



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



XD9700022

1824.
Tables

21701

Distr.
RESTRICTED

HED/R.24
28 October 1996

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

PRIVATE SECTOR DEVELOPMENT

DG/UGA/95/002

UGANDA

Terminal Report*

Prepared for the Government of Uganda
by the United Nations Industrial Development Organization

*Based on the work of U.O. Eleazu
industrial policy specialist*

Project Manager: R. Mueller
Industrial Policies and Private Sector Development Branch

* The designations employed and the presentation of material in this document do not imply the expression of any opinion of the Secretariat of UNIDO concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of company names and commercial products does not imply the endorsement of the United Nations Industrial Development Organization (UNIDO). This document has not been edited.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
NATIONAL STRATEGY AND PROGRAMME OF ACTION FOR THE DEVELOPMENT OF THE MANUFACTURING AND INDUSTRIES SECTOR	11
<u>PART I</u>	
1.0 Foreword	15
2.0 Ugandan Economy	16
2.1 Overview of the Ugandan Economy	16
2.2 Recent Changes in the macro Economic Framework	20
2.3 Structure and Performance of the Industrial Sector	21
2.4 Constraints on Productivity and Competitiveness	23
3.0 Factors that shape a National Strategy on Industrialization	27
3.1 Introduction	27
3.2 Socio-economic Objectives	28
3.3 The Macro-economic Policy Framework	29
3.4 Implications of Changing International Economic Environment	30
3.5 Determinants of Competitiveness	31
4.0 Elements of a National Strategy on Industrial Sector Development	35
4.1 Strategic Management of Industrial Development	36
4.2 The Interactive Policy Formulation	38
<u>PART TWO</u>	
5.0 Sub system Reports and Action Plans	40
5.0.1 Introduction	40
5.0.2 Indicative Industrial Plan	40
5.0.3 Strategic Consultative Groups	40
5.0.4 Existing Strategic Consultative Groups	41
5.0.5 The Role of the Ministry of Trade and Industry	43
5.1 Food Processing Industries	45
5.1.1 Introduction	45
5.1.2 Sugar Industry	46

5.1.3	Fish Processing Industry	48
5.1.4	Grain Milling Industry	50
5.1.5	Bakery Industry	53
5.1.6	Malt Industry (Beer)	54
5.1.7	Soft Drinks Industry	56
5.1.8	Alcoholic Beverages Industry	57
5.1.9	dairy Industry	59
5.1.10	Edible Oil Industry	61
5.1.11	Fruit, Soya and Vegetable Processing Industry	63
5.1.12	Meat Processing	66
5.1.13	Animal Feeds Industry	67
5.2	Wood and Wood Products Sub Sector	70
5.2.1	Raw Materials supply for Primary Forest Industry	70
5.2.2	Primary forest Industry	71
5.2.3	Secondary forest Industry	73
5.2.4	Strategic Constraints	75
5.2.5	Strategic Directions	76
5.3	Non-Metallic Minerals Products	79
5.3.1	Number of Enterprises in Sub sector	79
5.3.2	Background and Present Situation	80
5.3.3	Problems of Existing Manufacturers	81
5.3.4	Non-Metallic Minerals and their Uses	82
5.3.5	Opportunities	85
5.3.6	Recommendations	86
5.3.7	Conclusion	87
5.4	Foundry, Basic Metals and Fabrication Industries	88
5.4.1	Introduction	88
5.4.2	Justification	88
5.4.3	Major Constraints	89
5.4.4	Action Plans	90
5.4.5	Strategies	90
5.4.6	Opportunities for Growth	93
5.4.7	Strategies to Promote Growth	93
5.5	The Uganda Textile and Garment Industry	94
5.5.1	Introduction	94

5.5.2	Problems and Constraints hindering Competitiveness	96
5.5.3	Prospects for the Future	106
5.5.4	Recommended Remedies	106
5.5.5	Conclusion	112
5.6	Leather and Leather Products	114
5.6.1	Introduction	114
5.6.2	Stakeholders	114
5.6.3	Major problems Facing the Sub Sector	115
5.6.4	Market Potential	115
5.6.5	Strategic Directions	116
5.6.6	Action Plans	116
5.6.7	Conclusions	117
5.7	Paper and Paper Products including Printing & Publishing	118
5.7.1	Background	118
5.7.2	Overview of the Market	119
5.7.3	Export Market	120
5.7.4	Conclusion	120
5.7.5	Constraints to Growth	121
5.7.6	Action Plan: Suggestions - Summary Matrix	122
6.0	Action Plan and Programmes to Implement the National Strategy on Industrialisation	126
6.1.1	Uganda is a High Cost Country	126
6.1.2	Liberalisation	127
6.1.3	Technology Issues	127
6.1.4	Issues relating to Local Raw Materials	128
6.1.5	Taxation Issues	129
6.1.6	Financial/Credit Issues	130
6.1.7	Human Resources Development	130

6.2	Strategic directions for Selected Sub Sectors	131
6.2.1	Agro-Food Processing Industry	131
6.2.2	Forest Resources	133
6.2.3	Non-metallic Minerals	133
	Footnotes	134
	Bibliography	135
	Annexes	136

INTRODUCTION

The present UNDP funded Private Sector Development Project (PSDP) became necessary as an attempt to assist the Government of Uganda and the Ugandan Private Sector to coordinate the numerous private sector development programmes and projects being offered by several development partners, and to adopt a holistic approach to solving the litany of problems and challenges confronting the private sector. It also called for developing sectoral strategies and action plans and programmes which can be presented to donors.

It was against this background that UNIDO was approached to participate in the project by implementing the industrial sector aspects of the project. This called for assistance in setting up a consultative mechanism for policy/strategy formulation using the SMID approach.

It will be recalled that this project was preceded by two other projects funded by UNDP and executed by UNIDO, which have direct relevance to the introduction of the interactive policy process in the industrial sector i.e. DP/UGA/90/12 - **Indicative Industrial Plan Project** and XA/RAF/94/644 - **Preparation of the Basic Framework for a Programme to apply SMID in Uganda**.

Terms of Reference: A number of items in the TOR of the present mission had been undertaken during the earlier projects. The various sub-sectors had been identified, and diagnostic studies conducted by both national and international consultants. In fact a workshop to introduce the concept of SMID was then held. A few sub-sectoral associations were formed and registered (non-metallic minerals, and leather). Some already had ongoing associations (Uganda Oil Seeds Processors Association, Grain Miller Association, Uganda Bakers Association) which could be building blocks for Strategic Consultative Groups (SCGs). What remained (and what could not be achieved under XA/RAF/94/644) was to organize the SCGs and implement the interactive consultative process based on the diagnostic studies from the IIP Project.

The Consultant arrived a few days after a national workshop to inaugurate the Private Sector Development project to both government and the private sector stakeholders. In that workshop, an official of the Ministry of Trade and Industry covering UNIDO activities - Mrs. Jane Mambule, made a presentation on the achievements of the IIP and a brief description of the basic elements of SMID. At the workshop it was generally agreed that the interactive policy process should be applied to the other sectors while it was being elaborated for the industrial sector. In the circumstance, the terms of reference was modified as follows:

1. Prepare and present a keynote paper on Strategic Management of Industrial Development (SMID) approach to the inaugural meeting scheduled for 18 April 1996.
2. Give guidelines on the process and facilitate the formation of sub sectoral groups of the manufacturing sector.
3. Guide and assist the Technical Support Group in reviewing and finalising the preparation of sub-sectoral paper from the Indicative Plan.
4. Analyze the problems and solutions discussed in the sub-sectoral meetings and provide expertise to the project on SMID.

5. Prepare an industrial Strategy, a plan of action with a Budget arising from the findings and recommendations of the sub-sectoral consultative meetings.

These cover items no. 4-10 of the original TOR. As a result of meetings with the Ministry of Trade and Industry, this report will also cover items 12-14 of the TOR.

Output of the Industrial Sector component of the PSDP.

1. Industrial sub-systems selected and SCGs formed and functioning with guidelines provided by the consultants.
2. Strategic constraints on competitiveness identified for each SCG. Opportunities for growth and strategic directions mapped out; action plans and recommendations drawn up.
3. Consolidated National Strategy and programme of Action for the Development of the Manufacturing/Industrial sector in Uganda.

(See one volume report attached as Annex to this report).

Premises of the PSD Project

- * Seeks to build on what exists, promotes complementarity and encourages collaborative efforts;
- * Emphasizes capacity building at all stages and ensures participatory formulation and implementation process of policies, programmes and action plans, and that this process is internalized;
- * Enables the private sector, the Government, and development partners with the same objective to evolve a shared vision and shared responsibilities for its attainment;
- * Broadens the focus of economic planning to micro-economic development issues;

Objectives of the Programme:

- * Support the formulation of a National Strategy for private Sector Development;
- * Develop a focused programme and plan of action for Private Sector Development;
- * Mobilize the necessary resources;
- * Provide short-term interventions in selected critical areas; and provide a report that will lead to the preparation of a Programme Support Document on Private Sector Development and Poverty alleviation.

Implementation Strategy:

- Manufacturing/Industrial Sector with the Uganda Manufacturers Association (UMA) as the lead agency.
- Agriculture and Rural Sector with the Agricultural Policy Committee Secretariat, Bank of Uganda as the Lead Agency;
- Financial Sector with the Development Finance Department of Bank of Uganda as the Lead Agency;
- Uganda Tourist Sector with the Uganda Tourism Board as lead agency;
- Informal, Micro and Small Enterprises Sector (IMSE) directly under a project coordinator in the office of PSDP.

This consultant was, therefore, attached to the Lead Agency - UMA, with two national counterparts (one from UMA, and the other from the Ministry of Trade and Industry because of the antecedents as mentioned earlier).

II. Project Activities

II.1 *Launching of the Consultative Process:*

As mentioned earlier, the consultant arrived in Kampala a few days after the Inaugural Workshop for the Private Sector Development Project. The programme of work and time schedule was already set and the national strategy paper was expected at the end of July. After briefing by the local project management, it was agreed to reconvene the workshop sub-sectors. A technical committee meeting was held with the remaining IIP staff from Ministry of Trade and Industry who now served as facilitators for the sub-sectoral groups. The IIP studies had to be assembled and discussion briefs prepared for the meetings of the SCGs. Relevant enterprises and government departments/agencies were identified to be invited to the SCG meetings. The PSD Project established and staffed the Management Support Unit with a Manager and a Secretary. Both were housed at UMA also. The IIP staff from the ministry also constituted the nucleus of the Technical Support Unit as follows:

Foods and Beverages	-	Michael Lubowa (MTI/UMA)
Textiles and Wearing apparels	-	Cyprian Batala (MTI)
Leather and Leather Products	-	Jane Mambule (MTI)
Paper and Paper Products	-	Sarah Sonko(MTI)
Wood and Wood Products	-	Robinah Sabano (MTI/UMA)
Non-Metallic Minerals	-	Fredrick Rwahwire (MTI)
Electrical Machinery and Apparatus	-	Charles Mata (MTI)
Basic Metals and Fabrications	-	John Ssenyonjo (MTI)
Foundry Industry	-	Ben Muziriga Kakuru (MTI)

Tobacco Industry	-	Kapasi-Kakama (MTI)
Chemicals and Chemical Products	-	Edith Nsajja Mwanje (UMA)
	-	Sarah Kitakule (UMACIS)

It was envisaged, at the project inception stage, that other government institutions such as Uganda National Bureau of Standards, would also form part of the TSG. However, due to current low capacity and capability of many of these institutions, it was not possible to have them fully represented on the TSG. However, for purposes of consultations, these institutions always attended SCG meetings where possible.

II. Strategic Consultative Group Meetings:

Although seventeen sub sectors had been studied under the IIP project, they were not all considered for the SMID process. In order to group them into consultative groups, we considered:

- the objectives of government policy in the industrial sector;
- the number of players-stake holders in the sub-sector, and
- whether Uganda has a natural comparative advantage to start with.

Besides, packaging industries were allowed to join other SCGs most relevant to their products or raw material - glass, wood, plastic, paper, etc. Among the industrial objectives considered, the following were given more weight.

- create inter and intra sectoral linkages;
- diversify export base and/or reduce imports;
- job creating and fostering acquisition of new skills;
- facilitate the use, adaptation and transfer of advanced technology.

Based on the above, the following SCGs have been formed. Where associations were already in existence, the SCG was built around them. In the case of Agro/Food processing Sub sector, we had to allow sub-sectors to hold separate meetings and report at the enlarged sub-system level.

1. Food Processing industries incorporating

- Grain Millers Association
- Uganda Oil Seed Processors Association
- Uganda Bakers Association
- Sugar and Confectioneries
- Fish processors and exporters Association
- Tea, coffee processors
- Malt, Beer and soft drinks, spirits and wine

2. Leather and Leather Products

3. Wood and Wood Products incorporating Uganda Forest Industries Development Association (UFIDA), Saw Miller Association.
4. Textiles and Wearing Apparels
5. Paper and Paper Products (including printing and publishing)
6. Non-Metallic Minerals Products Association
7. Foundry, Basic Metals and Metal Fabrication Group incorporating Uganda Metal Industries Development Association (UMIDA)

A Strategic Consultative Group is more than just the manufacturers. Whereas the manufacturers or processors form the core of the group, each SCG includes upstream operators, (suppliers of raw materials and other inputs) downstream operators (users of their products as inputs, suppliers of essential services e.g. Transport, packaging materials, etc.; the representatives of relevant government ministries - Agriculture, Natural Resources, Finance (Customs or URA) etc.; Ministry of Trade and Industry (Technical Support Unit) and relevant government support institutions e.g., Uganda National Bureau of Standards, National Council for Science and Technology (Industrial Research Technology Development and Adaptation, etc.) The problem, however, was that some of the Government support institutions either do not exist as yet or are very weak and could not contribute effectively.

In order to kick-off the dialogue and consultative process each SCG was given the diagnostic studies done under the Indicative Industrial Plan project as a working document.

As stated earlier, their function was to discuss the findings of the study. The private sector participants were expected to bring their own knowledge, perspectives and practical experience to bear on the discussions. Government representatives could clarify existing policies or legal provisions as they touch on issues being discussed. The outcome of the dialogue was then structured as follows:

1. Nature of the sub-sector, importance to the economy, contribution to achievement of the industrial objectives, and the market-orientation of major actors;
2. Problems and constraints to competitiveness
 - cost related
 - product related
 - market related
 - technology related, etc.
 - policy/regulatory environment
3. Opportunities, comparative advantage, if any, and new investment prospects to enhance sub-system competitiveness;

4. Action to remove the constraints arranged according to those that can be tackled at enterprise level, at sub-system level or at the level of the government;
5. Specific needs for technical assistance.

At the end of this exercise, the report from the various Strategic Consultative Groups will be submitted to the national body representing manufacturers where the action plans, programmes and recommendations will be coordinated so as to eliminate areas of overlap. This results into a national strategy paper which is then taken to the national Forum organized by the Private Sector Foundation and the president's office for final ratification.

The first meeting of each SCG was used to explain the main elements of the interactive policy process (SMID) and explain the Terms of Reference for SCGs. After that, they elect their Chairman, Secretary and technical working group. These technical working groups met more often to produce a draft for discussion at the main meeting. Most of the SCGs had at least three, some five meetings before arriving at the submission in the Annex. At each meeting the TSG facilitators and the consultant were on hand to guide the discussion.

Some problems and constraints on SCG meetings

- Although the Management Support Unit (MSU) dutifully invited members by letters and follow-up phone calls, and in some cases visits, it was not always possible to have the same personnel attending all meetings consecutively. Some large companies (major stake-holders) would not attend meetings but surface at the national workshop - which has higher profile to bring up issues that should have been sorted out at SCG meetings. In the final analysis, the outcome of the discussions were of varying quality and sophistication depending on the level of knowledge and understanding of the issues involved among participants.
- Some public officials invited did not see it fit to attend "due to other pressing matters". It was noted that in those SCGs where a full compliment of public and private sector participants were present, discussions were more fruitful and lively. Often the small and medium-scale operators were more enthusiastic in using the forum offered by the SCG to be heard.
- As will be discussed presently, more expertise is needed from the TSG but at present, the Ministry of Trade and Industry can not afford such expertise.

III. Technical Support Group and the Role of the Ministry of Trade and Industry

Instituting a National Coordination Body:

The interactive policy process requires a national body to coordinate the output of the consultative process in SCGs into a coherent national strategy and action plan, and also to play an advocacy role on behalf of industrialists. In Uganda, there already exists the Uganda manufacturers Association to which most of the manufacturing companies already

belong. As mentioned earlier, there were some sectoral associations already in existence and affiliated to UMA. But there were one or two (e.g. Uganda Leather Industries Association and Forest Industries Development Association) which had developed outside UMA.

In addition, with assistance from USAID, UMA and the Presidential Economic Committee had organized annually since 1993 a (Presidential) National Forum on Strategic management of investment and Export Growth. These fora brought together business leaders and top policy makers to discuss some of the constraints on attracting foreign investment into the country and other issues.

As the assistance from USAID was coming to an end (1995), the World Bank came in with a project to improve the competitiveness of the private sector. In order to provide for proper coordination for the private Sector Competitiveness project, the World Bank supported and assisted in establishing a Private Sector Foundation (August 1995) whose major objectives are:

- "To serve as the focus for the ugandan private sector in advocating policies to promote its long-term development;
- To build and strengthen the existing dialogue between the government and the private sector;
- To take responsibility for implementation of the Private Sector Competitiveness Project, on behalf of the Government of Uganda; and
- To coordinate various efforts and initiatives, including those supported by donors, for private sector development"¹

Further, it is expected that" the Private Sector Foundation in its advocacy role, will take up policy reform priorities identified by the private sector and by the National Forum (a joint public-private sector policy group) and undertake or commission the preparation of detailed proposals for new legislation to put the needed reforms in place."²

In effect, both the Private Sector Foundation and the National Forum as institutionalized, serve the functions that would have been assigned to the SMID National Coordinating Body. The Consultant and the project Manager of the UNDP/PSDP met the Executive Director of Private Sector Foundation and discussed the structure, objectives and functioning of SMID in the industrial sector. It was agreed that it would be superfluous to establish another National Coordinating Body, especially as all the SCGs and sectoral association are either members of UMA or its affiliates. The output of the SCG

¹ Republic of Uganda: Private Sector Competitiveness Project, Project implementation Plan P.32

² ibid

consultative activities will be coordinated by UMA Secretariat for onward transmission to Private Sector Foundation and the National Forum for final deliberation and legitimation.

Besides, the Chairman of UMA, is also the Chairman of PSF and other key stake holders in UMA have interlocking memberships in organizations that are members of the PSF. The accompanying diagram depicts the emerging institutional aspect of the interactive policy process seen from the point of view of private sector.

Capacity Building aspects:

in the description of services to be performed by the implementing agency (UNIDO), it included training for 15 Ugandan nationals on strategic policy formulation. Apart from members of the TSG, the leaders of the various SCGs were put through the process of discussing determinants of competitiveness, and then examine the constraints and problems in the light of the determinants. Although no specific classroom sessions were held for the purpose, it was more of learning by doing. Over 35 individuals benefited by this process. According to an assessment report by the Head of the Management Support Unit, officials of UMA and the Ministry of Trade and Industry testified that they have gained a lot by the interaction which took place in the SCGs.

However, there are two areas in which a more focused capacity building assistance is still needed:

- 1) in the Ministry of Trade and Industry, especially in its role to provide technical support services needed in the consultative process as well as providing support in the area of information - technology, markets and products.
- 2) In Uganda Manufacturers Association to sustain the consultative process, and broaden the base of participation (the present exercise has been mainly urban based, and around - Entebbe - Kampala - Jinja axis). See annexe II.

TECHNICAL SUPPORT GROUPS AND MINISTRY OF TRADE AND INDUSTRY

The Ministry of Trade and Industry and the parastatals under it is the arm of government most concerned with developing the industrial sector. In fact, the statutory mandate of the Ministry is;

- to promote and facilitate the expansion and diversification of trade with particular emphasis on export promotion;
- to facilitate the effective marketing of commodities;
- to promote ecologically sustainable industrialization;
- to promote and facilitate the development and adaptation of appropriate technology;

- to facilitate the growth and proper functioning of the Co-operative movement through measures that enhance efficiency, transparency, and accountability in the operations of Unions and Primary Societies;
- to ensure quality products and consumer protection by providing National Standardization and Quality Control services.

In January 1995, all public industrial and trading enterprises falling under the ministry were transferred to the Privatization unit of the Ministry of Finance for divestiture. Furthermore, the field operations of the ministry in the area of cooperative development, marketing, trade and industrial development were decentralized to District Administration (local Government). Along with trade liberalization and deregulation, the various commodity marketing monopolies have been dismantled and in their place development boards were created (Cotton Development organization and Coffee Development Authority so far).

All these changes have left the Ministry with fewer functions. Later in 1995, an attempt was made to reorganize the Ministry into three directorates and two supporting departments, as follows:

- Directorate of Industry and Technology
- Directorate of Foreign Trade
- Directorate of Cooperatives and Marketing
- Department of Finance and Administration
- Department of planning.

In addition, the Uganda National Bureau of Standards (UNBs) and the Cooperative College are the two surviving extra-ministerial institutions still operating under the umbrella of the Ministry. A Cabinet memo and draft bill to provide a legal framework for an industrial Research Institute has passed through the Cabinet and awaiting passage through parliament. The pilot Growth (Industrial Development) Centres at Mbarara and Mbale passed on to the respective Districts under the Decentralization policy of the Government Growth. In order to provide policy direction and promotion of other centres, it is being recommended to recreate posts of Industrial Development Officers under a new Small-Scale Industries Department within the Directorate of industry and Technology. These will coordinate district industrial development programmes.

The Ministry is also proposing to carry out industrial opportunity survey of all the districts so as to establish baseline data as to the comparative advantage of each area of Uganda, and the need for the type of assistance to be provided by the new type of Industrial Development Centre.

The functions of the various Directorates are in a state of flux as each is still trying to work out a modus operandi with the private sector. Under the SMID which has now been fully established, the functions of the Directorate of industry and Technology has to be redefined to include the functions of the Technical Support Group. In fact, the core of the TSG should be the Directorate of Industry and Technology. Ideally, there should be three

facilitators for each SCG - one on trade related issues (from the Directorate of External Trade), one engineer/technologist on production related issues and an economist or policy analyst conversant with the emerging trade environment requiring very specialized knowledge and which ought to be internalized in the Ministry and available to the Technical Support Unit. Otherwise, the Ministry will find it difficult to perform the new role of facilitating and supporting the private sector.

The problem is that the full complement of the right calibre of staff is not now in the Ministry, and it is difficult to recruit such talents given the incentive structure in the public service. The need for capacity building in the Ministry is realized but it was noted that this has to go hand in hand with job enrichment and enhanced incentives.

A list of areas for assistance is attached as an Annex II.

**NATIONAL STRATEGY AND PROGRAMME OF ACTION
FOR THE DEVELOPMENT OF THE MANUFACTURING
AND INDUSTRIES SECTOR**

FROM

UGANDA MANUFACTURERS ASSOCIATION

UNIDO Consultant

Uma O. Eleazu

National Counterparts (UMA)

Edith Mwanje

(MTI)

Jane Mambule

Management Support (UMA)

Robinah Sabano

SCGS - TECHNICAL WORKING COMMITTEE**FOUNDRY, AND BASIC METAL PRODUCTS SUB SECTOR:**

NO.	NAME	ORGANISATION	
1.	Dr. Joseph Byaruhanga	Makerere University	(Chairman)
2.	Mr. Mukesh Shukla	Shumuk Group of Companies	(Secretary)
3.	Mr. Senyonjo John	MTI	(Facilitator)
4.	Mr. Muziriga Kakuru	MTI	(Facilitator)
5.	Mr. Saasa A. Richard	DIT	
6.	Ms. Nalumansi Sarah	UMA	
7.	Mr. Nkoyoyo Martin	UGMA/GESP, Lugazi	
8.	Mr. Bhatnagar Rakesh	Alam Group	
9.	Mr. Watmon R.	Tumpeco Ltd.	
10.	Mr. Srikanth N.	Uganda Baati Ltd.	

WOOD AND WOOD PRODUCTS SUB SECTOR

NO.	NAME	ORGANISATION	
1.	Mr. John Carvalho	Techna Saw Mills	(Chairman)
2.	Mr. Bob Bukwirwa	Arbo Construction	(Secretary)
3.	Ms. Robinah Sabano	MTI/UMA	(Facilitator)
4.	Mr. D. Ruyooka	Forestry Department, MUK	
5.	Mr. Billy Kagaaga	NH&CC	
6.	Mr. Tusabe Denis	B.M. Technical Services	
7.	Mr. N. Serwada	Tasekererwa Timber Works	
8.	Mr. Katumba Charles	Katumba Furniture workshop	
9.	Mr. David Wakudumira	Jinja construction & Joinery	
10.	Mr. Manzur Alam	Alam Group of Companies	

CHEMICAL AND CHEMICAL PRODUCTS SUB SECTOR

NO.	NAME	ORGANISATION	
1.	Mr. R. Patel	BPC Chemicals Ltd	(Chairman)
2.	Mr. Julius Emomeri	Eje Enterprises	(Secretary)
3.	Ms. Edith Nsajja Mwanje	UMA	(Facilitator)
4.	Ms Sarah Kitakule	UMACIS	(Facilitator)
5.	Mr. Joseph Akol	UCIL	
6.	Mr. Kaggwa Joe	Jopharm Dispensers	

PAPER AND PAPER PRODUCTS SUB SECTOR

NO.	NAME	ORGANISATION
1.	Mr. Ralph Nyakabwa-Atwooki	PAPCO (Chairman)
2.	Mr. Emomeri Julius	Eje Enterprises (Secretary)
3.	Ms. Sarah Ssonko	MTI (Facilitator)
4.	Ms. Agatha Babumba	Aristock Booklex
5.	Mr. Kigenyi Moses	Associated Paper Industries
6.	Mr. V.B. Bbale-Mugera	Oscar Industries
7.	Mr. Sentongo Benon	New Era Printers
8.	Mr. Lwanga John Bosco	Transuga Art & Craft

FOOD AND BEVERAGES SUB SECTOR:

NO.	NAME	ORGANISATION
1.	Eng. Peter Wakabi-Kigongo	Greenfields (U) Ltd (Chairman)
2.	Mrs Gudo Ahhwali	Ankole Unga Ltd (Secretary)
3.	Mr. Lubowa Micheal	MTI/UMA (Facilitator)
4.	Mr. Mutumba Charles	Gramu General Merchants
5.	Mr. Kyeyago David	Uganda Grain Milling Co.
6.	Mr. Mukalazi Remegio	M. Products & General Merchants Ltd.
7.	Mr. Musisi	Kampala Jellitone Suppliers
8.	Mr. Bisaase Mambule	Ntinda Spices
9.	Mr. Bengo Micheal	Uganda Wet Coffee Processors Association
10.	Mr. Borel Philip	Greenfields (U) Ltd
11.	Mr. Omojong Patrick	UFPPEA

LEATHER AND LEATHER PRODUCTS SUB SECTOR:

NO.	NAME	ORGANISATION
1.	Mr. Becheter	BATA (Chairman)
2.	Mr. Mwebe Emmanuel	UNIDO (Secretary)
3.	Mrs Mambule Jane	MTI (Facilitator)
4.	Mr. Debebe Hailu	DAAS
5.	Dr. N.T. Ndyanabangi	MAAIF
6.	J.B.P. Edian	Maaif
7.	Mr. Mutebi Godfrey	Expert Shoe Mbarara
8.	Mr. Kityo Saul	MAAIF

9.	Mr. Karim Rauf	UNEEK
10.	Mr. Shiraz Chatur	LIU
11.	Mr. Gopal B.	LIU
12.	Mrs Ndyabagye Elizabeth	Universal Sports Ltd.
13.	Mrs Kamanyi Judy	Interior Options

TEXTILES AND WEARING APPARELS SUB SECTOR:

NO.	NAME	ORGANISATION
1.	Mr. Eyasu Sirak	Eladam Enterprises (Chairman)
2.	Mr. Shiraz	Uganda Blankets (Vice Chairman)
3.	Mr. Balyejusa James	Innula Silk Estates (Secretary)
4.	Mr. Batala Cyprian	MTI (Facilitator)
5.	Ms. Annet Kizza	Minnet Fashion Designers
6.	Mr. Kisambira James	Lake Victoria Fishing Ind. Ltd
7.	Mr. Buyondo Sagiti Moses	Tutuuse Stores Ltd
8.	Mr. Praful Patel	ATM, Mbale
9.	Mr. Premel Bhatt	Nytil Picfare Ltd.
10.	Mr. Waneloba Micheal	Y.K. & Sons
11.	Mr. Kayondo Fred	Cred General Merchants
12.	Mrs Mugambi Lydia	Lydia Art Works

ELECTRICAL APPLIANCES SUB SECTOR:

NO.	NAME	ORGANISATION
1.	Mr. Mata Charles	MTI (Facilitator)
2.	Mr. Kagolobya G.S.	Uganda Electricity Board
3.	Mr. Lwanga Charles	Lwanga Electrical and Electronic Machines Ltd.
5.	Mr. Kironde Sam	Business Systems Ltd
6.	Mr. Balaram J. Swamy	Best Buys (U) Ltd.
7.	Mr. Katimbo Ronald Paul	Mukono Electrical Service

PART ONE

1.0 FOREWORD

Uganda is a country that is making a fresh start. When the present (National Resistance Movement) regime came to power, it quickly realised the need to re-establish nationwide peace and stability, law and order without which no development can be possible. On the economic front, it adopted the policy document *The Way Forward* designed to create "an independent, integrated, self sustaining economy". *The Way Forward I* laid down the macro-economic policies while *The Way Forward II* elaborated on the sectoral programmes and projects to realize the goal of self sustaining economic growth.

