening information dissemination linkages between KARI and industrial firms should be investigated. KARI should also focus on eliminating critical problems such as the citrus disease problem in the central parts of the country.
- iii) The Ministry of Finance should enforce use of variable duties to equalise domestic prices of critical food products. There should be proper implementation of controls on import and export of the staple foods especially since they are both major food items for the population and also major raw materials for industrial firms in the subsector. In the case of sugar, the State should take advantage of any possible revenue earning opportunity on imported sugar by imposing an irrevocable variable duty on the same. In order to determine the amount of variable duty to be charged, the Kenya Government's officially appointed inspection agents would determine the current CIF Mombasa price of imported sugar and the ex-factory price of Kenyan sugar and the comparison should be used to directly determine the variable duty to be imposed on the import consignments
- iv) Through adjustments in the duty structure for the vegetable oils sub-sector, there should be a continued emphasis by the Ministry of Finance on local processing of oil crops as opposed to importation of crude and refined oils.

### **7.1.2. Potential Levels Of Production And Export, And Market Orientation**

It is recommended that:

The Ministry of Trade especially through Export Promotion Council should intensify export market research and establish a more regular export market information service. This service should target the firms in the following sub-sectors: Canning and preserving of fruits and vegetables, Manufacture of vegetable oils and fats, Grain mill products, Manufacture of bakery products, Manufacture of cocoa, chocolate and sugar confectionery, Manufacture of food products NEC.

- ii) The Office of the President in conjunction with the Ministry of Trade should negotiate with Tanzanian Government on implementation of COMESA tariffs. It was reported that exported Kenyan food products are not receiving the appropriate tariff reduction in that country.
- iii) An Export Credit and Guarantee Scheme or Import/Export Bank should be established by the Ministry of Finance to encourage the firms that are satisfied that they have the export market, technology and available capacity to venture into exports. This is urgently needed by firms in the following sub-sectors: Canning and preserving of fruits and vegetables, Manufacture of vegetable oils and fats, Grain mill products, Manufacture of bakery products, Manufacture of cocoa, chocolate and sugar confectionery, Manufacture of food products NEC and Manufacture of prepared animal feeds.

### **7.1.3 Appropriate Technology For The Industry And Technological Basis**

It is recommended that:

- i) The Ministry of Industrial Development especially through the EPC, should provide advisory services on the types of technology suited to production of goods for specified export markets. This will save local firms valuable resources and expedite the process of venturing into export marketing successfully.
- ii) Whilst implementing the strategy for industrialisation, the Ministries of Industrial Development, Research Science and Technology, and Education should initiate support (e.g. through small grants) for private technology providers particularly in the vegetable oils and the canning and preservation of fruits and vegetables sub-sectors.
- iii) Kenya Industrial Research and Development Institute needs an improved financial base so as to intensify the research on technologies as per its mandate.

#### **7.1.4 Spatial Implications**

It is recommended that:

In view of the stated opportunities for establishing "industrial districts/parks", the

Ministry of Industrial Development should commission a study to investigate the potential projects for promotion in industrial districts to take advantage of economies of centralised location of industry. This is particularly important in the sugar cane and grain milling subsectors. Such information must be published and widely disseminated for the benefit of entrepreneurs in the Country.

- ii) Where there is still Government land available, the Ministry of Local Government and local Governments should avail industrial land to genuine manufacturers and not allocate it to speculators and other unrelated benefactors. Encumbrances should be placed on the titles of such parcels to restrict it to only industrial use and have a stipulated timeframe.

#### **7.1.5 Skill Levels, Training Needed And Training Modes**

- i) The Ministries of Education, Research, Science and Technology in conjunction with Ministry of Labour (DIT), industrialists in target sub-sectors, Universities and national Polytechnics should interact and jointly work towards increasing the industry orientation of the graduates.

The following recommendations touch on other currently existing policies, and they have been highlighted due to constraints currently being experienced by the firms in the target sub-sectors.

#### **7.1.6 Skill Levels, Training Needed And Training Modes**

It is recommended that:

- i) A proper training needs assessment be carried out by Export Promotion Council to establish whether or not training is needed in firms in the sub-sector if they are to penetrate the export markets.
- ii) There should be a concentrated effort by the Ministries of Education, Labour and Research, Science & Technology to increase training and learning opportunities for women in educational and training institutions in technical training subjects.

#### **7.1.7. Promotion Of Small Scale And Jua Kali Enterprises (SSJKE) Sector**

It is recommended that:

- i) The subsector should be nurtured by the Ministries of Planning and National Development and Industrial Development to safeguard its forward and backward linkage contributions to development of SSJKE. In particular, more deliberate sub-contracting initiatives for SSJKE should be encouraged.

#### **7.1.8. Privatisation of firms in the sub-sector**

It is recommended that:

- i) In order to increase exploitation of potential in the tea, coffee and sugar industries, effort needs to be made by the Ministry of Finance to increase the participation of suitable private sector operatives so as to increase efficiency as soon as possible.

#### **7.1.9. Information Dissemination to farmers**

It is recommended that:

- i) In light of current reductions experienced in Government extension services, more media channels should be licensed to expedite private information dissemination to farmers. This should be implemented by Ministry of Information and Broadcasting and the private media.

7.2 .

## **RECOMMENDATIONS FOR GoK REGARDING CHANGES IN EXISTING POLICIES**

### **7.2.1 To Facilitate Increase In Potential Levels Of Production And Change Market Orientation**

*It is recommended that:*

- i) Through reduction in duty on inputs, packaging firms should be facilitated by the Ministry of Finance to improve the quality of their products, so that they can make packaging more competitive compared to imported packaging products which is in high demand by the food industry. This is a particular problem in the canning and preserving of fruits and vegetables, and manufacture of cocoa, chocolate and sugar confectionery. The alternative in the short term, is to facilitate importation of affordable higher quality packaging material which is critically needed by the above-mentioned domestic food processors.*
- ii) The Ministry of Finance should introduce an export market testing financial facility possibly in close collaboration with the EPC for the above-mentioned sub-sectors. Such a facility will assist the firms to venture into export markets.*

### **7.2.2 To Facilitate Introduction Of Improved Technology For The Industry**

*It is recommended that:*

- i) The Ministry of Industrial Development in conjunction with the Ministry of Research, Science and Technology should establish a comprehensive industrial technology development policy that takes into consideration the urgent need to upgrade technology in the sub-sector. The policy should specifically address the promotion and dissemination of appropriate technology that has been shown to be suitable for production in micro and small enterprises.*

### **7.2.3 Requirement For Public Infrastructure, Fiscal And Other Public Policy Support**

*It is recommended that:*

- i) Telecommunications particularly telephone services should be improved and made more affordable through more competition to the current monopolistic corporations.*
- ii) Ministry of Finance should reduce or eliminate Presumptive tax since it discriminates against processors of agricultural products.*

*The Ministry of Trade should urgently support indigenous*

*industrialists, as well as reducing control of the economy by certain communities.*

- iv) There is need for the Office of the President to foster the political will to achieve the industrialisation goal by supporting the enactment and establishment of the National Industrial Development Council (NIDC).*

#### **7.2.4 Need For Financial And Budgetary Resources**

*It is recommended that:*

- i) As a deliberate policy initiative, the Ministries of Finance and Industrial Development needs to seriously address the issue of where the bulk of the industrialists will source their capital for the industrialisation process to the year 2020. For a start attractive "Industrial Development Bonds " may be floated to raise funds strictly for industrialisation purposes.*