Quite apart from the political upheavals and years of misrule, the economy in general, and the industrial sector in particular suffered from all the ills associated with state led economic growth and import substitution strategy. The problems of the 70s and early 80s only served to exacerbate them. The result was total failure of the public sector, a heightened pauperization of the populace, a dislocated and dilapidated infrastructure, and an economy dominated by the informal, subsistence, non-monetary sector. This is also the background that gave opportunity to the NRM Government to more less make a fresh start.

The government quickly realised that what was needed was not just structural adjustment but a major restructuring and rehabilitation of both the public and private sector. Years of war and misrule had debilitated what was once an efficient civil service. Because of the severe resource constraints, and the condition of the public sector, government decided that "the focus of Government planning must increasingly be on designing suitable Government policies (at these macro-economic, sectoral and sub-sectoral levels) in order to promote private sector initiative and to promote and environment conducive to private sector investment". In the industrial sector, the government noted that it had "inherited an out dated, inefficient industrial sector" and decided that those whose productive capacity were obsolete must be closed down, while those which had chances of rehabilitation will be rehabilitated and privatised.

In effect, the government decided on a more participative approach to managing national resources, an approach in which the private sector will become the "engine of growth". But the private sector was as devastated as the public sector. It was not just that physical structures - plant, machinery, buildings - were destroyed, or allowed to decay as a result of no operation, the private sector confidence had eroded to the point where the time horizon for investment could be only a matter of days. Banks and financial institutions had also lost credibility. It is in this context that government sought assistance from several quarters to rebuild the fabric of the society and the economy, and to assist in capacity building in both the public and private sectors.

This UNDP funded Private Sector Development aims at assisting the private sector to organise itself (both individual firms within it and business associations) to contribute effectively to efficient management and utilisation of national resources. It is a recognition that an efficient and dynamic private sector is a necessary condition of national economic growth.

To this end there had been laudable initiatives by several bilateral and multilateral agencies. The present UNDP funded Private Sector Development aims at developing a coherent National Strategy and Action Plans through dialogue between the Private Sector, Government, NGOs, and International Development Partners which result in a strengthened private sector as well as a more efficient national resource management.

Strategic Management of Industrial Development and the Indicative Industrial Plan

In order to strengthen the capacity of the manufacturing private sector in formulating and implementing executable action plans in respect of their industrial restructuring, the Government had requested UNIDO for assistance in formulating strategies for industrial restructuring. It was also expected that a comprehensive set of policies for the development of the sector and its constituent sub-sectors should be developed. SMID with its interactive policy process of consultation, joint planning and dialogue helps to build up capacities both in the public and private sectors in the formulation and implementation of development plans.

2.0 THE UGANDAN ECONOMY

2.1 Overview of the Ugandan Economy

The Ugandan economy is still very much dependent on agriculture. Both the monetised and the non-monetary agriculture contribute 60-65% of GDP. Coffee and tea contribute 35% to foreign exchange earnings. In terms of employment in the modern sector, agriculture and processing of agricultural produce in the modern sector account for 80% of total employment. Uganda has fertile soil and a range of climatic conditions which makes it possible to have all year round planting and harvest of one type of crop or another. However, this natural advantage has not been fully exploited.

Since 1987, the industrial sector has been recovering from years of devastation, neglect and bad management. It accounts for a minuscule 5-7% of GDP (7.09% 1993/94). However, the growth rate is quite encouraging ranging from 7.5% in 1989/91 to 18.9% in 1991/92, falling off in 1992/93 (6.6%) and rising again to 14.7% in 1993/94. This is attributable to enhanced utilisation of idle capacity due to the liberalisation of the exchange rate and de-regulation of unnecessary controls to importation of raw materials and spare parts. Although Uganda is said to have deposits of various minerals, mining has not made much impact on GDP. Even with the liberalised investment climate, not much investment has flowed into that sector. Much of the activity in that sector is still in quarrying of limestone for cement, and

associated minerals, kaolin and some gypsum. Its contribution to GDP range from 0.09% in 1987/88 to 0.32 in 1993/94. Because of the restoration of peace, and law and order in most of Uganda, the Tourist Industry shows promise of growth. Although there are no reliable data on the number of tourists visiting the country, Hotel and Tourism's growth rate has gone from a negative of -12.5% in 1984/85 to 11.6% in 1986/87. Its contribution to GDP has been inching up from 1.09% (1987/88) to 1.41 in 1993. Table 2 shows the growth rate of the manufacturing sector 1987-1993/94.

TABLE 2.

GROWTH RATE OF THE MFG SECTOR

1987/88	17.0
1988/89	9.3
1989/90	7.5
1990/91	9.2
1991/92	18.9
1992/93	6.6
1993/94	14.7
Average	11.9

On the whole, as a result of the policies of the EPR and the subsequent Rehabilitation and Development Plans 1993/94 - 1995/96, the economy has experienced a healthy growth averaging 5.4% per annum for the period 1987 - 1993. Per Capita GDP has also risen from a negative of -2.0% to 3.8% in 1993, averaging 2.4% per annum over the same period. Table 2.1 shows the contribution of various sectors to GDP. Table 2.2 shows growth rates in GDP and per capita GDP.

TABLE 2.1

CONTRIBUTION TO GDP BY INDUSTRY GROUP (GDP AT FACTOR COST (1991 CONSTANT PRICE) (% OF TOTAL))

Industry Group	1987/88	1990/91	1991/92	1992/93	1993/94
Agriculture	23.8	24.2	23.92	4.28	24.21
Mining and Quarrying	0.09	0.29	0.3	0.32	0.32
Manufacturing	5.32	5.76	6.62	6.5	7.09
Electricity and Water	0.9	0.86	0.91	0.89	0.98
Construction	5.3	5.16	5.17	5.21	5.64

Wholesale Trade/Retail	10.75	11.17	11.75	11.84	12.27
Hotel & Rest/ Tourism	1.09	1.25	1.35	1.37	1.41
Transport & Comuncation	4.02	4.14	4.18	4.13	4.18
Community Services	14.18	14.92	15.67	15.46	15.6
Nonmonetary Economy	34.5	32.14	30.06	29.95	28.34
Total	+				

Source: Bureau of Statistics, MOFEP.
Statistical Bulletin, No. GDP/5 (1995)

TABLE 2.2

TOTAL AND PER CAPITA GDP

YEAR	TOTAL MILL. SHS.	% CHANGE	PER CAPITA	% CHANGE
1986	1,546,485	0.9	105,282	2.0
1987	1,645,715	6.4	109,024	3.6
1988	1,760,852	7.0	113,450	4.1
1989	1,875,655	6.5	117,463	3.5
1990	1,984,492	5.8	120.807	2.8
1991	2,092,821	5.5	123,836	2.5
1992	2,194,187	4.8	125,389	1.3

1993	2,350,910	7.1	130,151	3.8
Average growth rate %		5.4		2.4

2.2 Recent Changes in the Macro economic Framework

The NRM early in its administration adopted an Economic Recovery Programme whose main thrust was to rehabilitate the economy and lay a foundation for sustainable economic growth as a necessary condition for further socio-economic development and poverty alleviation. The government recognised that political problems had been exacerbated by external economic issues; basically the problem with the economy was “a lack of sound economic policies”. It therefore sought to enhance the performance of the productive sectors by tackling problems associated with critical infrastructure on which the performance of these sectors depend; a systematic reduction in the rate of inflation by pursuing rational budgetary restraint, reducing the level of budget deficits and introducing a more flexible exchange rate management regime.

Key elements in the reform strategy include :

- a) Export promotion to increase the capacity of the economy to generate from domestic sources the foreign exchange required for economic growth;
- b) Reform of agriculture, especially the deregulation of export of cash crops by eliminating the parastatal monopolies in the marketing of these produce. The farmer receives better price for his produce and thus given incentive to produce more;
- c) Foreign investment promotion so as to compensate for shortfalls in domestic savings and investment. In this regard an Investment Code has been enacted, and the Uganda Investment Authority set up to implement it. Also the issue of Asians who were expropriated has been settled and most have got back their factories.
- d) Reform of government budgetary system to enhance revenue mobilisation and control of expenditure. The Uganda Revenue Authority has been set up to rationalise tax policies and revenue mobilisation.
- e) Reduction in the level of inflationary pressure arising from excessive money supply. The Bank of Uganda is exercising more discipline on the banking system to restore positive real interest rates in order to stimulate savings.

Later these policies were continued in The Way Forward 1990-1995, supplemented by the Rehabilitation and Development Plan 1993/94 to 1995/96. The main elements of the macro-economic strategy were:

- a) Resource Mobilisation
- b) Price and exchange rate stability and;

- c) Export promotion. The Government stated specifically that “Because of the state of the civil service and the structure of the economy, the role of Government Policy had to be to ‘facilitate’, or ‘enable’ change in the economy”. This of course meant that there had to be further structural and institutional changes and adaptation. It also restated its overall objective of “building an independent, integrated and self sustaining national economy”.

The Medium Term Structural Adjustment Programme 1993/94- 1995/96 has further liberalised the economy. Although government is withdrawing from active ownership of enterprises, it is however concentrating investment resources in those areas where only government can play a leading role. In the meantime, bureaucratic bottlenecks to private investment are being removed, and tax policies and tariffs are being fine tuned. Inflation has been reduced considerably to a single digit.

2.3 Structure and Performance of the Industrial Sector

The Census of Business Establishments (1989) revised (1992) lists 1642 establishments in the manufacturing sector, with a total employment of 53092. The sub sector with the highest employment was coffee processing (221 firms employing 11,097) followed by textiles (9 firms employing 4378). However, of the total, those employing 5-9 accounted for 698 establishments while 436 fall under 10-19 employees. In other words, many of the firms (68.9%) would fall under what will be described as Small and Micro enterprises. If we regard those employing 20-49 (343 firms) and 50-99 (103 firms) as Medium Scale.

Industries, that will give a total of 1580 establishments in the SME Sector, representing 96% of total. (See Table 2.3 - Annex)

In the sixties and seventies a number of expatriate companies, mainly British and Asian were active in the industrial sector. The government through the Uganda Development Corporation (UDC) was also involved in a number of industrial enterprises. So most of the medium to large scale industries were either public enterprises or foreign owned. When the Asians were expropriated in the 70's a number of Ugandans came into possession of some of these industries. However, as part of creating an enabling environment for private sector investment, most of these industries have been returned to their former owners, while government is privatising its holdings in those established by UDC.

**SPATIAL DISTRIBUTION OF MANUFACTURING
ACTIVITY AND EMPLOYMENT**

<u>Area</u>	<u>No. of Establishments</u>	<u>Employment</u>
Uganda (Total)	1646	53902
Central Region	963	34767
Eastern Region	309	10950
Northern Region	128	1765
Western Region	246	6420

Majority of the industries are currently concentrated in three urban districts of Kampala (564), Mukono (105), Jinja (113), Mpigi (95), Masaka (88), Mbale (72) and Mbarara (74). These are the areas with relatively well developed infrastructure and access roads. A few have located in Mukono and Jinja area because of nearness to their source of raw materials also.

The index of industrial production (See Table 2.4) show the efficacy of the policies adopted under both the EPR and the RDP. Although as would be expected, growth rates differed from sector to sector depending on the existing level of excess capacity, the condition of the technology in use and the quality of management. From a base of 100 in 1987, only Textile and Clothing declined considerably to 67%, while Leather and Leather Products, after a sluggish beginning increased by 60%. The strong growth sectors are Chemicals and Paint (522.2), Steel and Steel Products (451.8), Food Processing (356), Timber, Paper and Printing (381). The problem in the Textile Sector as will be discussed later is not unconnected with technological obsolescence and the slow pace of divestiture of those formerly in the Public Sector.

INDEX OF INDUSTRIAL PRODUCTION 1988 1995
(BASE 1987 = 100)

INDUSTRIAL GROUP	No of EST.	1988	1989	1990	1991	1992	1993	1994	1995
Food Processing	55	128.0	153.7	174.9	122.7	245.6	245.8	309.7	356
Tobacco & Beverage	13	139.6	143.7	155.2	176.1	155.2	170.9	227.2	308.4
Textiles & Cloths	13	121.8	132.7	116.3	110.9	111.9	92.7	68.1	67.0
Leather & Footwear	8	62.0	62.9	75.3	60.1	79.5	68.4	97.1	160.2

Timber, Paper & Printing	27	135.1	169.4	183.6	198.2	220.5	251.1	299.8	381.0
Chemicals, Paints & Soap	25	111.2	162.9	183.5	192.9	252.0	339.5	383.0	522.2
Brick, Tiles & Cement	14	94.5	109.0	154.2	162.6	203.1	261.1	248.6	370.5
Steel & Steel Products	19	87.2	98.9	107.7	149.3	190.7	259.0	389.9	451.8
Miscel.	25	134.0	204.2	181.3	251.2	272.3	381.0	487.3	596.2
Index All Items	199	123.7	145.2	155.5	178.2	191.2	215.3	260.3	329.3
% change		23.7	17.4	7.7	14.6	7.3	12.8	20.7	26.5

Source: Statistical Bulletin No. IP/27 MFEP - Entebbe

Note that apart from Tea, Sugar and Jaggery, all sub-sectors that are based on local farm products experienced slow or negative growth rates; these includes coffee roasting, coffee processing, textiles, leather and footwear, saw milling and timber. On the other hand, those under the heading of Miscellaneous (Vehicle accessories, Plastic Products, Electrical Products) experienced the fastest growth. Incidentally they all rely on up-to-date technology and use imported inputs, and thus heavily import dependent. According to the Census of Business Establishment, "The main importing industries included those involved with radio and television equipment and of chemicals for which 99% of all purchases were of imported goods. Other industries for which imports constituted 90% or more were Steel (97%), Plastics (94%), Paper and Printed Products 94% and fabricated metal products (90%)."¹ It is also instructive to note that the sub sectoral studies conducted under the IIP Project noted that most industries were of the light, low technology and finishing stages, providing little or no intra sectoral linkage even when this was possible.

2.4 Constraints on productivity and competitiveness:

As the economy becomes more liberalised and open, firms come into competition both among themselves and with imported goods. Efficiency and competitiveness thus become major issues of concern. In this section we summarise those constraints which were found common to all sub sectors during the diagnostic study undertaken under the Indicative Industrial Plan Project (DP/UGA/90/012). Although these studies were conducted in 1992, some of these constraints do persist as can be attested to by the yearly prebudget submissions of the Uganda Manufacturers Association (UMA) to the Ministry of Finance and Economic Planning (MFEP). These constraints can be considered broadly as:

- a) those that are found at the plant level and;
- b) those that affect manufacturing generally.

Plant level constraints include:

1. Technological obsolescence
2. Technical Skills constraints
3. Unreliable supply of factor inputs

Industry level constraints include:

4. Unreliable or inefficient physical infrastructure
5. Restricted access to credit
6. Inadequate support services

2.4.1 **Technological obsolescence:** Most of the factories in Uganda came into being just before or immediately after independence. In some cases the machinery imported then was not even new, so some of these machinery are 30 to 40 years old. During the nationwide disturbances some were vandalised, and most were poorly maintained or not at all with the result that the rate of deterioration was much faster than if the machinery were in use.

Spare parts for refurbishing are hard to come by, that is if the finance is available. Without the right specifications from the original blue print (which invariably is lost or out of print), one can not even fabricate the parts locally. The toll on productivity is more than can be imagined. Frequent breakdowns add to the downtime which adds to the cost of production, low capacity utilization and lost economies of scale. In the circumstance, there is no way such enterprises can compete with similar industries using more up-to-date machinery and probably running three shifts a day.

2.4.2 Akin to technological obsolescence is the of *lack of the requisite technical skills required in industry* - production management, maintenance management, marketing, financial and even personnel management. Besides, it was also noted that there is a shortage of critical technician skills at the shop floor - mechanics, electricians, fitters etc. Over the years there has been a gradual erosion of skills - some went with the wars, others left the country - and the few technical and vocational schools are not producing enough. Few employers had any on- the- job training scheme. Abundant and cheap labour confers no particular advantage to a nation unless that labour is enskilled for high productivity. A poor workforce affect productivity and competitiveness.

2.4.3 **Unreliable supply of factor inputs:** There are two aspects to this. Those who rely on imported inputs have to contend with high transport costs - Uganda being a land locked country. The long lead time required to order and receive the inputs mean that a lot more working capital is tied up in large inventories. Even within the East African market, a Ugandan manufacturer has this initial disadvantage when compared with a Kenyan competitor in Mombasa or a Tanzanian company in Dar-es-Saalam. On the other hand,

it was found that the companies using local raw materials do not make adequate arrangements for the steady supply of inputs. Most had no supply contracts and so procurement was haphazard, often depending on the vagaries of the market place and

what was available at any point in time. This too is not unconnected with inexperienced management of an industrial concern. There were also occasions when transport difficulties affected delivery of inputs. All these affect productivity and hence competitiveness.

2.4.4 *Problems associated with infrastructure*

Again this can be divided into two - physical and institutional infrastructure. Physical infrastructure refer to things like roads, railway, electricity, water (potable and industrial) telecommunications; ports and ware housing facilities. Inadequate or absence of these constitute major disincentive to foreign investment and even the growth of an indigenous enterprise class. The competitiveness of an industry is dependent on the adequacy and reliability of the services of these infrastructures. For example the transport system - (road, rail and air, the inter modal connections, clearing and forwarding) provide the lifeline to input supplies to factories as well as evacuating products to various markets. Anything which impairs the smooth operations - bad roads, slow trains, inadequate trucking services etc, cause delays in production, delivery time and production scheduled. Similarly speed in managerial decision making depends on the efficiency of the flow of information - telephone, fax, E-Mail etc. Attempts sometimes to provide these services privately as standby tends to increase costs of production as well as transaction costs both of which affect competitiveness and productivity. Many of the companies visited during the IIP Study complained either of inadequate or unsteady supply of electricity; a few had standby generating sets. A cursory observation confirms the bad condition of roads and the long delays in getting inputs across from Kenya or Tanzania. Because of this, there has been a demand for inland container terminals and serviced industrial plots where some of these services can be provided steadily for industries.

2.4.5 On the other hand *institutional infrastructure* refer to those institutions that stimulate and support industrial development. This will include institutions that train people in basic skills required in industry; research and development institutions that do the thinking that solve problems or provide innovative ideas; testing and quality control laboratories, standards organization to regulate weights and measures and advise on national and international standards; financial institutions that provide all kinds of intermediation in support of industries - venture capital, working capital, equipment leasing, export credit, insurance companies, capital markets etc. Industrial estates also fall in this category.

Indications are that such institutions are thin on the ground. Even where they exist, their impact on industrial productivity and competitiveness is minimal. Although the educational institutions are producing school leavers, many of them leave without any employable skills. The few training institutions providing skill training do not produce enough, and often not even the needed skills. Industrial research whether in the public or private sector is virtually not existent. The (East African) now Uganda Institute for Food Technology and Leather has been on the drawing board for twenty years and only recently resuscitated. Similarly the Uganda National Bureau of Standards has no research facility, although it presently depends on facilities available at Makerere

University which are not purpose built. Industrial, business and market information is unorganised. There is hardly any place where an entrepreneur can go and get expert advice on technology, markets, negotiating technical agreements and the like. Financial institutions reportedly are less interested in long term capital lending, and hence not very sympathetic to industrial development, nor are there specialised financial institutions to aid industrial development.

The private sector will need these support services to develop in the first place, before talking about competitiveness. Inadequate or lack of institutional support services means that industries will not simply develop.

2.4.6 *Restricted Access to Credit:* In addition to what has been stated above about financial support services, many of the industry associations still identify poor access to credit as their major constraint. Where there is access, another source of complaint is high rate of interests. This is especially so for the small and micro industrialists who can hardly be expected to pay interest rates of 25% to 30% and survive in a market that is constantly eroded by legal and illegal importation of competing products. However it is important to note that, the inability of small firms to access credit may not be unconnected to their inability to keep accurate records or specify their needs in a bankable format. Again, the undeveloped nature of industrial consultancy and lack of government advisory service tend to create a problem where there should be none. For example, in a recent survey by the Uganda Investment Authority of Licensed investors as at April 1995, of the 247 industrial sector investors, 50% did not know of, nor used any of the following credit facilities then available.

- Bank of Uganda Scheme for Credit to Industry
- Industrial Development Finance
- Crop Financing Fund
- Export Refinancing Scheme for exporters
- Export Credit Guarantee Scheme

Of those who knew about their existence only 16% had actually applied for or used any of the above. This in itself says much about the flow of information between government and the private sector. In the kind of market environment being ushered in, government must learn how to market its services.

3. Factors that shape a National Strategy on Industrialisation.

3.1 Introduction:

The formulation of a National Strategy on Industrialisation has to take into consideration a number of factors that influence the pace and direction of industrial development. First is the overall objectives of government for the economy and society. After all, industrial development is not an end in itself. It is the handmaiden for the achievement of societal goals such as poverty alleviation, income generation, rapid economic growth, employment creation and the like. In fact it is more and more becoming apparent that

without a measure of industrialisation, economic growth of any country will be stunted. It is not an accident that rich countries are more industrialised than poor, agrarian economies. Secondly, the strategy also has to take into consideration the macro-economic framework within which industries have to operate. The orientation of macro-economic policies will determine the orientation and even type of industries that can spring up and thrive. Thirdly, no country is an island unto itself. All countries, rich and poor, now engage in international trade for better or for worse. In the past those who engaged in foreign trade did not have to obey any particular rules. Self interest dictated behaviour patterns. But since the World War I attempts have been made to agree on uniform rules guarding the behaviour of firms in international trade, the culmination being the recently negotiated Uruguay Round of GATT which came into force on the 1 January 1995. The national strategy on industrialisation has to take into consideration the implications of these rules and other development (Eg. Advances in technology).

3.2 Socio-economic Objectives:

The government's overall economic objectives for the economy is summarised as "building an independent, integrated and self sustaining national economy". An independent economy was defined as "one which is able to obtain domestically most its requirements for production, consumption and capital formation". It was observed that now coffee was the main foreign exchange earner and any external shock affecting coffee is transmitted throughout the whole economy. Of course this was seen as unhealthy. All references to the development of non-traditional exports invariably have at the back of their minds, industrial goods or at least some form of processing of raw agricultural, forest or mineral resources before exporting, and that can only mean industrialization.

An integrated economy was also defined as "one whose various sectors are linked, or interact in a supplier-user manner". It was noted that Uganda's economy exports mainly unprocessed or semi processed primary products.

Similarly, the input/output table for the industrial sector (1994) show that most industries depend on imported raw materials and other inputs, even when such raw materials and other inputs, even when such raw materials can be produced from the very primary products being exported. Good examples are cotton lint, hides and skins and coffee beans. The only way to achieve any level of inter or intra sectoral linkage is through domestic resource based industrialisation.

as Finally a self-sustaining economy was defined as "one whose basic driving force is the production of goods and services to meet the demands of the population and to export, well as the need to create new and expanded productive capacities domestically.² Taken together, the movement towards creating an independent, integrated and self sustaining economy was a recognition of the centrality of industrialisation as the main engine for

propelling economic growth. Although the Medium Term Plan 1993/94 - 1995/96 stated that over the medium term "the major engine of growth is expected to be agriculture" probably because of its ability to generate foreign exchange, there is no gain saying that in the long run, it is industrialisation that will lead the socio-economic transformation that will improve the quality of life of the people.

3.3 The Macro-economic Policy Framework:

The macro-economic policy framework was designed to complement the overall objectives of creating an independent, integrated and self sustaining economy through maintaining stable and sustainable growth and development.

The macro-economic strategy up to the moment focussed on two main objectives:

- stabilising the currency through stopping inflation, and
- promoting export led growth.

The policy measures adopted included;

- i) prudent non inflationary budgeting
- ii) a competitive exchange rate policy and
- iii) trade liberalisation

Through subsequent annual budgetary exercises, the government has sought to achieve or create a favourable policy environment for resource mobilisation, monetary stability and export promotion. Although stabilization policies take a long time to work out their effects, it can be said that these policies in most cases have had the desired impact while causing some unintended consequences. Macro-economic imbalances still exist but dependent on the outcome of more structural reforms. Significant progress has been made in the management of liberalisation and of the exchange rate. In the financial sector, interest rates have been liberalised. On the trade side many of the trade restrictions of the past have been removed, the tariff structure has also been revised and in a number of cases reduced, although the move towards uniform rates have not been achieved.

On the whole import trade has been liberalised, imports licensing having been abolished.

In discussing industrial strategy in the context of the macro-economic policies, one must also mention as a major plan of government policy - privatisation because of its positive impact on government budget. At the last count, "seventeen (17) public enterprises and subsidiary units were divested giving a total gross proceeds of Ushs. 39.43 billion, cumulating to 42 public enterprises and subsidiary units with a total of Ushs. 131 billion

to date" (June 1996).³

Government is thus making good its promise to withdraw its investments from the productive sector and allowing the private sector to take the lead under the improved market conditions ushered in by the macro economic reforms. All these changes in the economic policy environment have ominous implications for industries that were established in a different era and under a policy of protection, let alone the physical damage done to men and machinery during the years of political turmoil and instability. Besides, some of the larger ones were established with the East African market in mind, first they lost the market and now are made to face competition from their counterparts in the East African and PTA countries where they have been in continuous production. The Rehabilitation and Development Plan 1993/94 - 1995/96 noted that the changed trade policy regime "have subjected the private sector to increased international competition and to changing market demand, both in terms of composition and quantity", but hoped that the result of the pressure would lead to improved efficiency in production, management improvement and technological upgrading. Since this will not happen automatically it is the task of industrial strategy and policies to make it happen.

3.4 Implications of Changing International Economic Environment:

Liberalisation and deregulation at home means that the economy is becoming more open to trade and investment from other countries. As noted above, this means more competition for domestic producers as they are being drawn (some would say sucked) into the orbit of world trade. The emerging trade regime is now subjected to the GATT rules of the Uruguay Round and all the paraphernalia of the internationalisation of economic relations - world wide information networks, free flow of ideas, tastes, culture patterns and hence demand - collectively called globalisation. For a country like Uganda which has not yet developed its industrial sector, where the existing industrial enterprises are just struggling to reestablish themselves, where the term "Uruguay Round" is still not part of the working vocabulary (Eg. the rules agreed to are not known), the tendency is for those who are familiar with the terrain of the "new international economic order" to swamp the Ugandan market with their products of superior quality produced with the latest technology probably by robots. Take the example of the rule of ISO 9000 which will require all goods traded internationally to accord to certain quality control guidelines from raw material processing to finished goods, and be certified to have so accorded. What does a country like Uganda do? There is currently no institution with the capability to inspect and certify quality standards. A National Strategy must therefore bear in mind that domestic producers have to go through a learning cycle and may need a time bound protection to do so as provided for by the GATT 94 rules. Trade Liberalisation also includes (or assumes there will be) a free flow of investments across national borders. With the flow of investments, also comes some technology to make the investment productive. However the decision to invest across national borders are taken by individual firms with the clout to do so - the transnational corporations (TNCs). If the past experience is something to go by, Africa has not

been a favourite ground for foreign direct investments. However, foreign investments are sensitive to such things like political stability or lack of it and so will like to be assured that they can take their money and run if need be. Strategy is about survival. In the kind of environment that is emerging, the name of the game is competition. To be competitive an industry must have what it takes - technology. So the task of formulating a national strategy is to create conditions that will attract foreign investors and allow national enterprises to survive and take advantage of the opportunities of the new international economic order.

3.5. Determinants of Competitiveness:

The essence of Private Sector development is to improve private sector performance. As has been shown earlier, liberalisation, deregulation and emphasis on export orientation mean more competition for home industries. Improved performance of industrial entities is measured by their efficiency of production and competitiveness in the market place. Therefore apart from getting the fundamentals of macro-economic policy right, there are other areas that must be addressed in a national strategy paper. Although some of these have been touched upon in the discussion of problems and constraints, two areas that need further emphasis are;

1. the critical role of technology and
2. the role of government in creating competitive advantage

3.5.1 From Comparative to Competitive Advantage:

In the past, if a country had abundant mineral resources and abundant source of energy, it was said to have comparative advantage in establishing industries based on those minerals, harnessing its energy resources. Infact, the idea that government will encourage and support industries that use local resources, assumes that the country has comparative advantage in those areas. This can be misleading because it has not taken into consideration the nature and condition of the resource, and the cost of winning it from nature (beneficiation) and transforming it into industrial raw materials. The problem of developing a viable salt industry from Katwe Lake is a case in point. Similarly, a large population of low skilled or unskilled hands is not much of an advantage, since low cost, low skilled workers result only in low productivity.

The one factor that can change (and in the past has changed) this static view of comparative advantage is technology. "Technology development is the prerequisite for improved factor productivity and product innovations which in turn fuel growth".⁴

Technology fuels growth and enhances competitiveness in three ways: through product innovation (introducing a completely new product to satisfy an existing demand) or through improving the quality of an existing product (which may lead to product differentiation). Any one of these can make an impact in the market or even create a

niche market. Technology makes all the difference. Technology is more than machines. It includes the stock of knowledge is used in the production and marketing of goods and services. A part of this stock of knowledge is embodied in machines, but much of it is also embodied in human skills, management methods, organisational structures and work routines".⁵ It is the judicious mix of natural resource advantage, human skills and ingenuity (technology) that creates competitive advantage.

3.5.2 Technology Acquisition Policy:

Modern technology is science based and it was through intensive scientific research that the present developed countries built up the stock of knowledge that they now have. Late comers to industrialisation do not have to go through the whole process that took hundreds of years to develop, so they simply buy, copy or steal from those who have the technology. To be able to acquire technology, a country has to adopt policies and create conditions that make it possible to successfully acquire technology. These include; having laws to protect intellectual property; laws to allow adequate remuneration or fair price to be paid to original owners of a needed technology; an educational system that creates a culture of innovation, an emphasis on the teaching of science and the acquisition of skills. It includes developing personnel with the capacity to select, assess and acquire on equitable terms technologies appropriate to problems of national development. In fact the nation of self reliance will be meaningless unless it includes the capacity to adapt, generate, utilize and diffuse science and technology in the contest of national development.

3.5.3 Status of Science and Technology Infrastructure in Uganda:

Recognising the need for the application of Science and Technology to national development, the Government of Uganda enacted statute No.1 of 1990 establishing the National Council for Science and Technology (UNCST) to advise government on and coordinate the formulation and management of an explicit national policy for all fields of science and technology. "The UNCST has developed an overall national policy on Science and Technology whose overall objectives are:

- a) to build and strengthen national capability for the generation, use and application of science and technology;
- b) to develop and improve the national scientific and technological base;
- c) to promote, develop and utilise new and emerging technologies;
- d) to increase the national productive capacity through application of science and

technology".⁶

Apart from this, Task Forces were formed to develop sectoral policies and strategies in the industrial sector, the Task Force recommended as follows:

"Policy: To increase the national capacity for industrial production and promote activities that facilitate impact of Science and Technology on industrial productivity.

"Strategies:

- 1) Establish systems and mechanisms for the acquisition, assessment, adaptation and application of essential technologies for industrial development, taking into account economic, safety and management consideration.
- 2) Encourage R&D activities would help to design process and manufacture production tools and equipment.
- 3) Encourage and support scientific and technological activities that would accelerate technology transfer and innovation.
- 4) Encourage and facilitate capacity building in engineering design and industrial technology systems.
- 5) Support R&D activities that would help the production and efficient utilisation of industrial raw materials.
- 6) Create an industrial technology development infrastructure.
- 7) Strengthen the scientific and technological bases for product standardisation and quality assurance.
- 8) Promote and facilitate recyclable material technologies and application.
- 9) Promote, facilitate and ensure safety disposal of industrial and other wastes.⁷

If all these were done, Uganda would be on the road to scientific and technological self reliance. At present what will be regarded as the science and technological infrastructure is still very weak and poorly articulated to national development effort. The scientific community is concentrated in a few institutions - Makerere University (510), National Agricultural Research Organisation (183), Uganda Polytechnic Kyambogo (138) Engineers and Technologists in other public

and private sector institutions (287). It is not exactly known how many other professions are in the private sector eg. Doctors. UNCST is attempting to develop indicators as well as data base for the Science and Technology community in Uganda as a basis for developing future manpower development programmes.⁸ Other initiatives by the UNCST include the establishment of an *Intellectual Property Network* Committee as a precursor to their proposed *Intellectual Property Management System*. This will require specific legislation to give the authority it deserves to command the respect of owners of intellectual property. Technology Evaluation and Testing Centre (TEUTEK) as a means of rationalising foreign technology being imported into Uganda and also as a foundation for the development (domesticating) production technology in the country. These and such other initiatives that can help small and medium enterprises have been hampered by low funding.

3.5.4 Human Resource Development:

This has been alluded to in the discussion of Technology. Part of the strategy for the acquisition of technology, is the development of the human capital in whose heads and hands will reside the know-how and the do-how that translates blue prints into goods and services. This requires systematic and integrated planning to include:

- a) upgrading and development of entrepreneurial capabilities
- b) developing managerial capabilities. Entrepreneurs and managers are the people who bring about the productive coordination of men and materials in the production process.
- c) training in the manipulative skills that are employed on the shop floor. It is said that to every engineer there should be at least eight technicians and 24 craftsmen/artisans. It is currently not known the existing stock in each skill category in Uganda.

The issue which Uganda must face is how best to acquire and domesticate technology - which ones to acquire, which sector to emphasize, which natural resources are easily amenable to enhanced technology etc. These are matters of strategy. Apart from the patents and trade-mark unit of the Ministry of Justice there appears to be no recent legislation on industrial property rights and their protection, neither is there any government agency to assist Uganda entrepreneurs in the search for appropriate technology, nor assistance of any kind in negotiating technology transfer agreements.

3.5.5 Role of the Government in enhancing competitiveness:

Admittedly, in the kind of trade regime that is unfolding it is firms and enterprises that engage in trade and competition with one another. No country throws its enterprises "to

the wolves” of international market. Governments try to create home conditions that will give home enterprises what has been called “home based advantage” that is a well developed physical infrastructure, low cost and en skilled labour or at least educated enough to be easily trainable; a clear, friendly and unambiguous laws on foreign direct investment, a competent bureaucracy that can reduce transaction costs to a minimum, a cluster of support institutions, and of course political and macro economic stability. While the government has been doing its best in this regard, it can not be said that the conditions are ideal for achieving competitiveness. As can be seen from action plans in Part II, there is still much room for improvement - some very critical.

4. **Elements of a National Strategy on Industrial Sector Development:**

The new orientation of the macro economic frame work adopted by the Government of Uganda in the **WAY FORWARD I & II** and subsequent medium term strategy documents dictate a change in the style of management of national development resources. Whereas in the past the Government of Uganda took the lead in industrialisation and allowed the private sector to fit in where it can, Government of Uganda has now changed strategy by allowing private sector to be the main actors in the productive sectors. Where the relation between the government and the private sector had been one of controlling and regulating (through the granting or withholding of licenses and permits), the new dispensation expects government officials to adopt a business friendly attitude and to facilitate, promote, and support the development of industrial activities by the private sector. According to one document “Uganda has already begun a process of liberalisation, moving towards policies which work through markets. Public institutions will continue to play a key role, helping to establish the infrastructure and policy environment conducive to private sector investment, maximising the potential for intersectoral linkages, ensuring widespread access to information and services, and monitoring and correcting economic distortions”.⁹ As discussed earlier, liberalisation and adoption of policies which work through markets when coupled with export promotion stance of the macro economic policies, mean an export led strategy of industrialisation. “The focus of Government planning must increasingly be on designing suitable policies (at the macro economic, sectoral and sub sectoral levels) in order to promote private sector initiative, to promote an environment conducive to private sector investment”.¹⁰.... This presupposes that the capacity to do this is available in government. Similarly the enhanced role mapped out for the private sector presupposes that the private sector exists and has the capacity to perform those roles.

However Government is not unaware of the short comings of the private sector, and that past history has left it weak and with a lot of challenges. It was therefore necessary to adopt a macro organisational strategy for enhancing private sector performance just as the government is embarking on public sector reforms to enhance the performance of the public service. Private sector development is a response to the observed weaknesses of the private sector in developing

countries of Africa in the context of the emerging world economic and trade regime. Opinions differ as to how best to develop the private sector.

One approach holds that if a country can implement the kind of reforms that Uganda has introduced in her trade regime and in monetary and fiscal policies, and given political stability and efficient infrastructural services, there will be an increase in international competition which in turn will force domestic firms to improve their technology, management and production efficiency, and in the course of time they will become efficient and competitive and can rub shoulders with their counterparts. It is now generally agreed that although such a liberal open macro economic framework is a necessary condition, it is not a sufficient condition for private sector development especially in the least developed countries. The government of a developing country like Uganda has to do more to support the growth of the private sector. This is the rationale for developing a national strategy for private sector development in general and for the industrial sector in particular. In the industrial sector, UNIDO's *Interactive Policy Formulation* process (a.k.a. Strategic Management of Industrial Development - SMID) has under various technical assistance, projects to the Ministry of Trade and Industry been elaborated and is now being put into operation as the national implementation strategy for the industrial sector. Its main elements are described below.

4.1. **Strategic Management of Industrial Development (SMID) - A framework and a strategy.**

As a strategy, the Interactive Policy formulation process relies on consensus building that involves dialogue between and among public sector officials and private sector stake holders as a basis for formulating industrial strategies and policies. It is Strategic Management in the sense that apart from being future oriented, it provides a flexible tool (forum) to ensure a continuous process of creating responses to the ever changing conditions of the world market place. The process has an inbuilt capacity building for both public and private sector participants in the formulation of long term policies and strategies. In the process of interaction between the two sectors, each side begins to understand issues from a broader stand-point. Finally, SMID mobilises and dynamises internal forces and stimulates the development of a new outlook towards the use and deployment of national economic resources.

The basic unit for the interactive process is **the industrial sub system**. An industrial sub system is "a cluster of economic agents -enterprises in a particular branch (or even a product group within a branch eg. Vegetable oil millers as a sub-set of food processing industries), including suppliers, support services, government agencies - sharing a specific interest: technologies, raw materials etc".¹¹ This is so because the conditions for competitiveness depends on the efficiency of the other actors within that network of relations. Secondly, experience shows that macro-economic policies usually do not produce uniform impact on all sub sectors. So focussing analysis at the sub system level, it becomes easier to work out selective and appropriate interventions that are meaningful and relevant to their functioning.

Quite apart from being the focus of analysis and possible intervention, the industrial sub system is also the basic unit for dialogue and consultation on the nature of action plan or programmes to strengthen the functioning of its members. For each industrial sub-system a Strategic Consultative Group (SCG), is formed. In constituting an SCG, consideration is given to the core manufacturing enterprises, then other enterprises that share common interest with them Eg. suppliers of raw materials, packaging or other services. In fact, where the SCG is formed around a product, it is advisable to include as many as possible the enterprises involved in the value chain. In addition to this cluster, we invite the representatives of the public sector whose activities affect them most, either as regulatory agencies or provider of support services. For example for the SCG on *Wood and Wood Products*, we invite representatives of the Environmental Protection Agency and of Tourist Board because of their interests in what happens to the forest. (See DiagramI).

The meetings of the SCG provide a platform for the public sector representatives to explain the rationale behind policies, and listen to the private sector participants on the impact or shortcomings of such policies and issues that affect their efficiency which the government may not have taken into consideration. Together they can discuss policy issues and goals, constraints and problems, action plans and programmes to ameliorate the identified conditions. The major functions of a Strategic Consultative group are to:-

- Review diagnostic studies of their sub system which normally will be done for them by consultants
- * Identify further constraints and weaknesses if any,
- * Identify the strengths as well as opportunities in new markets, new products or new process technologies
- * Assess the strength of threats at the enterprise level and sub system level
- * Summarise constraints to efficiency and competitiveness
- * Formulate action plans and or programmes to deal with the constraints. The action plans are classified into those to be undertaken at the enterprise level, those to be tackled at the level of the SCG and those that require governmental action.
- * Based on the opportunities identified, map out strategic directions for the sub system - the search for a niche market, or technology upgrading etc.

From the perspective of the sub system, SMID aims at bridging three gaps.

- * the gap between the objectives of short term policies which address structural adjustment problems, fiscal and external deficits, and the objectives of a longer term development perspective. Governments are usually interested in long term

stability while firms are interested in survival.

- * the gap between the governments macro-economic framework and the micro perspectives of enterprises. Usually small and medium enterprises with limited knowledge and resources do not appreciate the critical importance of macro-economic realities.
- * the gap between the need for industry related support institutions and services, and the actual capacities in these areas. Quite often, government support institutions exist only in name and may not have the capacity to deliver needed support service. The iterative process of consultation implied in the SMID usually bring out such facts so that further technical assistance can be directed at capacity building in such institutions.

4.2 The Interactive Policy Formulation process provides also a framework within which the consensus building takes place. The kind of consensus building dialogue that takes place at the sub-system level, also has its counterparts at the national level. There is usually a National Coordination Body which is responsible for coordinating the results or outcome of the sub system discussions into a coherent national policy and strategy.

A National Coordinating Body is usually a selected body of leaders of industry meeting top policy makers, and a few knowledgeable resource persons drawn from institutions of higher learning, private consultants or heads of technical support institutions such as the Uganda National Bureau of Standards. Their major function is to discuss the broad issues of policy and strategy and assist the government in formulating an overall strategy for each industrial sub-system, while minimising areas of conflict with other equally worth while policies and programmes. In addition to this they are expected to:

- provide strategic information to enterprises on markets, technology and the changing rules of international trade
- monitor tendencies that affect the competitiveness of home industries and recommend appropriate action
- act as intermediary between the enterprises, SCGs and Government thus eliminating the need for individual lobbying which lead to rent seeking. The National Coordinating Body thus ensures and maintains a level playing field for all;
- organise thematic deliberation workshops on issues that cut across SCG as further sounding board for industrial policies or support services.

Again, the interaction that takes place in those meetings provide conditions for mutual cooperation, cross fertilization of ideas and learning of each others point of view. The private sector learns the process of policy formulation and the fact that national interest is broader than profit making, the public sector learns what it takes to sustain an industry

and be competitive.

In addition to the two levels of consensus building activities, there are support units that are critical to their functioning. In most developing countries in sub-Saharan Africa, including Uganda, the flow of information between the public and private sector leaves much to be desired. Governments accumulate data, statistics and legal documents from all sources that can be useful to the private enterprises. Somehow, these are hoarded in the ministries and departments that accumulated them. It is not uncommon for the government to announce a policy change that will benefit industries, and several months after, no one seems to know how to implement the policy. In some cases it is even difficult to access the source document for details. In addition, the changes taking place in the world are not just many but also highly technical for the ordinary local firm to understand. Therefore one of the necessary institutions that must help the interactive process is a Technical Support Unit usually organized within the Ministry of Trade and Industry but draws its membership from various departments within the Ministry, other relevant ministries, government support institutions such as Uganda National Bureau of Standards, Industrial Research Institutions, Universities and Polytechnics. In addition, the TSU can identify local consulting firms which have capability to contribute to its work.

The function of the TSU is to collect, analyze and organize information required by the working groups as well as the government. In time it will accumulate and develop a data base on practically all the industrial sub systems as well as the industrial sector as a whole.

It will then be able at short notice to provide information on structure and performance of each sub system as well as impact of any development on their functioning.

In addition to the TSU there should also be a well staffed Management Support Unit which will serve as the administrative secretariat for the working groups. (See Diagram II).

The details of how this approach has worked out in Uganda will be fully described and discussed in Part II.

PART TWO

5.0 SUB SYSTEM REPORTS AND ACTION PLANS

5.0.1 INTRODUCTION

In Part One it was pointed out that a National Strategy on industrial development actually has two aspects - the substantive strategy on industrial development, that is to say the approach to be adopted in promoting the industrial development eg. Import substitution and public sector led industrialisation as was the case in the years after independence; and the macro organisational (or implementation) strategy to promote industrial development, for example, the macro-organisational strategy for public sector led industrialisation was to establish a Uganda Development Corporation, which in turn established several enterprises, investing public funds in productive enterprises.

Also, Part one has discussed the change in substantive policy from public sector led to private sector led industrial strategy with export trade rather than import substitution orientation. This new orientation now necessitated a new approach to formulating and implementing industrial policies - a macro organisational strategy called Strategic Management of Industrial Development (SMID) which involves an Interactive policy formulation, implementation and monitoring process. The main elements of this process has already been described in Chapter 4 of Part One. In the rest of this introduction, we describe how this strategy has been elaborated and implemented in Uganda.

5.0.2 INDICATIVE INDUSTRIAL PLAN

In its role as the lead Ministry in charge of industrial development in Uganda, the Ministry of Trade and Industry had embarked on a review of industrialisation policies in Uganda to fall in line with the new orientation of the NRM Government. Under a UNDP/UNIDO Project DP/UGA/90/12, it undertook and carried out studies of various manufacturing sub sectors with a view to, at the sub sectoral levels to identify problems and constraints,

It was during the IIP Project 1991-1993 that the concept of Strategic Management of Industrial Development was introduced and the preparatory phases - identification of industrial sub systems, diagnostic studies and formulation of Strategic Consultative Groups were carried out.

5.0.3 STRATEGIC CONSULTATIVE GROUPS

The IIP diagnostic studies covered the following sub sectors:

- Food Products and Beverages
- Textiles and Wearing Apparels
- Leather and Leather Products

- Non-Metallic Products
- Fabricated Metal Products (except machinery and equipment)
- Machinery and Equipment
- Electrical Machinery and Apparatus
- Radio, television, and communication equipment/apparatus
- Motor vehicles, trailers and semi-trailers
- Other transport equipment
- Wood and Wood Products
- Paper and Paper Products
- Printing and Publishing
- Foundry Industries (Metalurgy)
- Packaging Industries

In order to group them into consultative groups, we considered:

- 1) objectives of government policy in the industrial sector
- 2) the number of players - stakeholders in the sub sector and
- 3) comparative advantage

As a result, not all the sub-sectors studied have been included in the present exercise. Besides, packaging industries were allowed to join other Strategic Consultative Groups most relevant to their products or raw materials - glass, plastic, paper, wood etc. Among the industrial objectives considered, the following were given more weight.

- create inter and intra sectoral linkages;
- use and add value to the country's vast natural resources, and create new markets
- diversify export base and/or reduce import bill by efficient import substitution
- job creating and fostering skill development
- facilitate the use, adaptation and transfer of advanced technology

Based on the above, the following Strategic Consultative Groups have been formed. Where an Association was already in existence eg. Uganda Oil Seed Processors Association, Leather and Leather Products Association, the SCG was built around them. Some of the groups have gone ahead to formalise their existence by incorporation.

5.0.4 EXISTING STRATEGIC CONSULTATIVE GROUPS

- 1) Food processing industries incorporating
 - Grain Millers Association
 - Uganda Oil Seed Processors Association
 - Uganda Bakers Association
 - Sugar and Confectioneries
 - Fish processors and exporters Association
 - Tea, coffee processors
 - Malt, Beer and softdrinks, spirits and wine

- 2) Leather and Leather Products
- 3) Wood and Wood Products incorporating Uganda Forest Industries Development Association (UFIDA), Saw Millers Association.
- 4) Textiles and Wearing Apparels
- 5) Paper and Paper products (including printing and publishing)
- 6) Non-Metallic Minerals Products Association
- 7) Foundry, Basic Metals and Metal Fabrication Group incorporating Uganda Metal Industries Development Association (UMIDA).

A Strategic Consultative Group is more than just the manufacturers. Whereas the manufacturers or processors form the core of the group, each SCG includes upstream operators, (suppliers of raw materials and other inputs) downstream operators (users of their products as inputs, suppliers of essential services eg. Transport, packaging materials etc; then representatives of relevant government ministries - Agriculture, Natural Resources, Finance (Customs or URA) etc; Ministry of Trade and Industry (Technical Support Unit) relevant government Support Institutions eg. Uganda National Bureau of Standards, National Council for Science and Technology (Industrial Research Technology Development and Adaptation etc). The problem however was that some of the Government support institutions either do not exist as yet or are very weak and can not contribute effectively.

In order to kick-off the dialogue and consultative process each SCG was given the diagnostic studies done under the Indicative Industrial Plan Project as a working document.

As stated earlier, their function is to discuss the findings of the study. The private sector participants were expected to bring their own knowledge, perspectives and practical experience to bear on the discussions. Government representatives can clarify existing policies or legal provisions as they touch on issues being discussed. The outcome of the dialouge is then structured as follows:

- 1) Nature of the sub sector, importance to the economy, contribution to achievement of the industrial objectives market orientation of major actors;
- 2) Problems and constraints to competitiveness
 - cost related
 - product related
 - market related
 - technology related etc.
 - policy/regulatory environment

- 3) Opportunities, comparative advantage if any, and new investment prospects to enhance sub system competitiveness;
- 4) Action to remove constraints arranged according to those that can be tackled at enterprise level, sub system level or at the level of the government
- 5) Specific needs for technical assistance

At the end of this exercise, the reports from the various Strategic Consultative Groups are submitted to the national body representing manufacturers where the action plans, programmes and recommendations are, then coordinated so as to eliminate areas of overlap. This results into a national strategy paper which is then taken to the National Forum organised by the Private Sector Foundation and the President's office for final ratification.

This does not exhaust the work of the various SCGs. They go ahead implementing those areas to be implemented by enterprises, and their association, while the government implements those aspects left to it to facilitate and support the efforts of the private sector. As they continue to meet, they get feed back from market signals or the information unit of UMA and respond appropriately.

5.0.5 The role of Ministry of Trade and Industry:

The Ministry of Trade and Industry and the parastatals under it is the arm of the government most concerned with developing the industrial sector. No doubt the new orientation to industrial development will change the structure and functioning of the Ministry. At present it has two directorates - The Directorate of Industry and the Directorate of Trade. The former was in charge of the parastatal enterprises that are now being privatised. Its functions should now be redefined to provide the technical support required by the various SCGs. Ideally, there should be three facilitators for each SCG - one on trade related issues, one engineer/technologist on production related issues and an economist or management specialist. There are many issues involved in the emerging trade regime requiring very specialised knowledge which ought to be internalized in the Ministry and available to the Technical Support Unit.

In addition there are many support institutions which presently are either non-existent or very weak and ought to be developed and institutionalised under the Ministry of Trade and Industry. These include:

- i) Uganda National Bureau of Standards currently receiving technical assistance from UNIDO/UNDP.
- ii) An office to advise Ugandan entrepreneurs on the sourcing, negotiating and adapting foreign technology. It can also register foreign intellectual property imported into Uganda and ensure that processes will be put in place to sustain, replicate or 'deepen' its use in the country. The Uganda National Council for

Science & Technology (UNCST) proposed such a body, but is still being considered.

- iii) **Industrial Research Institute:** This has been on the drawing board since the Government of Uganda took over the moribund East African Institute for Food and Ceramics Technology. A Task Force set up by the Ministry (then) of Industry and Technology recommended that the proposed functions and obligations of the institute be diversified to span a wide range of activities including.
- a) identifying and developing appropriate process and product technologies to utilise the available natural resources to suit the local market and for export;
 - b) designing, developing and adapting machinery, tools, equipment and instruments and processes suitable for introduction and use in the rural areas;
 - c) developing suitable recovery processes and devises to reduce environmental hazards created by agricultural and industrial wastes and effluents;
 - d) setting up pilot plants where necessary to demonstrate the efficacy of locally developed industrial technology;
 - e) act as consultants to local industry and if any commercialise relevant research findings;
 - f) maintaining a comprehensive data bank on industrial research materials and products;

Similar initiatives have been designed by the Uganda National Council for Science and Technology (UNCST) but none has really come to fruition because of low funding.

5.1 FOOD PROCESSING INDUSTRIES

5.1.1 INTRODUCTION

Government expectation from the Manufacturing Sector is that, it should play an important role in providing the necessary forward and backward linkages with the Agricultural and Mining Sectors. The Foods and Beverages Sector is important in this respect because of its direct link with Agriculture, its contribution to food security for the nation, its potential as foreign exchange saver through efficient import substitution.

At the outset, it was discovered that the sub-sector was not only large but harboured subsets/product groups of agro food processing whose interests widely differ. Sub committees of the Foods and Beverages Strategic Consultative Group were thus formed. This report covers:-

Sugar	Fish
Grain Milling	Animal Feeds
Malt Products	Processed Meat
Bakery	Diary
Soft Drinks	Fruits and Vegetables
Spirits	Edible Oils

Each subsector will be reported on separately. This report also focus more on the subsets with the following :-

- High potential for growth in terms of diversification /production of new products , market expansion and introduction of new process technologies and adoption of new management systems.
- Impact of the regulatory/policy environment and competitiveness of industry
- Identification of products that are likely to make significant contributions to the Uganda Economy in terms of foreign exchange earnings and savings , intra sectoral linkages and employment generation/skill development.

5.1.2 SUGAR INDUSTRY

There are three enterprises in the industry, namely :-

- Sugar Corporation of Uganda (SCOUL) located in Lugazi;
- The Kakira Sugar Works (KSW) located in Kakira
- The Kinyara Sugar Works located on Masindi

These enterprises manufacture sugar from sugar cane under integrated farm /factory ownership .The by products from the manufacture of sugar are bagasse and molasses. Bagasse is principally burnt as fuel at the factories' boilers.

SCOUL converts molasses into alcohol which is mainly consumed as raw material input by the International Distilleries and KSW manufacture some confectionery from sugar.The total installed capacity in the industry is 160,000 metric tonnes per annum.

With the commissioning of Kinyara Sugar Plant, production this year is expected to be over 140,000mt.

Kakira Sugar Works:

Rehabilitation of the Kakira plant started way back in 1986 and there has been successive rehabilitation phases which have brought the factory to a crushing level of 2,500 tonnes of canes per day in the last phase of the programme which ended in November 1995.

Current installed capacity is 2500 T/PD and actual production was 39,461 MT and 40,430MT in 1994 and 1995 respectively.

Projected production for 1996 is 65,000MT.(Source: Sugar Policy Unit - Ministry of Trade & Industry)

The company's estates under cane in 1994 ran up to 8,000 hectares supplemented by about 3000 hectares under cane owned by out growers. The number of outgrowers is 1100 farmers

SCOUL

The company commenced rehabilitation in 1987 with the objective of achieving a crushing level of 2000 tonnes per day. Production was 19,715MT and 34,046MT in 1994 and 1995 respectively. Sugar output is expected to be

slightly over 50,000MT in 1996 (Source : Sugar Policy Unit -Ministry of Trade & Industry)

The area under cane amounts to 10,000 hectares . The company has no out growers programme

Kinyara Sugar Works:

This plant has been under a rehabilitation programme since 1987 .Phase I of the programme was to restore the plant to its original installed capacity of 1500 TPD which is equivalent to 37,000 tons of sugar per annum. The plant was commissioned in April 1996 and phase II will be to expanded the installed capacity to 2000TPD; equivalent to 50,000 tons of sugar per year by the year 2000. The acreage under cane is over 6000 hectares supplemented by over 500 hectares under cane owned by outgrowers.

Employment:

Employment in all the three operating companies totals 16000 workers, of whom over 2000 work in the factories .

Market:

At present all sugar is sold within the domestic market, as production is not yet sufficient to satisfy the national market.

It is estimated that in 1995 approximately 54% was met by imports. The national demand for sugar is in the range of 160,000 - 200,000 tons .

The soft drink industry is a potential consumer provided locally produced sugar meet the specifications of this industry.

Opportunities:

The country's per capita consumption of sugar is still very low , however with the increasing number of industries which require sugar as one the major raw material input, the country's sugar industry is destined to have a wider market.

Within the economic haulage distance of Kinyara factory there is a potential 40,000 hectares of land suitable for expansion and outgrowers development.

Strategic Constraints in the Sugar Product Group:

Among others, the constraints which appear to impede the growth, development and competitiveness of the Sub-sector are identified as follows:

- Competition from growing level of cheaper sugar imports.
- The two factories ; SCOUL and Kakira discharge 500 cubic metres of waste each into the nearby rivers- Musambya at Lugazi and Kiko at Kakira. Both factories produce effluent of a high Biological Oxygen Deficiency level (B.O.D). The water from River Musambya is unusable for about 10- 15 km down stream. Similarly R. Kiko is devoid of living organisms for 30 km from the point of effluent discharge.

5.1.3. FISH PROCESSING INDUSTRY

Fish processing in Uganda on industrial scale was first done in 1989 and by 1995 twelve companies all located on the shores of Lake Victoria were operating . Other 14 more companies were licensed of which three are under construction .(See attached schedule of fish processing plants in Uganda) All of them rely on Nile Perch. as their sale output. Production is mainly of chilled and frozen fish of which about 90% is exported to the EEC countries, Israel , North America and South east Asia.

In 1993 fish exports were over 6,138 tons of various processed fish worth o v e r US \$ 10 millions, whereas in 1994 volume of exports increased to 6,650 tonnes worth US \$ 11.2 millions . In 1995, processed fish exports were 7000mt, worth US \$ 15million .