#### **7.2.5 Enhancing Potential Additional Benefits In Linkage Industries**

*It is recommended that:*

- i) The Ministry of Finance should accord the crop based food industry subsector development priority because of the linkage it has to agriculture, the largest contributor to GDP and employment in the Country. An incentive programme for increasing commercial bank lending, e.g. through matching Central Bank cash deposit requirements with increased lending by the banks to the sub-sector, should be considered.*

#### **7.2.6.Environmental Impact And Measures To Ameliorate Environmental Damage, Spatial Implications**

*It is recommended that:*

- i)The draft Environmental Management Bill that aims to provide a comprehensive framework for addressing the different aspects of conserving our environment should be enacted as soon as possible by Parliament.*
- ii)The Ministry of Environment should facilitate dissemination of information on industrial waste treatment to enable firms to better conserve the environment.*

#### **7.2.7Raw Material Sources, And Supply Problems**

- i) In subsectors where agricultural raw material are inadequate (passion, mango, papaya, french beans, baby carrots, cucumber, courgettes, snow peas, baby onions, baby*

*corn, oil crops, wheat, white and yellow maize and rice), effort needs to be made by the Ministries of Finance and Agriculture, Livestock Development and Marketing to stimulate improved outgrower and nuclear production e.g. incentives for firms to establish nuclear/outgrower schemes. Such incentives could include tax holidays, duty and VAT waiver on inputs and other taxes.*

- ii) The Ministry of Agriculture, Livestock and Marketing should promote more use of organic fertilisers for crops so that products like juices, vegetables and vegetable oils can be made for the growing market of organic foods.*

### **7.3. RECOMMENDATIONS FOR ACTIONS TO BE IMPLEMENTED BY THE PRIVATE SECTOR**

#### **7.3.1. Potential Levels Of Production And Export, And Market Orientation**

*It is recommended that:*

- i) Firms should be transparent, giving accurate data and information to MID and MPND when requested. This is especially so on capacity utilisation because this is a useful indicator for the state of the industrial sector.*
- ii) Firms increase their efforts on identifying new markets and investigating the requirements of those markets. Wherever possible engage the services of the Export Promotion Centre.*

#### **7.3.2. Mobilisation Of Domestic Savings**

*It is recommended that:*

- i) Industrialists mobilise savings to increase investment especially where opportunities for expansion into new markets have been identified.*

#### **7.3.3. Environmental Impact And Measures To Ameliorate Environmental Damage**

*It is recommended that:*

*Products are manufactured using processes and inputs that safeguard the environment. Effluent treatment must be effected on harmful emissions before their release into the environment.*

#### **7.3.4 Fiscal And Public Policy Support**

*It is recommended that:*

- i) The private sector co-operates in the implementation of tax and other legal regulations.*
- ii) Regular participation in the SCG is required for any meaningful process to be established.*
- iii) The private sector should be ready to effect agreed suggestions from the SCG and GoK. SCG should report on specific progress by both GoK and the private sector on agreed actions.*

#### **7.3.5. Appropriate Technology For The Industry And Technological Basis**

*It is recommended that:*

- i) To enhance competitiveness of our Kenyan products, efficiency must be increased. Wasteful technologies, processes and methods need to be minimised.*
- ii) More funding for Research and development should be sought from private sector sources.*

**7.3.6. Skill Levels, Training Needed And Training Modes**

*The private sector should increase their co-operation with the training institutions by providing more opportunities for students and trainees for industrial attachments.*

**7.3.7. Promotion Of SSJKE**

*It is recommended that:*

- i) Since linkages with SSJKE are likely to be mutually beneficial to both manufacturers and SSJKE operators, more of these links should be identified and implemented.*

**7.3.8. Employment Opportunities For Women**

*It is recommended that:*

- i) The private sector should remove bias against women and offer more employment opportunities.*

**7.3.9. Reduction of Corruption**

*It is recommended that:*

*It is appreciated that corruption is a two-way process, but the private sector should take a leading role in reducing corruption. The private sector should report such cases to the Anti Corruption Authority.*