Presently , installed production capacity of fish plants in Uganda is estimated at a minimum of 73,000 tons of raw input per year.

Employment:

Fish processing on industrial scale is generally labour intensive with workers ranging from 40 to more than 150 people per plant. It is estimated that total employment is over 1500 people.

Sources of Raw Fish

Currently all the processing factories source their supply from Lake Victoria . Annual fish production by 1993 in the whole country was 276,000mt of fish, and the following year dropped to 213,000 tons. (Background to the Budget 1994/95).

It is estimated that Lake Victoria just provides a half of that figure .

There is fear that due to excessive pressure of the fish efforts on Nile Perch in the Lake Victoria, production has declined. This is exemplified by the fact that total fleet of canoes rose from 11,000 in the seventies to 20,000 by the late 1980's involving about 100,000 people. This is a possible strain put on the fish stock.

Opportunities

The fillet of Nile Perch presents appropriate physical properties capable of substituting fillets of Cod which have been consumed for centuries in Europe.

The global demand for fish products is on increase in industrialised countries, due to health diet concerns particularly among the elder people in Europe.

Strategic Constraints Affecting the Industry

- Reports on the ecology of the Lake Victoria show that there is a threat to the continued survival of fish life due to the spread of the water hyacinth. The weed covers large areas of bays and shore lines the lake where fish normally breed and is therefore responsible for choking young fish to death contributing to the present decline of the stock.
- Lack of an assessment of the fish stock particularly the Nile Perch which is the livelihood of the whole fish processing industry in the country.
- Pollution, both domestic and industrial which also absorbs oxygen and poison plant and animal life.
- Intermittent supply of electric power impedes the industry's ability to internationally compete
- Lack of accurate information regarding directives and regulations as to standards.
- Inaccessibility to credits from financial institutions for investment geared to meeting European Standards.
- Lack of a fully developed packaging industry in the country erodes the competitiveness of the industry on the international market.

Recommendations and Action Plans

- a. Need for improvement in the industry to enable it conform with the standards that will be approved on the present import regulations for the European Union where most of Uganda's fish is exported.
- b. Assistance in control of the water hyacinth which is affecting fishing activities on Lakes Kyoga and Victoria .
- c. Fish stock assessment should be carried out in lakes Victoria ,Kyoga, Albert .
- d. Rapid and accurate information regarding directives and regulations as to Standards
- e. Provision of concessionary terms for investment specifically geared to adapting products to new sets of standards

5.1.4 GRAIN MILLING INDUSTRY

Grain milling in Uganda involves five cereal grains namely; maize ,wheat , rice , sorghum, and millet .

Maize Milling

According to the surveys made during Indicative Industrial Plan Study in 1992 there were about 275 registered maize flour mills,located in different areas of the country , including 4 large ones and 4 medium mills , the rest were small . More have come up since then.

The bigger mills are mostly located in the urban areas , the smaller ones are scattered in the country side. Total capacity is 600,000 tons per annum.

The maize flour is mainly for domestic consumption. This is due to the fact that maize is traded internationally in grain form, where quality specifications are internationally recognized. Maize flour to maintain the same moisture content would require expensive packaging making the product uncompetitive.

Maize Requirements

The demand for maize is large and growing with per capita consumption as high as 12 Kg per month. Maize is grown all over Uganda, however the high cost of transport coupled with their low value to weight ratio , precludes exports to countries other than neighbouring countries in the PTA region. This leaves the domestic market well supplied with enough maize for processing .

Uganda has a potential to be a major exporter of maize if it can increase maize production. The current production is 750,000 MT per annum and is projected to reach 860,000MT in the 1997/98 (Source: Bank of Uganda Agricultural Secretariat)

Domestic Demand for Maize Flour

Maize flour is mainly used by households as staple food ,purchased in bulk by institutions such as education establishments, Army , Prisons and Relief Organisations.

Current demand for raw maize for processing is 670,000 tons per annum. and is projected to increase to 738,000 metric tons by the year 1997/98.

Wheat Milling

Presently there are only two wheat mills in the country, namely ,Uganda Grain Milling Company (Uganda Millers Ltd) based in Jinja , and Nkuruba Mill located in Fortportal with processing capacity of 20,000 tonnes of wheat flour and 3500 tonnes respectively . Another mill is under construction in Kabale.

It should be noted that UGMC recently finished rehabilitation of its Mill No 1 whose capacity output was rated at 28,000tonnes of flour per annum. Therefore current capacity in the country is 51,500 tonnes per annum.

However actual production of wheat flour in the country was only 10,090 tonnes and 8,274 tonnes in 1993 and 1994 respectively.

Wheat Grain Requirements

Wheat as a crop is not wide spread in Uganda as it is in Kenya and Tanzania. Current wheat production in the country is a mere 5000tonnes of grains. It is mainly grown in Kapchorwa, Kabale and Buhweju in Bushenyi District . Much of the wheat is consumed by UGMC (Estimated at 3500 tonnes), the rest by Nkuruba Mill. It is estimated that 20,000 tonnes of wheat grains are imported into the country per annum.

Demand for Wheat Flour

The demand for wheat in Uganda is determined by the requirement for wheat flour by commercial bakeries and households. The demand was estimated at 25,000 tonnes in 1993 (Source: *Wheat & Barley Development , Feasibility Study Report*) However a recent survey put the figure at 40,000 tonnes per annum. The latter

is a realistic figure as bakery activities have increased in the country by three folds since 1992.

Rice , Sorghum and Millet

Rice, sorghum and millet mills are still small ,both in output and in providing employment. However there are three medium scale rice mills in the Eastern parts of Uganda.

Uganda grows over 6,000 tonnes of rice(1992), but it has been estimated that the capacity to grow and mill is much greater . Consumption is estimated to be over 4000 tonnes of rice per year (1992), with demand reacting quickly to price.

Milling of sorghum and millet on industrial scale has of recent picked up and the prospects for increased consumption of the two products in the country is very high.

Opportunities:

- The conclusions drawn from the Wheat & Barley Development Project indicate that wheat can successfully be produced in the country. The project proposed a five year wheat and barley production project with participation of small scale farmers in selected areas of the country. Implementation of the actual production of wheat is to begin in 1997 mainly in Kapchorwa and Western Uganda .
- An increase in the quantity of rice grown and milled in the country could provide either an additional source of locally grown food or an opportunity for export market

Constraints Affecting the Grain Milling Industry

- The current world prices of wheat grains have of recently increased causing price instability in the industry.
- Lack of contractual arrangements between processors and farmers to ensure a steady supply of maize , sorghum , wheat grains . Farmers lack good and timely seeds .
- Inadequate and poor storage facilities /silos
- Poor infrastructure in the country especially in the area of electric power supply and rural roads.

- Most maize millers are producing below capacity due to:
- Lack of enough resources to invest in repairs and more efficient equipment.
- Inaccessibility to credits to procure maize cereals.
- Poor packaging is a limiting factor in diversification or processing of new products from maize cereals.
- Grain milling Industries' waste are composed of dusts which can cause occupational asthma. Most of the industries do not have adequate dust collection facilities and as a result workers' health is at risk.

5:1.5 BAKERY INDUSTRY

The industry mainly comprises of small scale bakeries. According to a survey conducted in 1990 over 274 bakeries were identified. The majority were located in the high population density belt stretching from Jinja to Mukono, Kampala, Mpigi and Masaka.

Registered bakeries in the country by 1994 were 41. The rest of the small bakeries are confined in the informal sector.

The Bakery Industry has an Association, established in 1993 and at present has a membership of 32 registered bakeries. Membership is of mainly the medium to large scale bakeries in the country.

Currently the processing capacity of the registered bakeries is estimated to be 35,000 tonnes p.a equivalent to 115 million standard loaves. The figure is much higher considering the extra 10 medium to large scale bakeries which have started operation since late 1994.

Wheat Flour Requirements

The wheat flour consumption is estimated to be in the range of 50,000 - 60,000 tons p.a. Domestic production can only meet slightly over 30% of the total national requirements. The balance is imported mainly from PTA and EEC countries.

There is price instability in the industry due to increased prices of wheat grains on the world market. This has led to some bakeries in the country of recent to close. It is claimed that with the current taxation regime, few bakeries can continue to operate in this highly competitive industry.

Prices of Imported Wheat Flour in the Country

Prices C.I.F. Mombasa :- US \$ 400 per tonne.
 Transport cost US \$ 100 per tonne.

Wholesale prices

Retail price

P.T.A Wheat flour: Shs 45,000/-
 Non P.T.A Wheat Flour: Shs 49,000/-

Taxes :

Import duty - PTA	5%
Import duty- Non-PTA	30%
Excise duty (for both)	20%
Sales tax “	15%
Withholding tax	4%
Import commission	2%

Strategic Constraints Impeding the Growth and Competitiveness of the Industry

- The current tax regime is not favourable to the bakery industry
- Inadequate home grown wheat continues to have adverse effects on the raw material supply to the industry.
- Lack of enforcement of standards in the bakery industry .Some bakery products are inferior to be allowed on the market
- Certain bakery ingredients are not easily accessible on the domestic market
- Lack of trained bakers in the country

5.1.6 MALT INDUSTRY(BEER INDUSTRY)

Currently there are only two breweries in the country namely Uganda Breweries and Nile Breweries, located in Kampala and Jinja respectively. Beer manufacture involves two major processes: malting and brewing. Malting is a controlled germination of cereal grains while brewing involves fermentation of the malt extract.

Production capacities of two breweries have greatly increased in the last four years especially at Nile Breweries after the Government handed over the plant to its former owners. By 1994 combined installed capacity was 49,1 million litres and actual production was 30.8 million litres of beer.

A new line with installed capacity of 400,000 crates per month was installed last November at Nile Breweries which has increase the installed capacity in the whole industry by 50% .Similarly Uganda Breweries Ltd is planning a US \$ 30 expansion programme of the bottling line, which will raise the capacity from the present 180,000 crates per month to 300,000 per month. This will double the whole industry's bottling capacity to 700,000 crates of beer per month.

The industry is capital intensive employing about 1000 people.

Raw Material Requirements

Major raw material requirements are malt which cost the industry more than US \$ 2.5 millions per annum and packaging materials in form of glass bottles and plastic crates.

Market

The beer is marketed in returnable bottles of half litre.

Uganda has the lowest per capita consumption of beer (3 litres per person) in the PTA region .In Kenya it is 21 lts and Tanzania 13 lts and Zambia and Zaire over 40 lts.The low consumption in the country is attributed in the recent years, to obsolete machinery in both breweries and the low disposable incomes among the population .

Opportunities

Recent expansions in capacities of the existing breweries will allow the industry to enjoy the large economies of scales which should bring the retail prices within ranges affordable by many people.

Strategic Constraints Affecting the Industry

- The industry is highly dependent on imported raw material inputs ranging from malt products to packaging materials
- High government taxes which make the product expensive in a country with low purchasing power

5.17 SOFT DRINKS INDUSTRY

The industry consists of companies , namely :-

- Crown Bottlers
- Century Bottlers(CBC)
- Kampala Bottlers (KB)
- Vimto

Production:

Actual production of soft drinks by the five plants in 1993 ,1994 was 26.8 m.lts and 41million litres respectively. Crown Bottlers has 58% of the market share. The plant production output in 1995 was 4.6 million crates , compared with 1.8 m crates in 1994.

Raw Material Requirements

The only local materials used are water and plastic crates .The industry also consumes 1400tons of CO₂ , and several thousands of tons of white sugar.

Market

Sales are entirely in Uganda with the Kampala area and Central region accounting for about 60%. Consumption levels in other parts of Uganda have of recent increased.However the country's per capita consumption of 2 lts per person per year is still very low compared to Tanzania's 5 litres (1990), and Kenya's 14 litres (1991).This lower consumption figure in Uganda may be caused by : low capacity utilisation and high government taxes.

Threats

The impending removal of custom barriers among the three East African Countries would leave the industry under severe pressure of cheaper soft drinks products from Kenya and Tanzania who enjoy large economies of scale. The problem of packaging (glass bottle) must be addressed if the industry is to compete with imported similar products from the East African Region.

5.1.8 ALCOHOLIC BEVERAGES INDUSTRY (SPIRIT) .

The industry is dominated by the International Distilleries Ltd.(IDL) with 90% of the market and spirit brands. The other manufacturer is West Nile Distillers Ltd . (WNDL).

The manufacturers produce blended spirits from raw alcohol made either from Ethanol a by product of sugar cane , or fruit (mainly banana) Enguli . most of the industry's raw alcohol at present comes from the one sugar factory (Lugazi) because it costs less than the price set by enguli producers.

Although the cost of producing enguli may be less than the cost of producing alcohol from ethanol , enguli can sold more profitably (although illegally) to consumers than the to the spirit industry.

Government duty and sales taxes on spirits adds over 100% to he ex- factory cost. Enguli, sold directly to consumers , may avoid these heavy taxes so offer higher profits.

The main (IDL) product is Waragi, accounting for over 70%. The other product brands whisky , Gin , Brandy and other all require imported concentrates to be added to the distilled spirits. All products are dependent on the import of bottles, caps and other inputs and so making the industry very dependent on imports.

Sales and distribution are largely concentrated in urban areas and limited by a number of factors such as competition from cheaper spirits including enguli.

Threats

The industry is at present almost dependent on one sugar factory for its supplies of raw alcohol . It should be note that Kakira has plans of establishing its own distillery operations in the next few years.

Opportunities

The industry has the opportunity of developing exports, and should be encouraged to offset its heavy foreign exchange spendings.

Constraints.

- Industry heavily depends on the importation of glass bottles due to the absence of a glass bottle factory in Uganda .

- Intermittent power supply is a major cause of production disruptions .
- High cost of imported flavour concentrates.
- Dependence on imported crown corks /caps
- Lack of enforcement of the Enguli Act 1994, which allows continued consumption of illicit liquors.
- Competition from cheaper spirits especially enguli.
- High taxes imposed on the spirits is a much contributory factor for the increasing consumption of illicit liquors.
- Inaccessibility to bank credits

Recommendation and Action Plans

- Production of glass bottles and manufacture of crown corks/caps should be set up in the country
- Attempts should be made by the industry to produce some or all of its raw alcohol from bananas, other fruits or from maize or other cereals.
- There is need to improve the supply of electric power to reduce the cost of production .
- Production of some or all of the imported flavour concentrates should be considered.
- The Enguli Act should be enforced.
- Review of lending policies to manufacturers

Action Plan

Follow up action to implement the feasibility study which recommended setting up a glass container plant in Uganda

Government should exert every effort to reduce the rate of disruption of power supply

Enforcement of the Enguli Act 1964 and total ban of consumption of illicit liquor.

Action By :

UIA ,
Private Entrepreneurs

Ministry of Energy

UNBS

5.1.9 DAIRY INDUSTRY

The Uganda Dairy Industry has nine medium to large scale enterprises. The largest is Dairy Corporation Ltd with milk processing operations in Kampala, Entebbe and Mbale.

Others are :

- Toro Dairy Cooperative Society located in Fort portal
- Kigezi Dairy Cooperative Society located in Kabale
- Jesa Farm located 27 mls on Hoima Road
- Ra Milk Ltd (recently commissioned) located in Mbarara
- Mityana Dairy Plant
- Liberty Dairy Ltd(Cheese production)- Entebbe
- Paramount Dairies- Mbarara
- Western Highlands Creameries - Mbarara
- G.B.K - Mbarara

The Uganda Dairy Corporation has a net work of milk collecting centres which feed into the three processing sites where fresh and reconstituted milk is pasteurised and packed in sachets .The Entebbe plant has a pilot-scale in plant for training needs and uses the equipment to commercially produce butter, cheese, yorgut, ice-cream and ghee .

Production

The installed capacity of processed milk in 1994 was 47,5 million lts per annum. Actual production in the same year was 28million litres of processed milk.

With the liberalisation of the milk processing industry a number of private entrepreneurs have joined in. Among the notables ones are Liberty Dairy in Entebbe, which processes milk and cheese , and Jesa Dairy ,Western Creameries, J.B.K and Agro-ways Ltd in Jinja , are all involved in the processing of pasteurized milk.

The commissioning of the new plant at Mbarara has increased the country's capacity to 60 million litres per annum. Construction of a new privately owned milk collection centre has started in Northern Ugandan town of Lira .The centre will have a capacity of 2000lts per day, and is expected to be commissioned in October 1996.

Milk Supply Requirement

The Dairy Cooperation ,the largest consumer sources its supply mainly from South Western Uganda from its milk collection centres ,before transpiration to Kampala.The supply of milk country- wide was estimated to be 380 millions in 1992/93 (Source: Bank of Uganda- Agricultural Secretariat ,1993) .

Domestic Demand

According to the survey carried out in 1990 by Agricultural Secretariat, Bank of Uganda , the average per capita consumption in Uganda is 22litres per person. Capita consumption is heavily weighed towards the urban areas. In Kampala, it is 39 litres while in rural it averages 21 litres. Most of the milk consumed is raw without going through any processing. There are some exports of milk especially to neighbouring Rwanda from Kabale Dairy Plant .Latest information indicate thatsince March 1996, about 50,000litres of milk have been exported.

Constraints

- Poor infrastructure particularly rural roads and inadequate milk collection centres in milk producing areas .
- Inadequate supply of electric power in milk producing areas.
- Packaging materials are not readily available on the domestic market.
- Seeds and other planting materials for improved grasses and legumes are not readily available. Farmers need improved pastures to improve the yields from their cows.
- Standards for milk products are not publisized.
- Lack of information on market opportunities and poor access to markets (which are mainly urban). Its is generally difficult for farmers to know what the market want.
- Technology is a major barrier to the entry of smaller firms into milk processing. Milk processing equipment is relatively sophisticated and expensive for smaller enterprises.

Recommendations and Action Plans

- Government action to improve the infrastructure, particularly rural roads, telephones and electric power supply.
- Uganda Investment Authority should lure investors in packaging industry .

5.1.10 EDIBLE OIL

Current Situation

Oil seed milling capacities in Uganda can be described under three categories.

- High - capacity oil mills in excess of 20,000 tonnes per annum
- Medium- capacity oil mill between 9,000-19,000 tonnes per annum
- low- capacity oil mills up to 9000 tonnes per annum.

Category 1 consists of three enterprises and are centred in Jinja and Kampala. The combined capacity is estimated at 46,000 tonnes.

Category 2 consists of mills concentrated around Kampala-Kawempe area . Most of these mills are very old , commissioned in 1940's .

Production :

The current production levels have risen from 47 tonne in 1991 to 7000mt in 1995 . In 1994 actual production of edible oil was 6,265 tonnes. (Background to the Budget 1995/96) .

Demand for Edible Oil

According to the Household Budget Survey of 1990, it was established that the consumption of cooking oil in 1990 was 10,530 tonnes . The per capita consumption of edible oil in Uganda is 2.2 kg , well below the recommended WHO amount of 3.3 kgs .

The national demand for edible oil has been put at 35,000mt , but a large deficit exists despite national production .Uganda receives edible oil from USA through USAID under PL 480 arrangement to the tune of 5000 tonnes annually. However this arrangement is ending this year.

Constraints

- Lack of enough oil seed for processing.
- Low oil content and low yields of available varieties .
- Lack of extension services to oil seed farmers.
- Limited of contractual arrangements between farmers and processors to ensure to ensure a steady supply .
- The decline of the cotton production in the country adversely affects the edible oil industry which used to depend on the cotton seed as the primary crushing raw material.
- Inadequate research facilities and funding
- Imports of edible oil will increase when the PL480 ends this year .

Recommendations and Action Plans

- Research in oil seeds should address issues of direct relevance to small farmers in the country
- Budgets for research activities should be increased and supplemental donor funds should be sought.
- There is need to improve seed quality and distribution systems to convince farmers to invest in improved seeds.
- There is need to develop and promote technologies that off-set labour shortages in rural areas.
- Tax exemption on agricultural inputs and implements.
- The oil seed processors should continue to be involved in seed multiplication and distribution , and in promotion of oilseed production as they have been under the auspices of the Uganda Oil Seed Processors Association .
- The development and promotion of appropriate technologies for village based processing should be encouraged.
- The importation of oil seeds from COMESA member countries without duties, should be encouraged to meet the existing excessive oilseed processing capacity.

- Review of lending policies that affect oilseed processors.

Action Plan

Action By :

Research to address issues of direct relevancy to farmers

NARO

Government to increase funds for research in oilseed crops

MAAIF, MF, MEP

Improve the quality of seeds and distribution system

Uganda Seed Project, Private Seed Suppliers

Development and promotion of appropriate technologies for rural based processing Review of duties on agricultural inputs and implements

UNSTC , UPK ,
UMA ,NGO'S

Provision of lines of credits for oil seed processors

MF, Donor Agencies

5.1.11 FRUIT , VEGETABLE AND SOYA PROCESSING

Fruit and Vegetable Processing

Processing of fruits and vegetable as an industry is still in its infancy in Uganda . Despite the fact that most of Uganda is endowed with very good soil and a tropical climate, the fruits and vegetables produced are basically for domestic consumption or exported unprocessed.

The potential to commercially produce a variety of tropical fruits and vegetable exists. There are many cottage-scale enterprises processing and preserving fruits and vegetables .. Presently a number of small to medium sized companies are involved in processing of fruits. Pineapple , banana , oranges,passion fruit tomatoes and mangoes are the principal fruits processed .

The outstanding enterprises are three, namely :-

- RECO located in Kasese , produces Jams, papain, fruit concentrates.

- Elgonia Industries located in Tororo; produces passion and orange squash, tomato and chili sauces
- Megatrends located in Kampala: produces tomato sauce and chilli sauce

There are some small sized enterprises ; some are women groups, which are involved in drying of :-

- Banana into cavendish
- Apple banana into slices
- pineapple , mangoes, passion fruits into leathers

The leading company in this field is Fruits of the Nile Ltd.

Since fruits and vegetables are perishable commodities the above activity would turn it into a stable product that would be easier to store and transport.

Banana, pineapple and oranges are processed into altar wines, white sweet and medium wines. of the "Banapo" brand in Kabale. In Jinja similar fruits are processed at Theresa Winery .

Capacity at Kabale plant is about 15,000 bottles (0.75 litres) per month.

Raw Material Requirements

Currently a steady supply of these fruits and vegetables is not guaranteed due to absence of contractual arrangements between farmers and processors; secondly commercial farming in Uganda is not wide spread. Despite absence of adequate knowledge in effective post -harvesting, handling, sanitation procedures, storage and distribution techniques, the prospects for high quality fruits and vegetables is still very good.

Soya Processing

Africa Basic Foods (U) Ltd is the leading enterprise in soya processing.

This is a small-scale soya bean and maize milling operation specialising in the production of soya flour, baby food and other soya and maize based products. It has a single shift capacity of 5 tpd.

Opportunities

There is a potential for a Uganda to sell dried fruits and vegetables in the export market.

The production of sauces and jams are beginning to replace imports and have established themselves on the domestic market. Africa Basic with additional finance and technical assistance could extend the scope of their soya based foods and possibly include the production of texturised vegetable protein (TPV). TPV is a high protein non-meat product which is highly valued by people who , for dietary or other reasons cannot eat meat.

Constraints

- Lack of standards for both locally manufactured and imported processed fruits and vegetables .
- The industry is wholly dependent on imported glass containers as well as other packaging materials.
- Lack of education among the Ugandan consumer : Many consumers cannot defferentiate between a juice concentrate and a mere squash or between tomato ketchup and tomato sauce .
- Absence of contractual arrangements between farmers and those industries where there is stiff competition for particular supplies.
- Insufficient expertise in horticulture : MAAIF extensionists are multi-purpose and not skilled in horticulture - the major supplier of raw material to the industry.
- Threat from Kenyan processed products. The Kenyan fruit and vegetable industry is well established and operating capacity is high , thus the cost per unit is comparatively very low.
- Poor post harvest facilities for fruits and vegetables .
- Few trained food technologists.
- Lack of information for critical decision making ,such as equipment selection .
- Inaccessibility to credits from financial institutions
- Lack of management skills is clearly evident

Recommendations and Actions Plan

- A glass bottle factory should be established in the country .
- The UNBS should be equipped to enforce and test the poor imported quality products dumped on the local market.
- Through Government and Donor assistance lines of credits should be established for easy accessibility of credits at low interest rates to entrepreneurs.
- Government should equip and staff the Department of Food Science, Makerere University.
- Encourage supply agreements between processors and growers in which both sides are equitably protected .

*Action Plan**Action By :*

Establish a glass bottle factory and other packaging industries

UIA , Private Entrepreneurs

Provision of an environment that enables Small and Medium Enterprises to access credits

Government / Donors , Financial Institutions

Education of Ugandan Consumers through promotion campaigns

Processors

Fruit and Vegetable aggressive

Encourage contractual arrangements between farmers and processors to ensure a steady supply of raw materials inputs

Uganda Farmer Association (UFA), Fruit and Vegetable Processors .

Enhance business management capabilities in all management function.

MTAC, UMA

5.1.12 MEAT PROCESSING

Presently , no large scale meat processing activity is carried out in the country. The only meat processing factory is the Soroti meat canning factory which is now not in operation and in a sorry state. The factory had an installed

capacity of 400 animals /shifts.

The Uganda Meat Packers Ltd factory in Kampala has an installed capacity of 150 animals/day and is only a slaughter house for supplying institutions and butchers around Kampala.

However, there are few small scale processors of meat products. These include Rosa Brothers Ltd, Food World Ltd, Quality Cuts Ltd etc, who produce sausages, bacon ham salamis and other products.

A new meat processing plant is under construction at Lubowa, 9 km Entebbe Road.

Livestock Resources

The livestock population for 1991 is estimated as 5.1 million cattle; 1.2 million pigs; 4.95 million goats and 0.8 million sheep.

Although drastically reduced in number and productivity after years of political unrest and of recently by the return of Rwandan Refugees to Rwanda, the current animal population can sustain a relatively sized meat processing industry.

Constraints

- Hygiene and consistency of products are still a problem to some of the processors.
- General lack of investment in the industry.

5.1.13 ANIMAL FEEDS INDUSTRY

The industry consists of one large, three medium scale and more than ten small manufacturers Uganda Feeds Ltd. (UFL) at Jinja, has at least 40% of the market share, Ugachik (U), Kanena Feed Mill at Bushenyi and Kwezi Animal Feeds Ltd in Fortportal., the remaining small mills are located around Kampala, Jinja, Mbarara, Mbale.

The industry has an installed capacity of over 60,000 tonnes of feeds per annum. Actual production in 1994 was 35,000 tonnes

Raw Material Requirement

The industry is domestically resource based depending on ingredients locally mixed. The major ingredients are :-

- Maize and maize bran
- Oil seed cake(Soya, cotton and sunflower)
- wheat brand and polard
- Fish by -products

Demand

Sales of poultry food fluctuates due to the seasonal nature of poultry consumption. Sales of other feeds are more stable. Forecasts indicate a doubling in liquid milk by the year 2000. This is a projected growth rate of 6.% per year. The growth rate used for pigs and poultry is 3.5% and 5% respectively. Based on these assumptions the demand for animal feeds was estimated by DANIDA Report in 1992 as shown the Table below.

Projection of Animal Feed Demand (1989-2000) in '000 tonnes

	1989	1995	2000
Poultry	55,000	80,000	96,000
Dairy cattle	27,000	43,000	54,000
Pigs	50,000	63,000	72,000
Total	132,000	186,000	222,000
Growth rate index	100	141	169

Source: DANIDA Report , March 1992

Feeds locally produced contribute a significant proportion to the Nation's GDP . However due to the high demand for feeds on the domestic market, exports of feeds to neighbouring countries is still far fetched.

Constraints

- There are no legal standards for nutritional content of animal feed .This can lead to lower quality formulations being offered to reduce the selling price or maximise profit
- High costs of raw materials such as maize , mukene, molasses. Maize and mukene are on high demand as food in households .

- Seasonality of maize and mukene is a limiting factor.
- Lack of education among farmers on the various types of feeds and feeding methods. The existing extension work has not yet been successful.
- Lack of an up to date data bank on existing demands for feeds, milk eggs , and on price trends.
- Inability to produce a full range of animal/ poultry feeds , but merely concentrating on the profitable lines.
- There are few qualified food nutritionists employed by the Animal Feeds Industry.
- Frequent power failures.

Recommendations

- The National Bureau of Standards should publicize, if available , quality standards to save the farmers from the problems associated with the poor quality feeds.
- The field extension service should be strengthened for the benefit of a wide range farmers
- Review of the current tax rate -VAT of 17% .The rate is still prohibitive to farmers who purchase the feeds as raw material input.
- More seminars for farmers should be organised by feed producers in order to expose to farmers various types of feeds required by different livestock and the recommended feed ratios and methods.

Action Plans

Action By :

Government accelerate implementation of programmes designed to improve the reliability of power supply.

Uganda Electricity Board (U.E.B)

Strengthen the extension services to poultry and livestock farmers in various types of feeding methods, including recommended feed ratios .

Animal Feeds Producers and MAAIF

Review of the current tax regime for the industry

MF

Establish and publicize standard norms for raw material inputs for industry

UNBS

5.2 THE WOOD AND WOOD PRODUCTS SUB SECTOR

5.2.1 RAW MATERIAL SUPPLY FOR PRIMARY FOREST INDUSTRIES

The forests of Uganda cover a total area of about 3.5 million ha., and of these at November 1993 approx. 1,424,391 ha. were gazetted as forest reserves (6.6% of land area). This was the forest estate under the Forest Department (FD) control, and included about:

- 450,000. ha. of tropical high forest
- 750,000. ha. of savanna woodland
- 14,000 ha. of conifer plantations
- 6,000 ha. of euclayptus plantations
- 200,000 ha. of other types (grassland, swamp forest, montane forest, etc)

Since 1991 a transfer has been made of 323,000 ha. from Forest reserves to National Parks leaving 1,104,391 ha. of forest estate under FD. (see attached Table 1 : Status of Forest Reserves in Uganda). Only two Forest Reserves have an up-to-date inventory namely Budongo and Mabira Reserves shown as below:

Budongo

23,037 ha. productive
45,830 ha unproductive

Total 68,867 ha

Mabira

16,608 ha. productive
14,063 ha unproductive

Total 30,671 ha

Since all inventories have been not been completed, the area of productive natural forest, the standing stock of timber, and the Annual Allowable Cut (AAC) can only be estimated. The AAC for all natural forest reserves previous to transfers to National Parks, and not allowing for setting aside conservation areas, was estimated by Plumtre and Carvalho in January 1991 to be about 250,000 m³ of all species.

Forest Plantation Resources

Planted areas with main species are as follows:

	Ha.	% of total
Cupressus lusitanica	4,621	35
Pinus patula	4,711	35
Pinus caribea & cocarpa	3,648	27
other pines	401	3
Total	13,381	100

5.2.2 PRIMARY FOREST INDUSTRIES

Saw milling activities started way back in the 1920s and is one of the oldest manufacturing activities in the country.

The entire wood and wood products sub sector has been lacking new capital investments since the mid 1960s. The major entrepreneurs then were Asians who were expelled in 1972. The Wood Industry Corporation (WICO), a government parastatal was set up, eventually took over the management of all saw mills and major carpentry and joinery workshops. WICO never took the initiative to immediately replace some of the machinery in later years and consequently production facilities became obsolete.

It is difficult to estimate the demand for sawn timber basically because timber is produced by both saw millers and pitsawyers with the latter being able to saw timber anywhere (whether reserved forests, on public and private lands).

However according to available data, demand for sawn timber can be estimated at 147,000 - 159,000 m³ p.a. This includes all pitsawn timber and sawn timber used in rural areas for building and construction. Consumption also includes an unknown amount of sawn timber that is smuggled from Zaire. The output of sawmills is attached in Tables attached.

Major Development Issues

Until recently (1994), the main source of Uganda's wood and wood products has been the Natural Forests which have been subjected to agricultural encroachment and unsystematic harvesting methods (exploitation) with the most available (commercial) species being creamed off from the forest.

The industrial plantations which amounted to about 20,000 ha and had been badly neglected in the past twenty years are in most cases over mature and in some cases infected with disease and are increasingly being harvested for wood and wood products to substitute for shortfall in Natural forests products.

It is estimated that not more than 50% of the planted area is still intact as a result of indiscriminate harvesting and plant disease. Compared to most countries in the region, Uganda has the smallest acreage of forest plantation and is probably the most endowed with the best conditions for establishment of industrial plantations. It needs emphasis to note that in future, most of Uganda's wood and wood products will have to be met from industrial plantations.

For the period 1995 - 2000, the annual timber requirement for the whole country has been estimated at 175,000 m³ sawn wood per year. At the present low recovery rate (20%) of sawn timber from roundwood, the annual roundwood requirements are estimated at 875,000 m³ per year. In addition, more roundwood is required for panel products such as plywood, blockboard, softboards, etc and has been estimated to raise to 70,000 m³ of roundwood equivalent per year in 2000.

Uganda's Natural Forests, public plantations and private forests can at present only supply 450,000 m³ of roundwood per annum (outside National Parks and Forest Parks). Under the present scenario, Uganda is therefore consuming almost twice as much roundwood than the sustainable allowable cut or consumption is 94% more than the sustainable sawlog requirements. In addition, the consumption of round poles in construction, fencing and power transmission was estimated to have reached 670,000 m³ in 1992.

The Forestry Sector plays a dominant role in Uganda's energy sector where 94% of the total energy consumed is from woodfuels as compared to 4% from petroleum and 1% from Hydro-electricity. As a general observation, a crisis is foreseen in the near future unless major improvements in forest management, utilisation and industrial processing are made to meet the country's requirements for fuelwood and other forest products.

Pitsawing provides the markets with the shortfall of sawn timber and it is estimated that about 3,000 pitsaws are operating now in Uganda.

Industrial Processing

The Forestry sector Industry in Uganda is predominantly sawmilling and pitsawing with pitsawing being more predominant in Natural forest especially those outside Forest Reserves.

The conversion of roundwood to sawntimber at a rate of 20% recovery is extremely wasteful and if recovery was to be raised to 40%, then the country's sawntimber requirements could be contained within the present sustainable allowable cut. This is possible through the introduction of technologies that are less wasteful and through training of technical staff in relevant skills.

In addition, more capital is needed to ensure that the right machinery that environmentally friendly is put in place. Thus in short-run, the solution to raw material supply can to a great extent be met through efficient industrial practice.

in logging, sawmilling, timber drying, wood preservation and other aspects of timber handling and storage. The scope for improvements and benefits in this field is tremendous. The same applies to woodfuel energy production, consumption and utilisation.

There are two major draw backs to the sawn timber activities i.e lack of kiln drying facilities at hardwood or conifer sawmills and log grading techniques by the Forest Department staff. Treatment plants are needed in most provisional areas, both for building poles and sawn timber since treated timber last longer and so reduces pressure on the forest resource.

5.2.3 SECONDARY FOREST INDUSTRIES

The main secondary forest products are:

- furniture
- profile boards for house fitting
- components for house fitting (doors, window frames, etc)
- stair cases, etc
- parquet flooring

The bulk of Uganda's wood working sector consists of micro-scale woodworking enterprises scattered in major urban areas of the country. A survey of industrial establishments carried out by Ministry of Trade and Industry (1988/89) in some districts gives the number of manufacturing furniture and fixtures as follows:

	No. of Enterprises	No. of Employees
Kampala	219	1,495
Masaka	102	797
Jinja	37	453
Mukono	58	214
Mbarara	37	420
Lira	20	216
Kabarole	18	120
Total	491	3,715

Some furniture and joinery manufacturing facilities are integrated with primary wood processing operations such as Kiira PlyMill and Saw Complex and Jinja Joinery and Construction Ltd both located in Jinja.

Other secondary wood industries include those manufacturing floor parquets, pencils, match boxes and briquettes.

Technology in use

Most wood workshops use simple hand carpentry tools such as hand saws, landers, etc. Around Kampala some workshops use planing, grooving and moulding machines; assembling involves manual glaring and depressing machines. Among those workshops employing the modern technique of dowel jointing are Mc Crae and Roko Joinery plant.

Technical and Financial Issues - Enterprise Level

The sawmilling industry is greatly lacking in logging equipment and skilled personnel in logging techniques.

The lack of suitable equipment and the right Technical skills is apparent in the whole wood sector is particularly manifested in:

- logging operations
- afforestation
- saw milling
- wood preservation
- timber drying
- marketing of timber
- wood fuel energy production and utilisation
- furniture, carpentry and joinery

Because of lack of suitable equipment, skills and knowledge in the above operations the whole industry has been characterised with a very high loss of the raw material in the whole sector production line.

Technical solutions are possible to implement both in the short and medium terms and are the main key to the sustainability of the industry and environment conservation. To a great extent lack of right equipment and skills is due to lack of financial capital to fund operations in sectors' production line.

Production Capacity

The installed production capacity of most enterprises in this sub sector is difficult to determine due to low level of development characterised by labour intensiveness and output of products articles based on per work basis. Most of the registered carpentry and joinery workshops in the country employ on average 15 people.

Estimated production capacities of these workshops is shown in table below.

Item	Unit of measure	1989	1990	1991	1992	1993
Est total capacity	pcs	-	-	-	-	220,000
windows & frames	"	30,000	36,000	30,000	36,000	42,000
door frames	"	24,000	30,000	24,000	36,000	42,000
chairs & others	"	24,000	24,000	24,000	30,000	36,000

There are no specific distribution channels for the carpentry and joinery products. Marketing of products is based on orders. Although some of the workshops operate show rooms as a form of retail outlets.

At the moment there are few companies exporting wood products, despite the attractive export market in neighbouring Kenya. On the domestic market, most enterprises are increasingly experiencing stiff competition from small producers who sell their products cheaply because of less overheads; this has led the large establishments to look for export market.

5.2.4 STRATEGIC CONSTRAINTS TO THE SUB SECTOR

Among others, factors which impede the growth and competitiveness of the sub sector are:-

1. Absence of serial production capacity in the country to efficiently utilise timber resources.
2. Non-availability of specific information on wood products. Most enterprises involved in the wood industry have no experience in export market.

Impact Regulations/Policy on Environment

- Lack of long term licenses for concessions, currently at 5 years, the banking institutions often find difficult to fund some forest related industries because the pay back period in most cases will exceed five years.
- Saw millers also find it difficult to replant areas they fell first because of lack of funding and mainly because under current licensing the trees

planted by the saw miller do not belong to him and nor is he obliged to maintain and tender them.

- In order for saw millers to plant areas felled, provision should be made for them to own the trees planted on condition that the forestry land use will not change. This way the sawmillers will regard replanting as an investment and will maintain and tend the crops.
 - The current regulations by the Forest Department requiring every piece of timber leaving the district to be personally hammered by the DFO is frustrating because the amount of timber produced in a district or by one saw mill is very high and the DFO can not always be available for this.
3. Unreliable unskilled labour force. It is very difficult to train manpower in serial production processes since the country lacks specialised industrial training institutions in this field.

It should be noted that many improvements proposed under primary industries are essential for sound development of the secondary industries, eg. Accurate sawing, dipping of pine sawn timber against blue stain, seasoning (kiln or air drying), and grading of sawn timber.

5.2.5 STRATEGIC DIRECTIONS

1. Natural Resources

The transfer of substantial areas from the Gazetted Forest Reserves to National Parks to ensure conservation for biological diversity and promotion of tourism is a major landmark in safeguarding and sustaining the environment. The additional creation of highly protected forest reserves further supplements the conservation and sustainability of the forest resource in the Country and is a major first step in the right direction.

In order to ensure sustainability and create highly productive natural forests, major management improvements have to be made to encourage a high degree of protection that will encourage natural vegetation which in a number of selected natural forests has to be supplemented with enrichment planting.

The offer of new sawmilling and pitsawing licenses in natural forest reserves should be curtailed until such time when the forests should attain such levels that allow sustainable harvesting.

It has been estimated that the natural forests can supply about 200,000m³ per annum. Assuming that the saw timber recovery rate will be raised gradually (assume 30%), the annual demand for sawn logs will be about 600,000m³.

With a mean annual increment rate of 12m³/ha at a 25 year rotation, the minimum annual planting to be done will be 2000 ha. However, in order to compensate for the present and past under cutting and cater for the increased demand after the year 2000, the annual planting target should be set at 3000ha.

In order to achieve this, incentives must be put in place to enable planting by private companies, individuals, Non-Governmental Organisations and Government itself. A major incentive by Government is to give long term concession to those involved in plantation establishment to own the tree crop planted without charging the land use.

The wood sector in Uganda is virtually underdeveloped in the field of pulp and paper products. The only panel products made in Uganda are plywood and blockboards.

Investments in the production of panel products such as plywood, clipboards, softboards and other board products should be encouraged when the local raw materials source permits.

Expansion of Existing Markets or entry by New Producers:

Uganda's highest advantage in the wood sector was the availability of unique and high quality timbers such as mahogany, elgon, olive, ironwood, mvule etc, but this resource has been very much depleted, the main emphasis now should be to curtail production and expansion in the Natural Forest based industries while ensuring management to encourage natural regeneration and enrichment planting.

Expansion should be geared to the establishment of industrial plantations first to substitute for the degraded natural forest products and secondly to meet increasing demand for forest products by the growing economy and population. In addition capacity utilisation in existing industries badly need to be raised.

2) SECONDARY INDUSTRIAL SECTOR

Constraints to Competitiveness in Furniture Industry

Where as there are a number of small scale furniture makers that have sprang up in the most recent years, there are also a number of obstacles this industry is facing that hold back the line of advancement. These include:

a) **Lack of Trained Manpower:**

Craftsmanship

Most of the people doing the craftsmanship in small scale workshops have not been trained in technical institutions. There is lack of designers for various styles and crafts of furniture. As a result almost all workshops tend to produce the same style and design of furniture. The enterprise owners should expose their employees to basic carpentry skills including maximising timber usage.

Managers

Very few firms are manned by properly trained managers as a result most of the businesses are operated inefficiently. The majority of the small scale firms are family businesses with very little managerial skills. Such managers should be encouraged to participate in short training programmes in business management.

b) **Obsolete Machinery and investment capital**

Most small scale workshops are using old machinery. It is only the medium and large scale workshops that have modern machinery. Coupled with obsolete machinery, is the inaccessibility to capital. Since most firms require funds to purchase new machinery, financial institutions should consider giving long term loans, i.e development loans, to ease the burden on loan repayment schedules. However, there should be a corresponding response in training programmes to upgrade existing technical skills. A new standardised training curriculum should be drawn up to be used by all technical training institutions.

c) **Raw Material Inputs**

Apart from timber, almost all other inputs (fabrics for upholstery work, wood treatment chemicals) are imported. In addition most chemicals imported are of poor quality. This in turn affects the quality of the final product.

The Uganda National Bureau of Standards should enforce the importation of quality inputs to enhance quality control measures in the firms.

d) **Market**

The local market for furniture is still big basically because of low disposable incomes especially in rural areas. Therefore most small scale furniture makers produce on order. In urban areas, the problem is lack of variety in styles and designs which makes the products unattractive to would-be buyers. The furniture makers should become more aggressive in their marketing methods due to stiff competition. In order to tap export markets the furniture makers should improve on quality. This requires importation of timber seasoning plants.

e) Quality Control

Quality control is not taken seriously in many firms. The Uganda National Bureau of Standards should enforce quality control in all firms in order to give them a competitive edge.

f) Taxation

Most small scale operators lack proper information regarding taxation policies; this tends to create friction between these operators and revenue officials. Through associations such as UMA, taxation seminars or workshops should be organised for small scale operators.

In addition, Government should offer tax holidays or concessional import duty rates for new investors.

5.3 NON-METALLIC MINERAL PRODUCTS SUB SECTOR

5.3.1. NUMBER OF ENTERPRISES IN SUB SECTOR

The Non-Metallic Mineral products sub-sector is expected to show an increasing contribution to economic growth despite a narrowly focussed tax base at present. The index of industrial production in the sub-sector was indicated to be 94.5% in 1988 and 203.1 in 1992 based mainly on bricks, tiles and cement.

The number of enterprises in this sub-sector fall into the following ISIC Codes.

CATEGORY	NO OF FIRMS	EMPLOYMENT
2610 Glass	1	0
2691 Ceramic Ware	11	250+
2692 Refractories	0	
2693 Structural Clay Products	65	2380
2694 Cement	2	600+
Lime	7	245
2695 Concrete Products	12	2622
Gypsum Products		
Chalk	1	100

The number of firms should not be taken to include the total that exists. This sub sector is characterised by having a large number of small, informal operations especially among brick makers and also lime producers. In addition, the number of employees should not be taken to indicate the number of employees in the sub sector as a whole as it is certain that there are many people working in the informal

sector of building materials production especially in small scale making, whose activities are not accounted for here, similarly it can be expected that there are many more than the seven lime producers that are listed.

The manufacturing sector will benefit from continued macro-economic stability reforms in the economic system and the commitment of government to provide an enabling environment conducive to private sector development. The non-metallic mineral products sub-sector provides essential raw materials for various industries. The mining and processing of these non-metallic minerals provides jobs especially in the rural areas and sometimes women in light open cast programs, eg. Clay, pottery, salt in Katwe and Kihiro. Non-metallic minerals are used in various applications in industries.

5.3.2 BACKGROUND AND PRESENT SITUATION OF NON-METALLIC MINERALS

During the late 60s and early 70s there was considerable activities of mines producing lime, sand, clays, stones and other non-metallic minerals. There were some companies utilising these non-metallic minerals. Inputs such as sand in glass bottles, feldspar in glass, scouring powder, soap factories, kaolin in paper industries, rubber, bricks, tiles and refractory bricks, ceramic ware, etc. Some of these local inputs apart from local consumption, were also exported to neighbouring countries. There was a promising future for the non-metallic minerals development during that time as more industries were expected to start locally or in the region.

But during mid 70s and early 80s most mines and factories declined due to change of management as a result of poor macro-economic programmes.

After the change in government in 1986 under NRM Government some rehabilitation programmes were undertaken in the non-metallic mineral products sub sector. Areas such as bricks, cement and lime industries increased in production at least 30% capacity utilisation.

Most industries in Uganda were set up for import substitution, a policy which could be sustained due to dependence on imported raw materials. Apart from sugar, cement and few country import over 80% of the raw materials input. This situation cannot lead to self sustaining economy, it is therefore important to:

- (a) promote industries which can produce raw materials from our local resources for in local industries and export surplus i.e Industrial Minerals
- (b) encourage industries which use local raw materials

A comprehensive forward looking study was undertaken to analyse:

- Strategic constraints on the manufacturing
- Government policies towards this sector
- Development and use of local resources (both human and natural)
- Prospects for growth and diversification of markets (both domestic and export)
- Infrastructure requirements
- Technology development needs

The Indicative Industrial Plan - DP/UGA/90/012 - drew up a prioritised action plan for the development of the manufacturing sector, sub sector by sub sector emphasizing priorities for future development and investment.

53.3 PROBLEMS OF EXISTING MANUFACTURERS

Transport

This sub sector is heavily dependent on road transport for the movement of raw materials, fuel and processed products. The continued construction and maintenance of the road network will be vital to its development.

The existence of the rail track from Mombasa through to Tororo, Jinja, Kampala and Kasese is of strategic importance to the development of the cement Industry in Uganda, both for the distribution of cement as well as for the possible future importation of large quantities of clinker. At the sub sectoral Consultative workshop, a representative of URC stated that the future of line to Kasese and the UCI (and other customers) may have in future to concentrate on road transport. This statement was viewed with considerable concern.

It was strongly recommended that the national rail network be fully maintained and its capacity to transport minerals and other bulk materials should be developed further as required in the sub sector. In future it is likely that other main branch of the system, from Tororo to Pakwach, will play a main role in the development of the yet unknown potential for the non-metallic mineral resources and industries in the northern part of the country.

Electricity

Load shedding and unsteady power supplies spoils kilns in cement industries. Kiln firings are always interrupted hence the production defects and power charges were unnecessarily high. In addition Uganda Electricity Board tariffs are very high

compared with the same supply in our neighbouring countries, Tanzania and Kenya.

Generally, power is not available in areas where minerals are to be mined eg. In Bundibugyo where gypsum is mined and Bushenyi where Kaolin is mined.

Smuggling and Dumping Problems

Kenya's Bamburi and Tanzania's Tanga are dumping their products at cheap prices on our market. Because when you include transport costs on their production costs, their cement should not be pozzolanic cement as portland cement, while the former should be cheaper by 20% even in costs of production and quality rating.

- Lack of Technical expertise i.e. Knowledge on how to design and operate mineral processing plants and the industrial application in the manufacture of various products.
- Technological deficiencies of the production process leading to poor quality products.
- Obsolete equipment which requires immediate replacement.
- Inadequate availability of qualified technical personnel able to both increase production and to train unskilled workers on the job.
- Low value added of industrial minerals and their products.
- Poor processing and production management.
- Relatively high costs of investing in modernisation of manufacturing facility, costs of feasibility studies, high interest rates on financial loans, significant pre-operational expenses.
- High non-competitive processed and manufactured products arising from high unit cost due to low capacity utilisation (below 10%).

5.3.4. NON-METALLIC MINERALS AND THEIR USES

INDUSTRIAL MINERALS AVAILABLE IN UGANDA

MINERAL	INDUSTRIAL APPLICATION
ASBESTOS	- Construction materials eg. Shingles, pipes, sheets, cement, fire proof products

- Extenders and filters
 - Insulation
 - Plastics
 - Curtains and Cloth
 - Gaskets and brake linings
- KAOLIN
- Ceramics eg. Sanitary ware, electric porcelain, pottery etc.
 - Extenders and filters
 - Glass and fibre glass
 - Paint
 - Plastic
 - Refractories
 - Rubber
 - Medicine and pharmaceuticals
 - Insecticide
- DIATOMITE
- Abrasives (scouring and polishing cpds)
 - Extenders and filters
 - Filter absorbents
 - Mixtures in pozzolana cement
 - Water - glass manufacture
- FELDSPAR
- Glass and fibre glass
 - Abrasives and Enamels
 - Ceramics and Pottery
 - Extenders and Filters
 - Paint
 - Scouring soaps and compound
 - Porcelain
 - Poultry grit
 - Agriculture and fertilizers
- GYPSUM
- Construction materials eg. Building lath, wall-board sheathing, plaster cement.
 - Filters
- LIMESTONE & LIME-
- Agriculture and fertilizers
 - Ceramics
 - Paper
 - Chemical products eg. Alkalis, calcium carbide, asphalt filler
 - Glass and fiberglass
 - Extenders and fillers
 - Metallurgy and Refractories

	-	Construction materials eg. Cement, building stone
	-	Paint
	-	Water treatment and animal feeds
	-	Refining processes eg. In sugar
MICA	-	Electrical and Electronics eg. In electrical insulation, electronic tubes capacitors
	-	Construction materials eg. Asphalt roofing
	-	Extenders and Lubricants
	-	Rubber
TALC	-	Ceramics and electrical porcelain
	-	Construction materials
	-	Refractory blocks
	-	KRAFT Pulp
	-	Extenders and Fillers
	-	Paint
	-	Paper
	-	Plastics and Rubber
	-	Acid Proof tables
SILICA SAND	-	Abrasives
	-	Ceramics
	-	Construction materials
	-	Drilling
	-	Electrical and Electronics
	-	Extenders and Fillers
	-	Filters
	-	Foundry and Furnaces
	-	Glass and Fibre glass
	-	Metallurgy
	-	Paint and Refractories
MARBLES	-	Construction materials eg. Terrazzo, concrete blocks, stone-dimension
	-	Ceramics and used in poultry grit
	-	Decoration
VOLCANIC ASH	-	Construction materials eg. Pozzolana cement, filters
	-	Fertilizers
KYANITE	-	Porcelain

	-	Spark Plugs
	-	Laboratory ware
	-	Sillimanite bricks
	-	Glass and Refractories
PHOSPHATES	-	Agriculture and fertilizers
	-	Chemical products eg. Phosphoric acid,
	-	Baking powder and cleansing preparations
	-	Metallurgy
PUMICE & PUMICITE-		Abrasives
	-	Construction materials eg. building blocks, tiles pozzolana cement
	-	Insulation
	-	Asphalt filler
	-	Extenders and fillers
	-	Lithographing and electroplating
HALITE (SALT)	-	Chemical products eg. Brines
	-	Drilling
	-	Refining process
SAND & GRAVEL	-	Construction materials

NB: All these named Non-metallic minerals are located in various accessible areas in Uganda and in substantial amounts. Accessibility is for exploration mainly and not exploitation.

5.3.5 OPPORTUNITIES

After implementation of the above programs it would be possible for Uganda to:

- (1) Save the available foreign exchange for capital goods
- (2) Facilitate establishment of new production programs in container glass, fibre glass etc.
- (3) Increase capacity at both Hima and Tororo cement works.
- (4) Production of refractory bricks to the grades required by foundry, sugar, ceramic and lime industries.
- (5) Production country wide, of fine clay bricks of improved shape and quality where fine raw materials are produced.

Other beneficiaries of this programme will be:

- Paper industries - local and regional
- Sugar industries
- Sanitary ware/ceramic ware factories
- Food processing industries
- Rubber industries
- Insecticide/pesticide
- Paints
- Medicine
- Breweries
- Ornaments
- Dimension stones
- Asphalt manufacturing
- Construction and building industries

Others which include those firms that consume non-metallic minerals in their manufacturing process such as textile and leather factories.

5.3.6 RECOMMENDATIONS

- (a) Establishing an industrial mineral processing and raw materials preparation laboratory at the associations headquarters, capable of testing and processing non-metallic minerals and developing them into products. This will be achieved through provision of equipment and machinery, training and expert services to start up the activity.
- (b) Provision of experts in industrial mineralogy, process engineering and equipment designing and fabrication and marketing.
- (c) Commissioning consultants to carry out a comprehensive assessment of the investment requirement of the non-metallic minerals sub-sector and marketability of its products (Feasibility study) this program should be coordinated by the Uganda Investment Authority and implemented by Uganda Non-Metallic minerals and products association.
- (d) Strengthening of the department of geological Survey and Mines to facilitate non-metallic mineral development.
- (e) Mining and supplying of industrial minerals for use in local industries
- (f) Supply of fire clays
- (g) Processing and supply of Kaolin, feldspar and Mica for local as well as export.

- (h) Manufacture of lime for sugar industries and other industrial grades and hydration by appropriate mechanical plant.
- (i) Production of portland pozzolana cement from suitable pozzolonic materials.
- (j) Utilization of natural phosphate in agricultural production.
- (k) Establishing a specialised non-metallic mineral laboratory.

This arrangement will make it easy for people to access information and guarantee to speed up developing the sub-sector.

Special Consideration:

In view of the past neglect to this sub-sector special consideration should be focussed on Technical and Management capacity building to ensure quality products and strengthened inter linkages in the economy.

Development Objective:

The development objective is to enhance industrial growth through creation of forward and backward linkages within the manufacturing sector and other sectors of the economy:

Specifically this program is aimed at improving the performance of the Non-Metallic minerals and products sub-sector so that the local operators and producers are able to produce high quality industrial materials and products to meet the local demand for various industries and for export to other countries.

With developed local industrial minerals more industries will be established using available local raw materials and the existing industries will increase capacity utilisation.

In addition to the above the available capital which was used to import raw materials will be used to expand production lines or replace the out dated equipments.

5.3.7 CONCLUSION:

The Uganda Non-Metallic minerals and products association considers, the program as a priority in strengthening of Uganda's industrial base by providing the necessary industrial inputs locally.

We believe that industrialization of this country can not solely depend on imported raw materials and equipment forever.

We believe that the only way to improve our peasantry class is to utilize available local resources and manpower so as to achieve the desired goal of becoming net exporters and real manufacturers of goods. This program will elevate Uganda from being the net importer of industrial minerals and products to net exporters of the same, in the near future. This program will facilitate adjustment in the standard of living of the rural peasant where industrial minerals are found.

5.4 Strategies and Action Plan for the Foundry, Basic Metal and Metal Fabrication Industries Sub Sector

5.4.1 INTRODUCTION

The Metallurgical and metal fabrication industries sub sector is strategic in the economic development of the country because the establishments therein form an integral part of industrial production.

In particular, the Foundry products are required in modern equipments used for transportation, communication, power generation, agriculture, construction and manufacturing industries. Specific examples are sugar industries, tea factories, railways, cement plants, cotton ginneries and textile industries, steel plants, dairy industries, mines etc.

The basic Metal and Metal fabrication industries on the other hand are important for the manufacture of structural metal products, tanks, reservoirs and steam generators; general purpose and special purpose metal working activities; domestic appliances; bodies and trailers for vehicles; other transport equipment and electrical appliances.

5.4.2 JUSTIFICATION

This sub sector has a comparative advantage in the economy due to the following factors:-

In general terms, metallurgical and metal fabrication industries can be justified as being strategic in the economic development of the country due to the following factors:

- * they accelerate technological innovation by availing appropriate machines and spares to other sectors,
- * their development avails chances for forward and backward linkages through which sectoral growth is possible,
- * the development of the sub sector reduces dependency on foreign economies, as well as being a foreign exchange saving mechanism.

Although the Indicative Industrial Plan survey covered about 30 foundries and only 18 metal working firms, the contribution of the sub sector to the economy is enormous, and its development must therefore be encouraged.

5.4.3 MAJOR CONSTRAINTS:

The following constraints were identified:

- * Uganda is a land locked country hence procurement of necessary imported raw materials increases the cost of product.
- * Cost of utilities is high and supply unreliable.
- * Inadequate working capital and high interest rates.
- * Lack of adequate local technical expertise.
- * Lack of networking and intra-sectoral linkages which create an information gap. It was observed that some industrial establishments have certain manpower or machinery that could be utilised by other establishments in the same line of business.
- * Obsolete machinery and equipment.
- * Lack of testing and quality control facilities.
- * Poor quality of finished products makes them less competitive.
- * Low value added to products.
- * Inefficiencies and low production capacities partly attributable to the negative development trends created by past political and economic upheavals.
- * Inappropriate sources of machinery and equipment. There is an information gap in the technology transfer.
- * At present the base raw material (except scrap metal) has to be imported, there being no iron and steel plant in the country.
- * Too many taxes and duties imposed on inputs. This becomes a disincentive to investors.

- * Conflicting interests between the need to fulfil National objectives and conform to other regional and international trade agreements such as WTO, GATT, COMESA, and PTA.

5.4.4 ACTION PLANS:

In order to re-activate growth in the sub sector, action plans should address the following issues among others:

- Human resource development
- Easy access to suitable raw materials
- High value added production
- Proper survey of markets including export oriented marketing
- Establishing strong networking and intra-sectoral linkages

5.4.5 STRATEGIES AND ACTION PLAN

The strategies outlined below aim at increasing efficiency, competitiveness, cost-effectiveness and quality standards with the private sector. The private sector has potential to expand and diversify in both the local and export markets.

5.4.5.1 EXTERNAL FACTORS:

(A) Infrastructure

<u>Strategy</u>	<u>Action By</u>
1. Stiff market competition from more developed neighbours	Ministry of Transport; Uganda Railways Corporation

- | | |
|--|---|
| 2. Review and revise existing tariffs for utilities. Supply of electricity should be liberalised | Ministry of Natural Resources; MFEP; Private Sector investors |
|--|---|

(B) Investment Financing

- | | |
|---|---|
| 1. Interest rates should be lowered in line with the prevailing inflation rates | MFEP; BOU and Financial institutions |
| 2. Expedite procedures for loan facilities | Financial institutions |
| 3. Establish industrial bank focussing on SME's. | Government and Private Sector (UMA), USSIA, UDC |

(C) Promotional Policies

- | | |
|--|--|
| 1. Streamline customs clearance procedures so as to reduce delays and costs. | Ministry of Finance and Economic Planning (MFEP), URA and SGS. |
| 2. Plan and coordinate industrial development activities to avoid unviable capacities and unhealthy competition. | UIA, MTI |
| 3. National projects and programmes executed on behalf of donor agencies should procure inputs locally, where possible. | MFEP, Donor Agencies, CTB |
| 4. Enforce measures to curb export of ferrous and non-ferrous metal scrap especially steel and aluminium scraps and copper alloys. | MFEP, URA, MTI, UMA |
| 5. Carry out a thorough study of the steel and metal fabrication sub sector. | MTI, UMIDA |

(D) Human Resource Development

- | | |
|--|---|
| 1. Periodic update of national manpower requirements.
Draw up a demand oriented training programme. | MFEP, Private Sector (UMA), MTI |
| 2. Equip technical training institutions | Ministry of Education, Ministry of Labour, UMA. |
| 3. Strengthen interaction between industries and technical training institutions (DIT,UPK,MUK,etc). | UMA, Ministry of Education, Ministry of Labour, Private Sector Foundation Industries. |
| 4. Establish strong networking and intra-sectoral linkages | UMA, USSIA, UMIDA etc. |

5.4.5.2 INTERNAL FACTORS:

(A) Human Resource

- | | |
|--|---|
| 1. Recruit appropriate manpower for various key operations in business | Enterprises |
| 2. Improve on financial management skills through training | Enterprises, management training institutions |

(B) Quality:

- | | |
|--|-------------------------------|
| 1. Enforce repair and maintenance practices to address efficiency problems | Enterprises |
| 2. Develop raw materials and products quality standards | Enterprises and UNBS |
| 3. Seek external guidance in sourcing of machinery and equipment | Enterprise; consultancy firms |

(C) Finance:

- | | |
|---|---|
| 1. Develop a bulk purchase facility for major raw materials | UMA, USSIA, Financial Institutions, Enterprises |
|---|---|

5.4.6 OPPORTUNITIES FOR GROWTH

The Metallurgical and Metal Fabrication sub sector has potential to expand in both local and export markets seen in the light of the current growth rate of the industrial sector as a whole, this sub sector has opportunities to supply all basic metal products inputs of other sub sectors.

The reigning regulatory and policy environment should be reviewed and revised in order to promote growth and development of local manufacturers.

As Uganda continues to subscribe to various regional trade arrangements and agreements, the Metallurgical Sub Sector has even greater challenge to enter new markets. Therefore, the regulatory and policy environment should be geared towards facilitating and promoting competitiveness and efficiency in the industrial sector towards those challenges.

5.4.7 STRATEGIES TO PROMOTE GROWTH

<u>Strategy</u>	<u>Action By</u>
1. Enforce measures on ban of exports steel and aluminium scraps, and of Copper and copper alloys.	MTI, MFEP, URA, UMA
2. Introduce corporate tax rebates and export incentives	MFEP
3. Provide concessional tax rates on export earnings and new technologies	MFEP

The above factors have been analysed in a Matrix form attached herewith as Annexure.

5.5 THE UGANDA TEXTILE AND GARMENT INDUSTRY

5.5.1. INTRODUCTION

Besides coffee, cotton is another crop for the production of which Uganda has comparative advantage. Past records indicate that in the 60's cotton was as important as coffee in the national economy in terms of employment and foreign exchange earning. The numerous ginneries and textile factories which are today in an appalling situation were set up in the 50's and 60's to process the abundant cotton produced in the country. Thus Nytil, ATM, Lira Spinning Mills, Mulco etc. were set up purely for this purpose. Unfortunately, due to the difficult political phenomena which the country underwent in the 70's most of these plants suffered a set-back almost grinding to a halt as sponsors and best technicians ran for life out of Uganda.

Just before Uganda plunged into political chaos whose consequences strangled the country's economy, cotton was the second biggest foreign exchange earner to coffee. As a cash crop, cotton provided livelihood for a substantial number of people. Because of its multipurpose functions, cotton is a very useful plant to Uganda's economy. Its usefulness can best be shown by a flow chart diagram attached to this paper. If fully developed, cotton can employ a lot of Uganda's labour force in addition to earning Uganda a huge amount of foreign exchange by way of exports and import substitution.

Since 1986 however, peace and stability was ushered in Uganda and deliberate steps were taken by the government to rehabilitate and revive the sector. Despite this effort, however, numerous problems which mushroomed and took deeper roots in the society during the difficult years of the country still linger around posing a major problem for the quick resuscitation of the sector.

Efforts to develop the textile and garment industry in Uganda, should be part and parcel of the national overall drive to increase cotton production in Uganda. **Uganda's textile and garment industry can only be competitive if it is based on locally produced raw materials.** As Uganda boasts of a good cotton crop, its ability to compete in the international textile and garment industry should be **focused on increased technological development in cotton production, processing and finished cotton products manufacturing.**

The government of Uganda, UMA and the UNDP as well as other donor agencies are all concerned with the prevailing lamentable situation of the sector and want to take a concerted effort to speed up its development by setting objectives and formulating strategic policies.

At a tripartite meeting of Government, UMA, and UNDP held at the Nile International Conference Centre on April 18, 1996 and as a result of that meeting a strategic consultative group for the textile sector (SCGTS) was set up constituting leading textile manufacturers and businessmen (see Appendix 1) to conduct a diagnostic survey of the sector from the manufacturers point of view and come up with a report enlisting the

major problems inhibiting the growth of the sector and recommend solutions for the consideration of the planners and policy makers.

This particular report is the result of the study conducted by the SCGTS. It is the sincere hope of all involved in the Ugandan textile sector that the Government of Uganda will take this report seriously in planning the development of the sector.

Current initiatives:

The government has already set in motion a cotton production increase programme. The programme so far in place includes the following establishments:-

1. The National Agricultural Research Organisation - NARO. This is charged with the responsibility of researching into cotton seeds. It has been able to identify cotton seed varieties as well as producing high yielding cotton seeds.
2. Ministry of Agriculture-Extension services.

This function is helping cotton farmers to grow cotton using profitable appropriate technology and methods.

3. Bank of Uganda - Agricultural Secretariat.

The secretariat is operating the "cotton sub-sector development project". This is a project funded by the World Bank through IFAD. It is a five year project with a funding facility of US \$31,000,000. Its activities include;

- ◆ Research into cotton seed quality.
- ◆ Seed procurement, dressing and distribution.
- ◆ Ginnery technicians' training.
- ◆ Credit facility to cotton farmers and tertiary operations in cotton growing areas.
- ◆ Ginnery restructuring programme.

4. The Cotton Development Organisation - CDO

This is a recently established body to regulate, supervise and advise the various participants in the cotton industry in the country. It was set up by the cotton Development Statute of 1994. Mostly, it **deals with ginneries, exporters, and traders in cotton seed, cotton seed and lint**. It is also supposed to facilitate production, research, extension services, pricing policy regulation, and marketing among other services.

The foregoing scenario indicates a government intervention policy **to increase the production of quality cotton in Uganda**. The set up however falls short of optimisation approach. Cotton has many stake holders who should be included in its development to make a unified front in solving problems and laying strategies for the way forward. The policy does not address the need for Uganda to develop cotton beyond lint export to cotton finished products export.

Long-term Strategy:

Uganda has embarked on a free market enterprise policy. One requirement of a successful free economy is self regulation. An economy can only be self regulating when all participating stake holders are involved in its aspects and functions that affect their operations. This involvement enables the stake holders to respond to situations promptly and take balanced remedial steps. It also provides for a coordinated approach to planning for the needs of all participants concerned. **Uganda should not look at cotton as a source of exportable raw material Cotton should be looked at as a raw material for the production of essential finished products.** Amongst the numerous products the country should be targeting are: **garments, textiles, edible oil, animal feeds, soap and fertilisers**. An integrated approach to cotton development should therefore bring together all participants in these products. **The Garment and Textile manufacturers should play a leading role in cotton development** in the country. They should focus their long-term business success on the locally grown cotton and **not on imported synthetic fibres**. A fully developed cotton industry will even make them fend the temporary apparent threat from imported second hand clothes. The objective should be to bring cotton production to its 1990 levels because of its wide linkages.

5.5.2 Problems and Constraints Hindering Competitiveness:

In the 1960's and 70's Uganda was producing enough cotton to cater for a substantial portion of local textile and garment demand. All school uniforms, security forces' uniforms and daily use garments were produced from Jinja and Kaki from Nytil. Other textile mills were established in the country to tap the readily available raw materials. So much cotton was produced that there was a surplus for export of both lint and textiles. Now most of the mills and garment facilities are idle due to lack of materials.

Cotton provided income to many homesteads in the cotton growing areas. Now these areas are divorced of this essential income. Cotton growing is in a slumber. Although efforts to resuscitate cotton growing in the areas are being made, there are still a few but major constraints. These are the challenges that a combined action by stake holders' and the government should aim at tackling. These constraints are multi-faceted.

So they require detailed research and assessment before finding optimum solutions for them. Everybody believes that if the cotton farmer is promptly paid an economic price, then cotton growing will be re-activated. This is quite possible if the cotton farmer's price is looked at from a total national economic benefit from cotton and not merely from the narrow angle of cotton lint. A stakeholders' pricing policy can easily solve this constraint.

The nature and cause of the major problems which seriously hamper the development of the textile sector in Uganda are analysed below.

Importation of secondhand Clothes

During the difficult period of Ugandan history most of the textile factories cut back their activities for lack of proper management, spare parts and essential raw materials and chemicals. This, among other factors, entailed a drastic fall in production, employment and exports and concomitantly brought about wide spread poverty which was translated in low purchasing power.

Thus, although the demand for clothing was still there, the low purchasing power prevented consumers from using quality goods. This exerted further pressure on the then existing textile factories to avoid production of high quality goods, but to concentrate on coarse and cheaper fabrics. This is typically illustrated by the gradual decline in the quality of fabrics produced by Nytil. There was a time when the word "Jinja" was synonymous with high quality fabrics in all East Africa. The older generation whether in Tanzania, Kenya or Uganda still refers too high quality cotton twill as "Jinja"

With the fall in the production of quality goods, on one hand, and the decline in the purchasing power of the vast majority of local consumers, on the other, two significant phenomena with dire consequences took place in the economy:

- a) Those who had better income were buying foreign made high quality finely woven, dyed and printed fabrics which were mostly smuggled into the country.
- b) The vast majority, whose incomes were meagre, bought second-hand clothes which were primarily introduced by NGOs and other charitable organisations which brought duty-free used clothing under the guise of charity but were mostly sold albeit at very cheap prices. These though second-hand, were fashionable and attractive in style and colour.

The two phenomena brought about **change in demand and pattern of consumption** in the textile sector-demand for high quality, well finished **synthetic products** by a small segment of the society and demand for very cheap, fashionable and colourful secondhand clothing by the vast majority.

Second hand clothes are collected by exporters in Europe and the United states free of charge from individuals and are then exported at low prices. These secondhand clothes, although are disease ridden posing health hazard for their users as they are not fumigated, do, nevertheless, enjoy high demand in Uganda because of their low prices.

The textile sector in Uganda ranging from cotton growing to garment making, used to employ more than 500,000 people and earn more than US \$ 100 million per year from the export of lint cotton. Today the sector hardly employs 1000 people and hardly earns any foreign exchange. This situation is brought about by unrestricted importation of secondhand clothes which have inundated the domestic market. As table 1 below indicates the domestic demand for textiles in 1993, for instance, was estimated to be 134.75 million square metres of fabrics. This was met by 9 million square metres of fabrics from domestic production, 10 million square metres of imported fabrics and new clothes and the remaining by imports of secondhand clothes.

**TABLE 1 - SUPPLY AND DEMAND FOR TEXTILE
FABRICS IN UGANDA**

	1993	%	1995	%
Population (millions)	17.5		18.3	
Per capita Consumption (in m ²)	7.7		7.9	
Total demand (million m ²)	134.75	100	144.57	100
Domestic production (million m ²)	9.00	6.6	NIL	-
Imported new fabrics (million m ²)	10.00	7.4	20.4	14
Imported second hand (Million m ²)	70.00	52.0	100.3	69.4

Source: BOU, Quarterly Economic Report, 1993
ELADAM Enterprises Ltd, Feasibility Report on Rehabilitation and Expansion of NYTIL, 1993.

In 1995 total demand for textiles in Uganda was estimated to be 144.57 million square metres. This demand was met almost entirely by imports of new fabrics and new clothes amounting to 20.4 million square metres and imports of second hand¹² clothes accounting for 100.3 million square metres. In 1995, there was no domestic production of new fabrics as all the textile mills in Uganda had closed down.

Imports of second hand clothes increased from 70 million square metres in 1993 to 100.3 million square metres in 1995 representing an annual growth of 15.15%.

¹²These Statistics of second hand cloth imports do not include second hand clothes which were smuggled into Uganda.

Imported second hand clothes accounted for 52% of the domestic demand for textiles in 1993 as compared to 69.4% in 1995. If one adds to this figures of what was perhaps smuggled into the country in 1995, the total import of secondhand clothes in 1995 would be 124.17 million square metres or about 85% of the total demand in that year. The textile sector in Uganda cannot therefore, develop when 85% of the market is taken up by imported secondhand clothes.

The problem is further compounded by the fact that some of the parliament members and their spouses are important importers of secondhand clothes. Thus, any attempt to phase out second hand clothes or to increase taxes on them is dampened in the cabinet or parliament meetings.

These Statistics of second hand cloth imports do not include second hand clothes which were smuggled into Uganda.

Unless government takes a bold and deliberate step in line with what is recommended at the end of this report, the textile sector in Uganda will never survive. This is particularly true taking into consideration the forthcoming trade liberalisation.

2. Obsolete machinery and equipment

Most of the ginneries and textile mills were set up about 20 to 40 years ago and their machinery and equipment was intended to cater for the needs and fashion demands of that time. What these machines produce today is not of fashion and uneconomical for garment making as the width is much below what is universally accepted.

Garment producers prefer fabrics of at least 150 cms width so as to enable them produce garments at minimal cost. Most of the mills have more picanol shuttle looms which produce fabrics of 76 - 102 cms width which are uneconomical for garment making than sulzer looms which produce wider fabrics. Narrow fabrics cannot be exported as there is no demand for them in the large fabric consuming markets.

Neither could they be sold locally in large quantities as their market is pre-exempted by secondhand clothes. This leads to a huge pile of stock tying up working capital and consequently leading the factories to inefficient operation.

If the textile sector of Uganda is to benefit from the scheme of trade liberalisation in the East African region which is just in the offing, the existing obsolete machinery and equipment will have to be replaced by new and modern technology to be able to produce high quality fabrics. This calls for huge capital outlay and needs government assistance in persuading local banks to extend loans to businessmen without much fuss and bureaucracy.

3. Low productivity of labour

Productivity, expressed in simple words, is the amount or quantity of market acceptable goods a worker can produce in a fixed time. It measures not only quantity but also quality of the products produced in a given time.

Productivity, thus defined, is therefore influenced not only by economic factors such as terms and conditions of employment but also by factors such as culture, norms and habit of society, the health skill and dexterity of workers, availability of social services such as transport and health services, etc.

Thus, where the custom of society is that a person has to have extended leave to bury a deceased relative or to attend funeral rites or to look after sick relatives at the hospital because the hospital nurses cannot do that, where rampant malaria and typhus debilitate a worker by sapping his energy, where well equipped and manned vocational schools which can impart basic practical skills to the worker are virtually non-existent, where the individual worker is less concerned to make sacrifices to build his company and his nation but rather to look after his personal gains by fair or unfair means, productivity is bound to be low. Taking these considerations into account, **productivity in Uganda is one of the lowest in the world.** It is not therefore, easy to increase productivity in a short time though there is much talk about it. Europeans, Americans and Japanese took longer time to increase their productivity moving by steps changing their customs, norms and habits in response to particular needs of society and demands of life. We want to move by jumps and spurts over the road travelled by advanced countries in slow steps, without creating the cultural and social as well as attitudinal pre-requisites for applying science and technology in our mode of production. The result is frustration. This does not mean however, that we cannot increase productivity or bring about a better change. The point is rather that productivity takes time to improve.

Some times people ask a naïve question : why don't you produce for export? **But they forget that the key for any export activity is PRODUCTIVITY AND PRODUCTIVE EFFICIENCY** (productive efficiency is defined as production of market demanded goods at the least cost) Where productivity and productive efficiency are low, one cannot do much in any export activity no matter how much steamed up enthusiasm one may have. This is even further complicated in the case where the **cost of power for industrial use is high** as in Uganda. Imagine a situation where an industrial machine is switched on by its operator. The machine has a given revolution per minute and consumes a given number of electric units which have fixed cost. Whether the machine produces or not, as long as it is switched on, it consumes electricity. The operator does not effectively use the machine to produce the maximum with the given electric units consumed because he is slow in his motion and consequently the cost of power per unit of product is high. This type of cost **which is the direct result of low productivity** added to the already high cost of electricity makes the prospect of competitive export very bleak.

A recent comparative study of productivity conducted by the World Bank for Ethiopia, Eritrea, Kenya, Tanzania and Uganda puts Ethiopia and Eritrea at the highest scale and Uganda at the lowest.

Productivity in Uganda is therefore, very low and cost very high and something has to be done about it in the short run as recommended below.

Today, when the world is reduced to a global village by advancement of science and technology and when every country has embarked on development of export industries, competitiveness becomes necessary. Competitiveness means increase in productivity and productive efficiency. However, on the one hand, productivity is very low and takes years to increase and, on the other, cost of labour is high as one has to provide not only salary but also incentive pay per piece, free food, housing, medicine, transport, social security, annual leave with pay, etc. Under such circumstances, companies which have export oriented production become less competitive when compared to their counterparts in Bangladesh, Sri Lank, India, Pakistan and Indonesia where workers work very hard and produce much more for a small fraction of what a Uganda worker is paid.

In Bangladesh, for instance, a skilled tailor in a garment factory earns US \$50 per month and produces 15 shirts per day. His Ugandan counterpart earns US \$80 per month and produces only 2 shirts per day.

5. High cost of Electric power and other utilities

The recent increase in electric supply tariff rates by UEB has greatly alarmed and baffled many people including manufactures. These rates are exorbitant and will certainly have negative consequences on the development of the industrial sector.

Hydro-electric power is supposed to be the cheapest in the world as it has a replenishable source of energy - water - with which Uganda is abundantly endowed by nature.

Ethiopia is another country which is endowed with hydro-electric power. It has three dams on River Awash which supply electric power to all the industries and households in and around Addis Ababa as well as other cities and towns in that country. Ethiopia as Uganda, obtains its financing from IMF, World Bank and other multilateral financiers to develop her hydro-electric power and as such, terms and conditions of borrowing should be as those of Uganda.

As table II indicates, power tariff rates in Ethiopia are about 60% cheaper than in Uganda for small-scale industries and about 40% cheaper for large scale industries. The difference in electric tariff rates between the two countries is quite conspicuous and will certainly have negative effect on industrial development in Uganda. The situation can be worse if one takes into consideration the low productivity of labour and the fact that the country is land locked. These factors can adversely affect competitiveness in the

export market and can militate against the effort of attracting serious foreign investors unless deliberate corrective measures are taken by the government of Uganda.

TABLE II: COMPARATIVE TARIFF RATES FOR SUPPLY OF ELECTRICITY ETHIOPIA AND UGANDA

TARIFF PER KWH IN U. SHS

SECTOR:

DOMESTIC	UGANDA	ETHIOPIA	REMARKS
1-30 KWH	20		
31-200 KWH	70		
above 200 KWH	100	31.8	Just one flat rate
Service charge	1000=		Per month
SMALL INDUSTRY			
Rate per KWH	115	47	
Service charge	4000=	2,120=	Per month
LARGE INDUSTRY			
Rate per KWH	70	43=	
Service charge	15000/=	6,572	Per month

SOURCE:

Figures for Uganda were obtained from UEB. Figures for Ethiopia were obtained in Ethiopia Birr from EELPA (Ethiopian Electric Light and Power Authority) but were converted to Uganda Shillings at current rates of exchange.

Kenya was not included as its source of power was not 100% hydro-electricity as in the case of Uganda and Ethiopia. Kenya uses oil for its partial supply of electricity while at the same time it imports power from Uganda.

Telephone rates are also too high. To make the matter worse, telephone lines are stolen on parallel lines. This sounds strange, but it has affected quite a large number of industries particularly those which have ISD lines which can be easily connected to an illegal customer who, through a shady deal, subscribes to one of UPT engineers, a fixed

sum of money every month irrespective of the number of calls the illegal customer makes. The telephone bill of the illegal customer appears on that of the legal subscriber who owns the number.

6. **Discrimination in Import Duty on Raw materials**

In the 1995/96 budget speech, the Minister of Finance had announced that all factories would enjoy a 5% import duty on raw materials. Hardly two months after this budget speech, URA (Uganda Revenue Authority) passed a circular stopping garment factories from using the 5% import duty privilege on their raw material imports. URA argues that the raw material of garment factories is finished product which can also be retailed in shops directly to consumers and since it (URA) does not have any mechanism of controlling what is diverted to shops and what is used as raw material, the simplest solution for it is to stop the 5% privilege for garment factories. This argument of course is very much akin to a situation where a man refuses to sleep because he is afraid of seeing bad dreams. The solution is not to kill the man but to let him sleep while remedies for the bad dreams are looked for.

Garment factories today pay import duty ranging from 10% to 25% depending on the composition and origin of the raw material while other factories in other sectors are enjoying the 5% duty privilege on their raw material imports. This situation is worsened by the fact that garment factories are forced to pay sales tax on the ex-factory value of their products. If duty is charged according to the tariff book on the raw material, then sales tax also should be charged according to the tariff book on raw material, not on the ex-factory price of the products.

The policy is unfair and discourages the development of the sector.

7. **Corruption**

During the difficult period of Uganda, people did not have useful jobs as most of the private sector was non-functional. People were relying on black market activities as well as on corrupt methods to earn their income for survival. When conditions improved, these anomalous ways of earning one's income remained as habits and people could not easily give them up.

Right now, corruption is the biggest problem in Uganda. Army uniforms are purchased from abroad while high quality military uniforms are produced in Uganda for the same price as that of the imported ones. UEB, Water and Sewerage Authority, Uganda Coffee Marketing Board, Uganda Police Force, Uganda Airlines Corporation, UPT are altogether buying more than 900 million shillings worth of uniforms yearly. However, these organisations are either buying from abroad or are getting their uniforms made by the informal sector which does not contribute tax to government.

Uganda Police Force were paying U.shs. 7,500/= per Uniform for stitching to one factory owned by favoured factories, while others were willing to stitch for only half of that cost.

Water and Sewerage Authority got their uniforms made in Kenya in 1993/94 while Ugandan Garment Factories which employ Ugandans and pay tax to Uganda Government are on the verge of closing down for lack of sufficient market. Uganda Airlines made its uniforms in Kenya in 1993 and in South Africa in 1995. is this act induced by corruption or by lack of patriotism?

Buying from abroad encourages the growth of foreign industries and creates employment for foreigners abroad. Our concern is to foster industries in Uganda and to create employment for Ugandans.

Unless the government of Uganda creates a mechanism by which domestic industries are given priority in the supply of goods, where they happen to be competitive, it would be futile to expect maximum employment and tax revenue from local industries.

8. Lack of Ancillary industries

Ancillary industries are those set up to render technical and commercial services to the manufacturing sector.

The large-scale industries such as BAT, SCOUL, Kakira Sugar Works, etc., have their own units which can repair and in some cases, produce spare parts for them. They have also large commercial and marketing departments which can easily procure raw materials and sell their products country wide. They have sufficient funds at their disposal and can be self-reliant in getting the services they want.

Small scale industries such as garment factories and ginneries, talking of the textile sector only, have difficulty in getting technical and marketing services. if some machine parts are broken, there are no organised independent technical firms or workshops where one can go to repair or replace those broken parts. If there are any, they are unorganised and unreliable as either they delay to finish a small work or run away with the broken spare part and the advance given to them to repair it. The same is true in marketing products. Small scale industries do not have sufficient funds to open market outlets all over the country. What they do in other more developed countries is that commercial firms take products on consignment basis and pay the small-scale producer the proceeds as soon as the consignments are sold.

It is the experience of all local manufacturers that these arrangements do not work in Uganda as consignees, more often than not, prefer not to pay the proceeds to the producers of the products.

These ancillary industries and services are essential for the smooth development of a country and indeed, their absence is actually a sign of backwardness for any economy.

In the case of Uganda, when some sophisticated spare parts are broken the owner, will have to rush to Kenya either to get it repaired or to buy new replacement. When a new spare part is brought into Uganda a very high rate of import duty, sales tax, import

licence fee, withholding tax etc. is imposed on it. Moreover, URA requires import licence and great deal of useful and productive time is wasted to get this important licence for a spare part worth only a small amount of money. This is very frustrating for a manufacturer.

9. Multiplicity of Taxes and lack of clear strategy

After 1986, the NRM government had to rehabilitate practically every sector. This task required capital outlay which was partly obtained from donor organisations and international financiers which imposed conditions such as balanced national budget, liberalisation of trade, etc. Some of these conditions, though acceptable in principle, were too harsh when applied all at a go. Balancing the budget meant formulating and imposing high taxes¹³ across the board on infant industries as well as on the recently privatised derelict ones that the new owners are still struggling to rehabilitate. Liberalising trade meant allowing new woven fabrics as well as second hand clothes to be imported with little or no trade barriers.

Thus textile factories, particularly garment factories are required, if not forced, to pay 10% - 25% import duty, 15% sales tax 15% commercial transaction levy, 2% import commission, 4% with-holding tax, 0.8 SGS fee, 35% corporation tax, 10% social security, 200,000/= per year for trading licence, 200,000/= per year for permit to operate a factory in the municipal area, 100,000/= per year per advertising per year per advertising sign post - the concerned factory has set up. On top of this burden, the raw materials of these factories are overvalued by SGS by about 10% just to raise more revenue to URA. The garment factories are deprived of the 5% duty privilege on their raw material.

Economic history of the world is replete with the story of heroism and sacrifices made by Japanese, British, Indian, etc governments in spearheading the development of their economies and in genuinely protecting their industries at their infancy. The question for us today is : Can we emulate those patterns of infant industry protection in the midst of harsh conditions such as trade liberalisation created by international financiers?

¹³Some bureaucrats say that these taxes are insignificant compared to those imposed on similar sectors in the U.K., Belgium, and Sweden but they forget to compare the social services given by these countries in return for those taxes.

5.5.3 PROSPECTS FOR THE FUTURE

We have extensively discussed the various problems which have stifled the development of the textile sector so that the Government of Uganda can take bold and deliberate economic and fiscal measures to correct these problems and set the sector on the course of development.

As it is now, the sector is in an appallingly pathetic situation. All the textile mills (Nytil, Mulco, ATM, Lira Spinning Mills, etc) almost all the ginneries, and almost all the garment manufacturing plants (UGIL, Eladam, Pop-In, Chistex, etc) are either not operating or are operating with skeletal manpower.

Cotton production was revived since 1986 but now is in declining trend because of the closure of the country's textile mills which are major buyers of cotton. If one considers the number of people and their dependents engaged in cotton farming, processing and exporting, spinning, weaving, tailoring, packing, forwarding and selling, the unemployment figure created by the neglect of the sector would rise to more than half a million people at a conservative estimate.

The question now is what can be done to resuscitate the sector? the following remedies are suggested :-

5.5.4 RECOMMENDED REMEDIES

In order to re-activate the Uganda Textile and garment sector, the following are recommended:-

1. A cotton stake holder's council be established. On this council there would be representatives from:-
 - i) Textile and Garment manufacturers.
 - ii) Cotton ginneries.
 - iii) Cotton farmers.
 - iv) Edible oil producers.
 - v) Animal feeds producers.
 - vi) NARO.
 - vii) Ministry of Agriculture.
 - viii) CDO.

- ix) Bank of Uganda (Agricultural Secretariat).
- x) UNBS

This council should cater for all the stake holders' interests. Government policy relating to stake holders should be a result of the concensus of the council. Market demand should set farm prices of cotton based on total stake holders' benefit and not on cotton lint price.

2. Centralised research activities should be carried out in all the aspects of the sub-sector to facilitate optimal decision making affecting the sub-sector.
 3. Uganda should aim at exporting finished cotton products and not cotton lint. Because of joint supply, an increase in production of cotton lint will lead to an increase in production of cotton seed for the edible oil processors, and provide additional income to the farmer.
 4. Efforts should be made to introduce micro and small industries in the rural areas to carry out activities like spinning, weaving and tailoring. This will increase the value of cotton to the farmers and other rural based people. It will also keep cotton farmers employed in the off-season period.
- 1) **Stimulate demand for locally made fabrics and garments**

We have shown earlier that the major problem which hampers the development of the textile sector in Uganda is importation of second hand clothes.

Two methods are recommended to curb importation of second hand clothes.

- a) **Phase out imports at the rate of 20% per year**

Government can phase out imports of second hand clothes at the rate of 20% per year and completely eliminate it within a period of five years. Within five years the existing textile mills and garment factories will be fully revived and expanded while new investors see that there is a good market for textiles. Already there are four large textile mills and 15 garment factories waiting for government action against second hand cloth imports before they undertake heavy investments to expand their capacities.

b) **Tax second hand clothes on the basis of yarn-content and not on the basis artificial of advalorem value**

Since secondhand clothes are collected free of charge at their origin, they have artificial value and taxing them on advalorem basis as it is conventionally done now is an indirect way of encouraging the doom of local textile industries.

They should rather be taxed on the basis of the current value of the yarn that went into their making. For example one kg. of yarn is currently US \$3.00. The cost of yarn that can make one T-Shirt is therefore, US \$ 0.38.

Add to this 25% of the cost of the yarn as the cost of labour and threads that went into the making of one T-Shirt. This will make the cost of one second hand T-Shirt US. \$ 0.475. Add to this the usual freight and insurance and say the total CIF cost of a second hand T-Shirt is US \$0.50.

The basis of the tax for a second hand T-Shirt should therefore be US \$0.50 not some other artificial value.

The import duty on second hand clothes should start from 50% on **yarn-value** basis and increase by 10% every year to reach 100% in 5 years. In addition there is 4% with holding tax and 2% import licence fee.

The current selling price of one secondhand T-shirt ranges from US \$ 0.80 to US \$1.00. If the VAT on second hand clothes is assumed to be 15% then the total tax on one secondhand T-shirt will range from US \$0.386 to US \$0.416.

This increases government while still allowing profitability remains still high and advocates of second hand clothes should now worry for 5 years until it is completely eliminated from the market. Garment manufacturers should also show capacity to produce the shortfall from phasing out secondhand clothes annually.

Using the above two methods, second hand cloth importation can be controlled in such a way that the local textile industries can be encouraged to invest and produce more while consumers will not be lacking cheap clothing.

Uganda Manufacturers Association (UMA) can regularly provide URA with charts showing the cost and yarn content in the different types of second hand clothes for taxation purposes.

This method will immediately result in the development of the sector by attracting new investors and by encouraging existing firms to expand.

2) **Assistance in changing technology in the sector**

As stated earlier, most of the technology in the textile sector is obsolete. To capture the local market and to venture into exports as well as to survive the stiff competition in the East Africa and COMESA market Ugandan textile factories will have to produce high quality textile goods which is only possible when the present obsolete technology is replaced by modern technology. Government should encourage the local banks to extend long term loans to serious existing investors in the sector without much red tape and bureaucracy. The banks should also not ask too much collateral security where debentures and a proven track record of good management are in place.

3) **Reduce cost of production**

a) **Transport cost**

Uganda is a land locked country and suffers from high cost of transport. At least it costs about US \$5000 to transport a twenty foot container from Mombasa to Kampala and back by road. To reduce cost of transport the railway which offers a cheaper alternative.

Uganda Railways should be improved not only in its management but also in the acquisition of up to date rolling stock. One major problem of Uganda Railways besides lack of sufficient number of wagons, is that of security. Several cases of theft and pilferage occurring in Uganda Railways while goods are in transit from Mombasa to Kampala have been reported preventing potential transporters from using the railways. Uganda Railway should be encouraged to organise its own traffic security Government should eliminate this by instituting a passage. If railway transport is strengthened to provide better services, road transport charges will certainly go down due to competition.

b) **Revise electric supply tariff rates**

The electric supply tariff rates have to be revised downwards to encourage industrial development.

To do this, UEB will have to make a thorough cost benefit analysis regarding generating and transmitting electricity. The cost of generating each unit of electricity will have to be realistically determined by conducting an exhaustive study of the sector. It will then be easy to fix the supply tariff rates in line with what obtains in our neighbour's market.

Large industrial consumers can be given a sliding scale of tariff as happens in other countries.

The World Bank is complaining the UEB has not done this study in an acceptable manner and argues that the rates were fixed by them (UEB) using the rule of thumb rather than the rule of supply and demand.

If UEB cannot do this, a team consisting of electrical engineers, economists and financial analysts should be set up by the government to carry out the said cost study and come up with economically acceptable rates.

UEB's collection of electric bills leaves much to be desired. UEB should be made to step up its collection of bills systematically or should sub-contract collection to private companies. If there is improvement in collecting bill there will certainly be improvement in the total fund collected which may help UEB to reduce the rate on industrial consumption, because the high rate of collection can easily offset the reduction of rates on industrial consumption.

4) **Government Patronage:**

All government and semi-government or parastatal organisations should be barred from importing what can be productive locally at competitive prices. To make this more effective, the Ministry of Trade and Industry should not issue import licenses for importation of items which can easily be produced locally and additionally, the importer should be required to bring a letter of no objection from the Chairman of Uganda Garment Manufacturers Association and the Chairman of the Textile Sector.

In awarding tenders, only industries which have pre-registered with UIA, Ministry of Trade and Industry, URA and Textile Manufacturers Uganda Garment Manufacturers Association should be considered. The same registration conditions should be required in the textile sectors. This will eliminate the possibility of diverting tenders to the informal sector.

5) **Avoid discrimination in import duty on raw materials and spare parts**

- a) Uganda Investment Authority should grant a Certificate of investment to each small scale and large scale textile and garment factory that is going to be resuscitated exempting it from the payment of taxes on imports of machinery and equipment and factory building materials. The waiver of taxes on the textile sector does not result in budgetary deficit to the government as what is currently paid by the sector is very negligible due to the inadequate operation of most textile factories in the country. If the government has managed with negligible tax revenue from the textile sector until now, it can certainly afford to grant a five-year tax holiday to all textile factories which have to be resuscitated and expanded. In the long run, however, the government can benefit a great deal in terms of revenue as the factories and their employees will pay taxes.

The present practice of discrimination regarding the privilege of import duty on raw materials should immediately be discontinued. To avoid misuse of this low duty privilege, the following should be done :-

- i) The Association will in conjunction with Department of Customs retain Bonded warehouses for storing all duty free raw material under double lock system

When raw materials are released in portions, from time to time, the Customs officer should register it. Manufacturers should show evidence that the checked out materials have actually gone into production.

All garment factories should pay VAT on all their finished products as soon as their final products leave their factories. This will enable the Customs Officer to control the bonded warehouse.

- ii) Ordinary merchants who import and retail or wholesale textile fabrics and/or ready made garments to the public should pay the higher import duty and VAT, 4% with-holding tax and 2% import licence fee. These should be treated differently from garment factories which import fabrics as raw materials.
- c) Any textile factory whether it is a textile mill or a licenced garment factory should be allowed to pay a 5% import duty on importing spare parts components and the requirements of import certificate for small items should be avoided.

6) **Liberalise employment and movement of labour Investment**

The forthcoming trade liberalisation in the East African region should also liberalise employment, investment and movement of labour so that Ugandan employers can have free access to the more efficient labour of Kenya at competitive wages.

5.5.5 CONCLUSION

In conclusion therefore, this study had been made to show the potential that cotton has in the economic development of Uganda and its major role in the textile and garments industry of the country. Further research is needed to make policy decisions.

If the above recommendations are immediately implemented the textile sector can be resuscitated.

It is not easy to deal with all the problems of the sector but at least some of the major obstacles will have to be tackled. As the Chinese say, a journey of a thousand miles begins with one step and certainly be a change for the better in the textile sector. It is therefore, hoped that the government will take this as an urgent task.

**NAMES AND ADDRESSES OF MEMBERS OF THE STRATEGIC
CONSULTATIVE GROUP FOR THE TEXTILE SECTOR**

- | | | |
|-----|---|---------------|
| 1. | Mr. Eyasu Sirak, Managing Director,
Eladam Enterprises Ltd,
P.O. Box 1237, Kampala. | Chairman |
| 2. | Mr. Shiraz, Managing Director,
Uganda Blankets Ltd. | Vice Chairman |
| 3. | Mr. James Balyejusa, Managing Director,
Innula Silk Estates Ltd,
P.O. Box 1929, Jinja. | Secretary |
| 4. | Ms. Annet Kizza,
Minnet Fashion Designers. | Member |
| 5. | Mulco, Jinja | Member |
| 6. | Nytil, Jinja | Member |
| 7. | ATM, Mbale | Member |
| 8. | Mr. James Kisambira
Lake Victoria Fishing Industries Ltd,
P.O. Box 9786, Kampala. | Member |
| 9. | Mr. Cyprian Batala, Chief Economist
Ministry of Trade and Industry,
P.O. box 7103, Kampala. | Member |
| 10. | Mr. Moses Buyondo Sagiti,
Tutuuse Stores Ltd.
P.O. Box 4684, Kampala. | Member |

5.6 LEATHER AND LEATHER PRODUCTS

5.6.1 Introductions

The Leather Sub sector is one of those areas in which Uganda has a natural comparative advantage. Uganda is well endowed with livestock - cattle, sheep and goats; and is near enough to Zaire to develop a viable trade industry in crocodile skins. Data from the Ministry of Agriculture, Animal Industry and Fisheries is shown in the following table.

Livestock Populations

Year	Cattle	Goats	Sheep
1991	4,460,402	3,701,095	980,071
1994	4,871,863	4,584,513	1,119,754
1995	5,018,017	4,498,733	1,184,688

Total production and export of hides and skins in 1994 with total value of USD 16,980,000 were as follows:

Hides	>93,181 PCS
Goat Skin	1,828,990 PCS
Sheep skin	252,572 PCS

This quantity of hides and skins would have fetched more if further processed at least upto "wet blue" stage. In addition, it is reported that about 30% of cattle hides and 35% of goat/sheep skins are not collected due mainly to the lack of incentives, a poor collection network and inappropriate flaying and curing methods.

5.6.2 Stakeholders

The major players in the sub sector include breeders, slaughter houses, tanneries and leather goods industries (mainly shoes). The major ones are listed below:

- Uganda Meat Industries
- City Abattoirs (Kampala City Council)
- Leather Industries of Uganda, Jinja
- Alhamed Tannery, Kampala
- Tannery and Leather Improvement Union of Masaka
- Uganda Fish Skin Tannery, Jinja
- Uganda Bata Shoe Company

Uganda Shoe Company
 Universal Sports (balls)
 Equator Sports (balls)

In addition, it is reported that there are over 150- small scale shoe makers.

5.6.3 Major Problems Facing the Sub sector

The origin of hides and skins pose serious difficulties in the development of the leather industry. Most of the hides and skins are produced in the rural areas, in a most unhygienic condition, and without proper knives and facilities like water or drying hangers. The result is poor quality and high reject rate for the skins. There is also the problem of animal diseases like pox and insect bites which will require long term measures by the veterinary department.

The collection system through middlemen and hide traders often puts the farmer at disadvantage, pricewise and so he has no incentive to improve the quality of what he produces. More importantly, because the tanner gets the hides and skins from middle men, he has no direct contact with the farmers so as to communicate his needs or quality standards.

Besides, off take of cattle for slaughter is still bound by tradition. In a cattle culture where the animal is not bred for its leather, leather production being incidental to other customary usage of the animal, focusing on quality of hides becomes a little academic for the uneducated farmer.

Low technical skills at the tannery and leather working levels. Most of the tanneries have not got the up-to-date technologies in tanning.

Importation of second hand shoes which constitutes an unfair competition, especially when they are not appropriately assessed for purposes of import duty. Uganda is producing roughly 1.5 million pairs of shoes a year of which 700,000 are leather. This is just about 15% of the potential market. The bigger part of the footwear needs in Uganda is fast becoming a dumping ground for second hand shoes which most African countries have banned on health grounds.

Infrastructural facilities are inadequate. The lather industry requires a lot of water and power and as every one knows they are erotically provided especially as they are no industrial estates. Due to poor sewerage system, evaluation of effluents can also be a problem.

5.6.4 Market Potential

Uganda Bata Shoe Company and Uganda Shoe Company are the two major large scale leather footwear companies. However, there is still room for 60 - 70 shoe factories in Uganda. There are five companies in the medium scale including

Mulago Orthopedic workshop (Ministry of Health) producing shoe for the disabled. The small scale leather footwear sector has three companies.

Bata is the biggest employer with 145 people, wholesome companies even employ as few as five people. The estimated number employed in the large, medium and small scale sector leather footwear is 1,500. Obviously the number can increase, if second hand shoes are stopped, as there will be great demand for locally made shoes. Uganda produces the cheapest shoes with an average of She 10,000 at break even cost., and yet the leather is imported.

The Uganda Leather and Allied Industries Association (ULAIA) insists that the biggest local market is for the “Back to School” for pupils and students. Sadly however, schools are failing to set these shoes as uniform because the majority of parents prefer cheaper and durable second hand shoes.

Historically, east Africa has been a traditional supplier of hides and skins to European market. Recently most hides and skins are being exported to China, India and Pakistan as these are the areas coming up with fast growing leather and footwear industries. In Africa it is mainly the North African countries of Egypt, Tunisia, Algeria and Morocco. In southern Africa, South Africa, Zimbabwe, Ethiopia and Kenya which have relatively advanced leather industries. The rest of Africa exports either raw hides and skins or semi-processed wet blue hides and skins. Kenya has been exporting small quantities of finished leather, some semi-processed leather but mainly raw hides. Uganda and Tanzania have mainly been exporting raw hides and skins.

5.6.5 Strategic Directions

There should be planned development of the sector. The first stage will be investment in improving the quality of hides and skins, and organization of collection and marketing. The ULAIA is prepared to organise and train special extension workers with MAAIF.

Secondly, more investment should be attracted into tanneries with improved technology to produce high quality finished leather.

Thirdly, upgrading the technology and skills in the leather industry. With more training for the small scale leather workers, it will be possible to organize cooperatives for the manufacture of handbags, purses, briefcases, etc even under sub contracting.

Big shoe firms can also create ancillary production units in “export villages” or “export production cooperatives”.

5.6.6 Action Plans to Improve the Leather Sub Sector

A number of UNIDO technical assistance had in the past helped to rehabilitate the sub sector. The current one US/UGA/92/200 is under implementation in two main target districts of Jinja and Masaka. Another project, US/UGA/96/*** is underway designed to reinforce the capabilities of the Ugandan leather sub sector. Specifically the project is meant to improve the rate of collection of hides and skins, quality and increase the value added in this sub sector by supporting the tanneries as well as the leather finishing industries in Uganda. In addition a footwear technologist has been based in Uganda to especially support the footwear enterprises.

The project will be implemented mainly with the ULAIA but in close collaboration with the Ministry of Agriculture, Animal Industry and Fisheries and Ministry of Trade and Industry.

The ULAIA has been formed and incorporated and also functions as a Strategic Consultative Committee. So the major action plans are in the area of policy environment and support services.

1. In order to discourage the importation of second hand shoes, the import duty should be raised substantially (100%). Alternatively Government should consider phasing it out as in other countries.
2. Government should provide serviced industrial estates which will have priority in electricity, water, roads, etc. Users will be ready to pay economic prices for reliable services.
3. Government should impose a ban on the export of raw hides and skins after a period of two years when have increased and improved tanning capacity locally.
4. Inputs such as buckles, laces, chemicals for tanning and other accessories for footwear, glue, molds, etc should be exempted from import duty. The revenue implicated will be compensated for the VAT on finished products.

5.6.7 Conclusion

ULAIA feels that if manufacturers are given the right environment, Uganda can produce high quality leather products, provided that the right conditions exist. There is no manufacturers of footwear in the world who can produce shoes that are cheaper than second hand shoes, industry officials argues. "Government is talking about a Uganda National Bureau of Standards, but what standard and value is given to second hand shoes?" The Association says that eventually second hand shoes must be phased out.

ULAIA is already discussing with government how it can fund and run the extension service of veterinary and hides improvement offices. Also, according to the ULAIA

report when the country starts producing good quality hides, the tanners will be able to produce export quality leather. It is also important to note that the home market should be a priority to cut imports. Tanners must also have strong home market buying their leather as total reliance on exports is dangerous. There are approximately 200 artisan type footwear manufacturers producing an average of 2 pairs of shoes a day who would consume 10,000 square feet daily. These have now resorted to repairing or replacing soles on the imported second hand shoes or to make a new shoe using leather from a second hand leather bag.

A strong and healthy footwear and leather goods industry will eventually produce high yields in terms of revenue for government, employment for skilled workers and lot more. Loss of revenue initially on taxation of inputs will be a very small price to pay compared to what the country stands to gain. It is the ideal industry for government to promote because like agriculture the main component is domestically available - hides and skins.

5.7 PAPER AND PAPER PRODUCTS INCLUDING PRINTING AND PUBLISHING

5.7.1 Background

The development of Uganda's paper, paper products and printing industry has undergone an extremely varied and bumpy course over the past 30 years. The political and economic turmoil during the Amin-era-era-era brought a rapid end, in 1971, to a period of steady growth and investment and gave way to disarray and near-closure of most manufacturing groups. It is only since 1986 that the sub sector has responded to the present and future demands of the market, although extremely these are still low when compared to pre-1971.

Striped of their assets. Lacking in much needed raw materials, spare parts, plant and funds, the factories had to recommence production with a shortage of trained operators, technicians, management and absent owners. Government support, with the aid of donor agencies, development banks and the like has provided assistance wherever possible. Several enterprises have succeeded in their recovery plans to the extent that they are now developing new products, diversifying their activities and investing in expansion plans as well as actively pursuing export opportunities. Yet there are others within the sub sector operating at a fraction of their installed capacity, seemingly powerless to stop imports eroding their share of the domestic market.

The lack of an economically exploited fibre resource has caused reliance almost solely on imports of raw materials. This added cost to production has had to be passed on to the end users and as such makes their finished products uncompetitive when compared to imports, which, in many instances have been found to be superior in quality to those produced in Uganda.

Hence, the industry must look to those Areas of their operation, be it processing, production efficacy, management, training, quality control, reduction in plant

down-time, material wastage and operational inefficiency in order to streamline their production process. It is towards this end that the Government of Uganda wishes to identify and formulate those policies which would most effectively assist the sub sector and national manufacturing sector as a whole in the realization of their full potential.

5.7.2 Overview of the Market

Uganda's paper industry was established in 1968 with the commissioning of PAPCO, with the objective of catering for the domestic needs for paper and board based products. Based on the premise of continued growth in demand, an expansion programme was embarked upon with the purchase of an additional second hand paper machine and other plant with the objective of increasing PAPCO's production capacity from 3,600 MT p.a to 6,600 MT p.a. However, the erection of new paper machine virtually coincided with the rise of the Amin-era, with the result that work was abandoned and was subjected to looting and cannibalisation during the ensuing turmoil prior to the NRM Government.

In recent years the mill has had to stop using imported virgin pulp and to use 100% waste paper in its furnish, due cash-flow problems. The shortage of spare parts and essential items of plant has also taken its toll on the mill with the result that its regular customers have been running to imported paper with which to produce their products to satisfy the dictates of the market with respect to quality and price.

Consumption of paper and paperboard in Uganda is estimated at being some 8,165 MT p.a (1992), of which approximately 286 MT p.a (3.5%) were produced by PARCO.

Domestic paper, board and finished products consumption rose dramatically for the period 1967 to 1971, at an average rate of some 22%, to peak at 17,050 MT only to plummet from 1972 onwards to some 6,240 MT (1992). As may be seen from the table, average per capita consumption for the period 1990 to 1992 was a mere 0.42 kg, compared to the average for 1970 and 1971 of 1.53 kg. It is significant however, that imports of finished paper products and packaging materials in form of paper bags, paperboard boxes and other packaging containers have significantly increased since 1990, reflecting the preference by the industrial sector and consuming public for the higher quality imported finished product, to the detriment of the local manufacturing base.

It is evident from the indicative figures presented in Annexes 4 and 5, that the consumption of paper and paperboard in Uganda is too low to meet present needs; the wide difference between the 0.47 kg per capita consumption of Uganda compared to say Kenya at 6 kg and Zimbabwe at 10 kg clearly illustrates the situation. In spite of there being no import quotas, nor restrictions imposed on purchases involving foreign exchange, thereby allowing imports to meet demand

for product quality, it is obvious that the market is kept artificially low by virtue of it being resource and price constrained.

Whereas the manufacturers of paper and paperboard-based packaging stayed operating well below optimum capacity utilisation, output of the printing and paper converting industries rose appreciably during the period 1991 to 1992.

5.7.3 Export Market

The export market for paper and paper products is unlikely to prove favourable due to strong competition in both product price and quality on the international market from those producers with better balanced raw material resources, or having large well established manufacturing establishments, or those countries which are closely integrated by trade agreements.

It must also be taken into consideration that the small tonnages concerned with neighboring export markets, compared to the additional capital plant and operating costs involved, would render the venture economically unsound. Also customer servicing, which is a prime factor, would prove difficult to manage from a distance.

However, several enterprises have examined the export market potential in order to use spare production capacity. It would appear from discussions held with the major printing houses and stationery manufacturers, that they are optimistic for their prospects in winning export orders. Although the exports of commodities, fish, fruit and flowers are forecast to grow steadily, the greater part of export packaging, in the form of corrugated and waxed board boxes, textile and polypropylene sacks are imported. Hence, the paper-based packaging industry will need to bring about considerable improvements should it wish to meet the demands of such a growth market and displace imports.

5.7.4 Conclusions

A cursory evaluation of the market data has led to the following conclusions with respect to the projected demand for paper, board and paper products relative to the ability and capacity of the Ugandan manufacturing and converting industry to displace imports.

- a) An appraisal of the pertinent data indicates that the largest potential increase in paper and paperboard demand will be printings and writings and unbleached products for the production of packaging materials or the supply of finished paper and board packaging.
- b) The combination of minimal paper/board production output from PARCO during the medium term, combined with the strong competition from

imports in both price and quality for a growing domestic market, could justify a feasibility study of a new papermill.

- c) The production facilities of the existing paper-based packaging and paper products manufacturers and convertors, as well as printing houses, could well meet medium term projected demand for their products and substitute imports to a significant degree, but only on completion of an investment programme of rehabilitation and modernisation and with the availability of competitively priced quality raw materials.
- d) Export sales, apart from packaging of export commodities, is expected to be minimal in the medium term and restricted to neighboring countries.
- e) Although national economic recovery and growth is evidenced, it will take several years before future growth trends bring a return to the pre-1972 consumption levels of paper and paperboard of 1.70 kg per capita. However, should consumption reach 1 kg per capita by the year 2000, which is not unreasonable compared to the consumption levels of neighboring countries, then total consumption of paper and paperboard by a projected population of 21 million would be some 21,000 MPA.
- f) In the general view of the market potential, serious consideration must also be given to the competitiveness of imported paper, paperboard and paper products, which, apart from price advantages would probably afford the end-user with a superior quality product to that which could be produced locally should investment in the upgrading of the sub-sector not proceed and in light of the absence of a locally based competitive source of pulp and paper.

5.7.5 Constraints to Growth

Apart from a few isolated enterprises, the sub-sector as a whole is struggling under the burden of limited cash flow. This has restricted their ability to purchase quality raw materials, equipment and spare parts which are needed to enable them to compete with imports of finished paper-board products.

The need for training in modern management methods, operating skills, maintenance and marketing are very apparent. There is a marked absence in the use of international standards to test raw materials and finished products, which, compounded by the general lack of quality control, does little to help the sub-sector's efforts to act as substitutes for high quality imports.

Product quality and reliability are all important should a mill wish to gain competitive edge and retain its customers. Quality of product is related both to technical skill and the efficiency of operation. Reliability of delivery is often the only factor by which a customer, in the developed countries, decides between two

suppliers whose quality and cost are reasonably similar. In fact, reliability of deliveries frequently outweighs cost because the customer is able to maintain a low, but safe, level of inventory which avoids having capital locked up in stock.

Manufacturing costs present the greatest opportunity for improvement in efficiency levels. Apart from the fixed costs which vary little whatever the rate of production, the other costs are time-related rather than production related. Hence, where there is excess capacity or inefficiency, unit costs will be reduced by increasing the rate of production. The first step in increasing production rate, is generally to attempt to make better use of existing plant and equipment and thereafter to invest in such plant as would greatly enhance production levels, yet prove to be cost effective.

Since production capacity is largely under-utilized, with most establishments visited only operating a single shift, one can appreciate the reluctance of owners to invest in modern equipment which, though they appreciate it is needed to reduce production costs and improve product quality, could put them at risk in a fickle market.

However, it would be considered prudent, for those enterprises wishing to improve their operations, to undertake a phased strategic programme to rehabilitate, modernize and expand their plant, within their financial means. Targets should be established whereby unit production costs are gradually reduced and product quality and range increased, according to measures introduced to upgrade equipment and improve management and operating efficiency. The resultant increase in profits may then be reinvested into the next development phase.

By adopting this strategy, it would also enable management to gain a better understanding of their market's needs and for owner-investors to plan capital projects to be geared to projected increases and shifts in market demand and export opportunities.

5.7.6 Action Plan - Suggestions

5.7.6.1 Market Research

- a. Initiate a data collection system covering those product groups targeted, including production, imports, exports, inventories, planned additions to capacity, raw materials availability, cost of production and prices.
- b. Undertake studies of major markets and end-users in order to learn where the customer is, what the product is utilized for and what performance and quality standards are important.

- c. Include within the scope of market research the more important competition from alternative products, in order to show the entire market in perspective, ie. Jute, cotton and polypropylene bags compared to 50 kg paper sacks for packaging sugar.
- d. Carry out periodic reviews and outlook studies for local and export markets as a basis for longer term planning.
- e. Examine transportation and other costs of distribution and show these in relation to the factory price.
- f. Disseminate market intelligence within the industry as it becomes available, in the form of newsletters, price reports and special studies.
- g. Review the effectiveness of marketing activities and institutions on a regular basis.
- h. Study the buying habits of consumers and the strategies of competitors.

5.7.6.2 Product Planning and Development

- a. Identify the resource of paper and board in terms of price and quality and evaluate it in relation to the customers' end product performance specifications.
- b. Assess other raw material supplies, such as inks and adhesives etc, in relation to alternative products under consideration.
- c. Undertake research to improve upon and develop the product quality and range and liaise with established research organisations in order to benefit from their findings and recommendations.
- d. Study product development trends and compare the performance and quality characteristics of competing products and search for ways to off-set any advantages they may have.

5.7.6.3 Standardization and Quality Control

- a. Emphasize performance requirements when establishing standards.

- b. Work towards uniformity of grade standards with respect to specifications, terminology, classification and units of measure, for both raw materials and finished products.
- c. Seek uniformity in test methods and technical reports.
- d. Invest in that equipment, officially recognized by the industry, as deemed necessary to undertake testing of raw materials and products, in order to enable control during the raw material purchasing stage and during the manufacturing process to comply with quality targets.
- e. Provide training to qualified technicians to undertake test methods and quality control and to care for the equipment in their charge.
- f. Communicate test results and standards to customers and similarly make performance requirements of customers known to sub-suppliers.
- g. Enforce a rigorous quality control programme.

5.7.6.3 Suggested Government Activities

- a. Trade Policy: by seeking freer access to export markets preservation of domestic markets.
- b. Trade Promotion: by assisting in the organization and financing exhibits and trade fairs, and by assigning commercial counsellors abroad to engage in product promotion.
- c. Infrastructure: by underwriting the cost of, and bringing about improvements in transportation, power sources and local community services.
- d. Research and Development: by sponsoring product testing and improvement and by funding such projects in national laboratories.
- e. Export Credit: by financing export shipments.
- f. Grade Standards: by their establishment, application and continued enforcement.
- g. Promotion Subsidies: by supplementing the budgets of private firms and trade associations.
- h. Market Research: by identifying opportunities and strategies for realising them, and by collecting and publishing statistics.

- I. **Forest Management:** by ensuring that a continuous supply of pulpwood is available to a pulp mill.
- j. **Industrial Strategy:** by establishing national priorities and targets for the forest industries and other sectors, as well as guidelines for implementation.
- k. **Co-ordination:** by promoting the effective co-operation of donor agencies, various public agencies, trade associations and individual companies.
- l. **Incentives to Further Development:** by encouraging investment, providing industrial development credit and tax relief.

6.0 ACTION PLAN AND PROGRAMMES TO IMPLEMENT THE NATIONAL STRATEGY ON INDUSTRIALISATION

The effort to develop national strategies on various sectors of the economy could not have come at a better time. It affords opportunity to reappraise the various changes that are taking place and affecting the performance of the economy. These have been discussed in Chapter 3 above. The discussions and dialogue that have taken place in the various Strategic Consultative Groups are predicated on the assumption that:

- a) The Government will continue in its effort to stabilise the economy through prudent monetary and fiscal policies, budget restraint and control of inflation;
- b) The government will continue to maintain political stability, and security of life and property;
- c) On the sectoral level, the objective of industrial and agricultural policies will continue to be pursued; and
- d) That since the effects of liberalisation, deregulation and globalisation can not be wished away. Uganda has to develop strategies to live with them.

Given these assumptions, the strategy for industrial development that emerges can be restated as: *Developing a more resource-based, export oriented industrialisation that exploits opportunities offered by the new economic environment, while serving the basic needs of the populace for manufactured goods.* In this section we discuss the emerging commonalities from the discussions in the SCGs. The next section will deal with strategic directions in selected sub sectors that have potential for achieving efficiency and competitiveness.

6.1.1 Issue I: Uganda is a high cost country.

Uganda is a land locked country and goods destined for Uganda have to pay high transport costs. Besides Kenya and Tanzania Railways charge discriminating rates. The Uganda portions of the roads are not always in a state of repair causing untold delays in the delivery of goods.

Electricity tariff is highest in Uganda compared with other East African Countries. Apart from high tariff, its supply is erratic which adds to the cost, due to down time. Telecommunications is equally unreliable and costly. In short the condition of physical infrastructure in Uganda puts her industries at a competitive disadvantage ab-initio.

Action by Government: Without reliable energy, industrialisation will be very difficult. In the short run, the goal should be to increase output from the present 150MW to 200MW which is quite possible with the Owen Falls alone. It is estimated that Uganda Electricity Board (UEB) loses about 35% of what it generates in transmission and distributes. Assistance should be sought on how to achieve a more efficient distribution, billing and collection of revenue due to the Board. Devise a prioritised development programme for each sector of infrastructure. Where appropriate, incentives should be created for private sector to provide some of the services at commercial price. Foreign investment could be attracted on a *Build-operate-transfer basis*. This will be appropriate in infrastructural services such as the Inland Terminal, Bonded Ware houses, Industrial Estates where electricity, water and telecommunication can be served in bulk.

The importance of making the Uganda Investment Authority a one-step center for new investors was to reduce the transaction costs (cost of doing business) in Uganda. But it appears there are still pockets of resistance that create their own bottlenecks.

- 6.1.2 **Issue II: Liberalisation was too sudden which caught Ugandan industries unprepared.** It is argued that there is nothing wrong with liberalisation as such if there was a level playing field for all. Since the GATT rules allow for grace period for least developed countries (of which Uganda is one), this should be exploited where applicable to provide protection for home industries to develop the muscle to compete in the open market.

Action by Private Sector: The Private Sector Foundation should organize a workshop on the implications of the Uruguay Round agreements on Uganda's trade. Thereafter each S.G. should make a case for enterprises or the sub sector and submit to UMP for negotiation at the National Forum. Whatever is being proposed must agree with the new GATT rules.

Action by Government: In part two certain strategic industries, crops and products have been identified. Government and the Private Sector Foundation should agree on a time bound policy intervention to allow such industries develop the capability to compete effectively.

- 6.1.3 **Technology Issues:** The important role of Technology in industrialisation can not be over emphasized. Therefore Uganda should go out to acquire it, either by buying, or attracting Foreign Direct Investment or developing and adapting simple off-the shelf technologies for our use.

Action by Government: Government should make budgetary commitment to establish the following institutions.

- An Industrial Research Institute

- Office of Industrial Property
- Technology Evaluation and Testing Center
- Industrial Development/Growth Centers (at the District level)
- A network of computer-based technology information system
- Enact necessary legislation to protect intellectual property
- Emphasize the teaching of science and practical skills in the schools and technical education centers

Action by Private Sector: Enterprises should start their R&D by establishing a Quality control department to liaise with similar government institutions.

- Train local employees to master all aspects of any imported technology;
- Seek partnership with owners of technology, or have licencing, franchising or such technology transfer agreements which must include training.
- SCGs should consider setting up a joint Skills Acquisition/Upgrading Centers for their members or staff.

Action by bilateral donors: Assistance should be in the form of training; hands-on experience in factories overseas; twinning between home companies and Ugandan enterprises for technology transfer and training. Multilateral agencies should continue their efforts at capacity and institution building, especially the institutions mentioned above.

6.1.4 Issues relating to local raw materials.

While it is a noble idea to use local resources and build on the natural advantage they offer, many problems have been identified. These include:

1. Accessibility - minerals are usually found in remote places with no access road. Even then the cost of prospecting to determine extent of deposit is usually high and risky. Then the technology for beneficiation and processing into industrial raw materials has to be acquired.
2. For agricultural resources, because of the myriad households involved in farm production and using traditional methods, the supply of raw materials can be erratic and unorganised. Besides, the seasonality of most crops, post harvest losses and transportation problems add to the problem of manufacturers.

3. Conflicting policies or poor implementation of agreed - on policies. The examples given of Hides and skins which is being exported while local tanneries that can add more value to them by processing to wet blue are starved of raw materials. Also ferrous and non-ferrous metal scrap is being exported illegally while local rolling mills are starved of raw materials.

Action by Government: There is need for the newly created Ministry of Planning and Economic Development in conjunction with relevant Ministries to establish a Raw Material Development Unit to bring together existing information and data on mineral, forest and Agro based primary raw materials and assist entrepreneurs in their development.

The Raw Material Development Unit should liaise with the private sector in planning Strategic Directions for those that are renewable resources and depletion rate for the non renewable resources. It should also be in the forefront for the search for appropriate technology for the valorisation of the primary raw materials.

Venture Capital Fund: There is need for a fund to assist in the more risky ventures of mineral prospecting. Alternatively, tax incentives should be given to companies that undertake such risks.

Isolated Infrastructural Development to access known reserves should be undertaken by the private sector and tax incentives given for private sector to provide such infrastructure.

Action by the Private Sector: Enterprises that use agro-based resources should either as individual companies, or an association assist farmers with improved seedlings, if necessary extension service, advice and other inputs to improve their productivity.

Since farmers need an assured market and higher incentives, each concerned S.G. should organize the marketing of their raw materials - collection, transportation, grading, pricing - with the Ministry of Trade and Industry as arbiter if need be.

- 6.1.5 **Taxation Issues:** It was reported by many SCGs that a multiplicity of taxes tend to add to cost of production and final price paid by the consumer, in addition to the newly introduced VAT. Besides, the collection system for some can be irritants that add to the cost of doing business in Uganda.

Action by Government: The present effort to achieve uniform import tariff is welcome provided it takes into consideration import duty charged by Uganda's neighbours to avoid making Uganda a dumping ground. With the introduction of VAT, a system of revenue allocation to municipalities should be evolved so

as to eliminate all the extra municipal taxes. All systems of tax administration should be streamlined for ease of tax payers.

6.1.6 **Financial/Credit issues:** There are three aspects to this;

- a) availability of investible funds
- b) attitude of banks to long term credit and
- c) flow of information between banks and private sector

Availability of investible funds depends on the rate of savings. Savings can be by individuals or corporate groups in the form of retained earnings after tax. The rate of savings in Uganda is low and not enough to fuel investment. Excessive tax on companies leave little retained earning for ploughing back. On the other hand, it is reported that certain loans obtained from World Bank and African Development Bank for on-lending to industrialists are tied up with the commercial banks who are either unwilling or unable to appraise industrial projects for financing. That brings in the issue of attitude of bankers. It is reported that most banks prefer short term lending and therefore stay on the short end of the financial market, whereas what industrialists want is long term lending. The banks argue that most Ugandan businesses do not come with a bankable project. Most businesses are unaware of what the banks want and the latter have not published their requirements.

Action by the Private Sector: There is need for a high level discussion between the industrial sector and the financial sector under the chairmanship of Bank of Uganda to sort out these issues.

6.1.7 **Human Resources Development Issues:** There is a general realisation that there is need to increase the pool of skilled manpower in every field. As discussed earlier, this includes developing entrepreneurial, technological and managerial skills.

Action by Government: Continued support to all educational and training institutions to increase intake and improve quality of teaching and learning. Specialised institutions should review their curriculum with the private sector with a view to producing readily employable graduates.

Action by Private Sector: Individual enterprises should conduct thorough job classification and evaluation so as to determine their training needs. These should then be classified into those for in-service on-the-job training and off-the-job institutional training. Each S.G. should maintain regular dialogue with technical institutes that train in the kind of staff skills they require, and they should be ready to offer their industries for industrial attachments.

6.2 STRATEGIC DIRECTIONS FOR SELECTED SUB-SECTORS:

In 1993 Maxwell Stamp Plc of UK undertook on behalf of the Uganda Investment Authority, "A study of the Resource Endowments, and Comparative Advantage". The general conclusion of the study was that "Uganda comparative advantage emanates mainly from natural resources and unskilled labour". After reviewing the resource endowment, availability of other factors of production and identifying potential investment opportunities, it commented as follows. "Uganda's existing comparative advantage is heavily concentrated on agriculture, forestry and mineral resources and their primary processing. This implies that there is scope for further development and secondary processing of the resources.... However the two essential factors of production, capital and skilled labour required in the production and processing of export goods are not abundantly available in Uganda".

This is consistent with the findings of the sectoral studies undertaken under the Indicative Industrial Plan (IIP) project. It is evident that even if all the physical and institutional constraints were removed, Uganda can not become competitive in every sector and in every market. Some products are better placed than others - given the level of technology, the condition of internal market and the structure of international market - to become efficient and competitive in export market and others in the domestic market only. Choosing strategic directions therefore is to consider various conditions surrounding a branch of industry or even a particular product and focussing on developing it for a particular market. Since conditions of the market, production process etc change over time, what is strategic today may not be tomorrow. Again research and development (R&D) and technology can assist in responding to changes in the market.

It must be mentioned here that many SCGs did not grasp this aspect of their work, and so as they get more used to the consultative process, and as information on products and markets become more easily available, they will be able to make better projections.

6.2.1 AGRO-FOOD PROCESSING INDUSTRIES:

- (a) *Strategic Cash Crops:* Coffee, cotton, and sugarcane. These crops are amenable to both small-holder and plantation production. They have wide linkage with other sub sectors. Their production can easily be brought back to 1970 levels.

Strategic Direction for Coffee:

- Improve quality control at farm level
- Introduce "wash and pulping" as secondary processing to improve the export value of the beans
- Improve roasting/grinding for the niche market of specialty coffee

Strategic Direction for Cotton: Improve technique at Ginneries.

All lint to local textile mills. Goal should be to return to "Jinja" cloth quality by 2000. Textile mills to supply local garment and made up clothing industry.

Cotton seeds to edible oil processors. A coordinated programme can easily put Uganda back as a net exporter of textile and edible oil.

Strategic Direction for Sugar:

With the privatization of the sugar industry, the country can become self sufficient in sugar by 2000 with about 250000 tons output.

- Increase acreage under cane
- Ethanol production for potable and methylated spirits (pharmaceutical grade)
- Bagasse into pulp for paper

(b) **Strategic Food Crops:** Oil seeds (sunflower, simsim and soybeans) to supplement cotton seeds. Grains (maize, wheat, rice, sorghum and soya beans) for the production of flour

- R&D into composite flour
- Texturized Vegetable Protein (TVP)
- Adaptive technology for drying and storage

The main contribution of industrial sector in this area will be processing to reduce post harvest losses, increase shelf life and therefore contribute to food security.

Livestock: Meat processing, leather and dairy.

Diary: It is reported that production is 380 million litres annually out of which about 35% is lost due to non processing facility. Capacity at present is 60 million. Strategic Direction is in processing into pasteurized and UHT milk for regional markets; dairy butter, cheese, yogurt and ice cream for the home market.

Strategic Direction for Leather

- Improve flaying and drying methods
- Process to wet blue before export
- Finished leather for home shoe and handicraft industries

6.2.2 FOREST RESOURCES:

- Rationalize the utilization of this important resource. At present four ministries are in charge of Forests - Ministry of Natural Resources, Ministry of Wildlife, Tourism and Antiquities; Ministry of Local Government (District Councils) and peripherally Ministry of Agriculture.
- Each has different perspectives, objectives and programmes for the forest. These need to be harmonized so that those involved in extractive industries will have clear guidelines.

Strategic Directions for Wood Industries

- Industrial plantations with specie of wood plants for special purposes
Conifers for pulp and paper plants, hardwood for saw mills.
- Multi-line sawmills
- Plywood/particle board/veneer mills
- Small scale briquetting/charcoal plants
- Furniture - knockdown furniture for regional market

6.2.3 NON METALLIC MINERALS SECTOR

This is one sector that if fully developed will have wide spread impact on the growth of the economy because of its contribution to building and construction, chemical industries, agriculture, and many other industrial sectors.

Strategic Direction for the Non-Metallic Mineral Sector

- Research and Development to determine chemical characteristics of the known minerals as well as their uses.
- Technology driven development
- Search and acquisition of relevant conversion technologies
- Establishing an Industrial mineral processing and testing laboratory. This will also facilitate acquisition of the needed technology.

6.2.4 BASIC METALS AND METAL FABRICATION

This is the base of engineering industries. Until this sector can make exact replacement parts and precision tools, it will not be able to fabricate other machines.

Strategic Directions

An integrated foundry, heat treatment, machining and precision machine shops.

FOOT NOTES

1. Census of Business Establishments, Bureau of Statistics MOFEP, Entebbe 1989
2. Rehabilitation and Development Plan 1993/94-1995/96 Vol. I
3. Hon Minister of Finance - Budget Speech 1996/97
4. World Investment Report 1992 (Transnational Corporations as Engines of Growth) United Nations, New York 1992
5. Page 73 *ibid.*
6. Prof Z.M. Nyiira "National Science and Technology Policy. A challenge to Science, Engineering and Technology for Development". Paper delivered to the inaugural National Technology Conference by Uganda Institution of Professional Engineers Feb. 1996
7. National Science and Technology Policy: UNCST 1993
8. Based on a survey carried out by UNCST in 1994.
9. Rehabilitation and Development Plan 1993/94-95/96 Vol I
10. *Ibid*
11. UNIDO Document (unpublished)

BIBLIOGRAPHY

1. Prioritising Public Expenditure for Sustainable and Equitable Growth in Uganda. World Bank Report No. 9203 UG Vol II 1991.
2. The Way Forward I & II: Medium Term Structural Adjustment Credit
GOU
3. Hope From Commitment: Achievements of the UNCST 1990-1993.
Kampala 1994
4. Perspectives on Industrialisation: Global Industrial partnerships, Interdependence and competitiveness, UNIDO Secretariat, prepared for Global Forum on Industry: Perspectives for 2000 and Beyond: New Delhi, India October 1995.
5. Uganda Industrialisation Policy and Framework 1994-1999. Ministry of Trade and Industry. GOU 1994
6. SEDCO & JRW Aluma and J.P Ndimukula: Report on Wood Industry Sector in Uganda. UMP 1989
7. Report of the Task Force on the Uganda Industrial Research Institute (Food Technology and Ceramics) Ministry of Trade and Industry, 1993.
8. Maxwell Stamp Plc: "A study of the Resource Endowments and Comparative Advantage" for Uganda Investment Authority
9. Prof E. Lujjo et.al. "Report on strengthening of Endogenous capacities in Science and Technology through National Policy Dialogues. UNDP/MCIC 1992.
10. "Survey of licenced investors - 1994". Uganda Investment Authority 1995.
CTA's Terminal Report - DP/UGA/90/012 Indicative Industrial Plan.
11. Review of Government Policy as it affects Small Scale Enterprises - Ministry of Planning and Economic Development, Government of Uganda 1992.

ANNEXES

- ▶ Table 2.3 - Revised Main Economic Indicators - Manufacturing Sector in Uganda
- ▶ BOX 1: Policy-led Versus Investment-led Integration
- ▶ Fish Processing Plants in Uganda
- ▶ Company Profiles: Neclime Dura Ltd.
African Ceramics Co. Ltd.
Hima Cement (1994) Ltd.
- ▶ Status Report: leather Project - US/UGA/92/200
- ▶ Paper and Paper Products - Exports & Apparent Consumption
- ▶ Ministry of Trade and Industry: Areas of immediate concern and needing technical assistance

TABLE 2.3

CENSUS OF BUSINESS ESTABLISHMENTS, 1989

REVISED MAIN ECONOMIC INDICATORS
MANUFACTURING SECTOR
UGANDA

ISIC GROUP	MANUFACTURING DESCRIPTION	No of Estabs	Employment	Compensation of Employees	Gross Output (at factor cost)	Value Added	VA/GO %
(money values in '000 shs)							
151	MEAT, FISH & VEG PROCESSING	25	777	164,388	767,016	106,786	13.9
152	DAIRY PRODUCTS MANUFACTURE	4	516	472,428	2,877,640	918,642	31.9
1530	COFFEE PROCESSING	221	11,097	2,773,458	65,229,572	7,773,995	11.9
1531-3	GRAIN MILLING & ANIMAL FEEDS	253	2,870	499,844	9,039,761	1,764,716	19.5
1534	TEA PROCESSING	28	1,744	278,533	2,566,160	367,145	14.3
1542&5	SUGAR & JAGGERY	39	3,266	1,439,371	8,725,626	3,290,353	37.7
oth154	OTHER FOOD PRODUCTS	55	920	198,058	2,583,541	591,489	22.9
155	BEVERAGES	10	2,080	1,553,287	8,664,990	4,102,761	47.3
160	TOBACCO PRODUCTS	1	719	587,137	6,773,323	3,088,934	45.6
1710	COTTON GINNING	28	1,137	145,751	2,186,862	582,098	26.6
1711-2	SPINNING & WEAVING TEXTILES	6	2,108	412,595	711,939	179,359	25.2
172	OTHER TEXTILE GOODS	9	4,378	1,527,491	4,831,042	2,502,886	51.8
173	KNITTED & CROCHETED FABRICS	2	20	7,554	16,526	9,154	55.4
181	WEARING APPAREL	30	1,006	263,872	1,060,519	463,332	43.7
191	LEATHER & LEATHER PRODUCTS	3	136	35,982	192,166	59,537	31.0
192	FOOTWEAR	17	434	299,081	1,043,353	464,113	44.5
201	SAWMILLING & WOOD PLANING	48	1,950	431,920	1,814,256	656,722	36.2
202	WOOD, CORK & STRAW PRODUCTS	7	75	21,303	64,249	31,774	49.5
210	PAPER & PAPER PRODUCTS	12	570	170,597	1,307,080	323,748	24.8
221	PUBLISHING	11	301	135,224	711,327	188,086	26.4
222	PRINTING	43	1,345	346,765	1,405,444	294,036	20.9
223	REPRODUCTION OF RECORDED MEDIA	2	12	1,610	2,908	2,130	73.2
241	BASIC CHEMICALS	1	30	21,130	167,887	87,241	52.0
242	OTHER CHEMICAL PRODUCTS	30	1,225	864,872	7,556,285	2,019,666	26.7
251	RUBBER PRODUCTS	3	133	36,484	142,378	74,009	52.0
252	PLASTIC PRODUCTS	4	175	114,322	602,217	220,495	36.6
269	NON-METAL. MINERAL PROD'S nec	60	2,715	732,196	2,348,085	870,403	37.1
271	BASIC IRON & STEEL	3	391	82,053	1,171,322	388,503	33.2
273	CASTING OF METALS	4	42	18,050	57,474	19,690	34.3
281	STRUCTURAL STEEL PRODUCTS	79	954	450,985	1,911,258	729,065	38.1
289	OTHER FABRICATED METAL PROD.	64	1,650	422,296	4,066,007	1,529,195	37.6
291	GENERAL PURPOSE MACHINERY	6	74	13,535	78,248	23,462	30.0
292	SPECIAL PURPOSE MACHINERY	13	1,646	106,878	912,338	187,397	20.5
311-4	ELEC MACHINERY & APPARATUS	8	176	135,253	797,680	440,517	55.2
323	TV & RADIO EQUIPMENT	1	91	64,437	1,340,411	183,684	13.7
342	MOT. VEH. BODIES & TRAILERS	3	53	13,580	72,893	40,696	55.8
343	PARTS ETC FOR MOTOR VEHICLES	4	54	13,234	53,207	23,320	43.8
351	BUILDING/REPAIRING BOATS	1	10	592	8,758	1,138	13.0
361	FURNITURE	268	3,579	822,261	4,346,898	1,392,547	32.0
369	MANUFACTURING nec	7	104	22,694	87,400	36,804	42.1
5020	MOTOR VEHICLE REPAIRS/SERVICE	233	3,339	611,306	3,191,410	964,737	30.2
TOTAL		1646	53,902	16,312,407	151,487,456	36,994,365	24.4

BOX 1**1. POLICY-LED VERSUS INVESTMENT-LED INTEGRATION**

Most integration programmes aim at improving the economic performance of their member States by providing them, at the very least, with increased opportunities for trade and stimulating greater economic competition. In addition, regional integration is often meant to encourage firms to expand their operations in the region so as to attain economies of scale which may have been constrained by the small size of domestic markets. As firms expand across national borders, intra regional FDI flows increase, as do the trade flows associated with it. The result is integration at the production level.

The development of a regional production system based on intra regional FDI requires a far greater degree of policy co-ordination between States than does increased intra regional trade. Regional trade integration involves mostly the liberalization of barriers to cross-border flows of goods and services; it remains, therefore, relatively "shallow". Regional production integration goes beyond trade integration and extends to the liberalization of barriers to cross-border flows of capital, technology, skills and, to some extent, people; it is therefore, relatively "deep". More specifically, the policies that allow for such movements go much further in integrating national economies and regulatory systems than policies designed to support intra regional trade, since adjusting to a regional production system implies harmonizing (or, at least, recognizing and coordinating) a wide range of national practices and policies, rather than only liberalizing trade. Indeed, policies to a regional production system may extend to the harmonization of fiscal, monetary and industrial policies among member countries and the adoption of common standards in a variety of fields, such as labour, health and safety. It appears that successful regional integration involves a combination of integration at the levels of both policies and production. However, many regional integration programmes fail to reach this stage of deep integration, that is, a regionalized production system governed by a regional policy framework, and, therefore, often do not last.

Policy-led integration programmes are those in which initiatives at the policy level initiate the economic integration of participating States. Typically, the policy measures focus on reducing barriers to trade among member States, usually by liberalizing trade between member countries, to create a free trade area and, if a customs union is formed, by adopting common external trade policies vis-a-vis third countries. Integration policies may go even further towards harmonization, if a given level of cross-border trade has already been reached. The essential characteristic of such integration efforts is that the institutional framework for integration precedes actual integration at the production level.

In contrast, FDI-led integration (or TNC-led integration) occurs when the activities of firms, not policies, serve as the principle drivers of regional integration, that is, TNCs perceive advantages to integrating their operations across countries in the region. Such advantages may include country and process specialization, and the economies of common governance over a set of geographically-dispersed activities. While liberal trade policies may encourage firms to implement regional strategies (which often entail intra-firm, intra regional trade), such integration may also

occur in the absence of specific regional integration policies. In other words, the integration of States in a region may be thought of as originating from one of two possible starting points: from the regional integration policies of States or from the regional integration strategies of TNCs - assuming, of course, an overall enabling framework.

In practice, the line between policy-led and FDI-led integration is not so sharp. As noted above, policy-led integration is often geared towards promoting intra regional trade in the initial phases of an integration process, by reducing trade barriers. Once a given level of intra regional trade has been reached, firms within the region may adjust to the larger market by making cross-border investments, thus beginning to form a regional production system. Indeed, a minimum level of cross-border trade within a region is likely to be necessary before intra regional FDI flows begin to grow. At some stage, however, the efforts of firms to create efficient operations on a regional scale may be hampered by the lack of an appropriate regional policy framework. For example, non-tariff barriers (such as different national technical standards) may block attempts to integrate production at a regional level. Furthermore, disputes may arise between member States regarding the treatment of firms that have established regional operations. Thus, the degree of production integration already achieved may create pressures to deepen the integration at the production level. Regional policies at this stage may cover such areas as harmonized standards vis-a-vis firms and their output, a common company law and even closer integration of fiscal and monetary policies. In this manner, policy-led integration triggers a process of FDI integration, which in turn leads to further integration measures at the policy level. Thus, while it is difficult to classify regional integration efforts as being purely policy-led or FDI-led (most tend to fall between the two extremes) the ways in which integration programmes evolve have different implications for the subsequent degree and nature of regional integration.

CULLED FROM WORLD INVESTMENT REPORT 1992. (Page 34-35)

FISH PROCESSING PLANTS

OPERATIONAL PLANTS

NAME	OWNERSHIP	DATE OF APPLICATION	DATE OF OPERATION	PLANT CAPACITY / DAY	TYPE OF PRODUCT	LOCATION
Green Fields (U) Ltd (formerly Quality Foods)	Partnership	1989	1989	20 Tonnes	Chilled fish fillet, Whole frozen, Hot Smoked	Entebbe
Uganda Fisheries Enterprises Ltd (UFEL)	Government	1990	1990	15 Tonnes	Cold smoked fish fillets, chilled fish fillets	Jinja
Gorda Fishing Industries Ltd.	Sole Ownership	1990	1990	20 Tonnes	Frozen fillets, fish meal	Jinja
FEM	Partnership	1992	1992	5 Tonnes	Frozen fish fillets	Kampala Ind. area
Victoria Fresh Foods Industries	Limited Company	—	1991	20 Tonnes	Frozen fillets	K'la (Gaba)
Fish Masters	Partnership	—	1991	20 Tonnes	Frozen fillets	Kampala Ind. area
Kyega	Limited Company	—	1991	23 Tonnes	Frozen fillets	Kampala (Luzira)
Kampala Ice Plant	Government	—	1981	2 Tonnes	Frozen Whole fish	Kampala Ind. Area
Kampala Song Ltd	Sole Ownership	Jul. 1992	Jan. 1993	5 Tonnes	Frozen fillets	Kampala (Kitinda)
Uganda Fish Packers	Partnership	—	Jan. 1993	14 Tonnes	Chilled fillets	Kampala (Nakawa)

PLANTS UNDER CONSTRUCTION

<u>NAME</u>	<u>OWNERSHIP</u>	<u>DATE OF APPLICATION</u>	<u>DATE OF OPERATION</u>	<u>PLANT CAPACITY/DAY</u>	<u>TYPE OF PRODUCT</u>	<u>LOCATION</u>
1. Four Square	Private Company	Jun. 1992	—	10 Tonnes	Frozen fillets	Bugiri (Entebbe)
2. Clovergen	Private Company	Jul. 1993	—	10 Tonnes	Frozen fillets	Entebbe
3. Isper International	Private Company	Sept. '91	—	5 Tonnes	Frozen fillets	Entebbe

PLANTS GRANTED PERMISSION BUT YET TO CONSTRUCT

1. Marine Agro Ltd.	Private Company	—	6.10.92	10 Tonnes	Frozen fillets	Jinja
2. Nile Fish Export Ltd.	Private Company	—	1992	10 Tonnes	Frozen fillets	Jinja
3. Madona Enterprises	Private Company	Jun. 1989	1989	10 Tonnes	Frozen fillets	Kasenyi
4. Alpha Marine	—	—	—	5 Tonnes	Frozen fillets	—
5. Golden Sun Ltd.	Limited Company	Jul. 1992	Jul. 1992	10 Tonnes	Frozen fillets	Jinja
6. Uga Swede Ltd.	Limited Company	Jul. 1992	Jul. 1992	10 Tonnes	Frozen Fillets	Jinja
7. Nile Enterprises	Limited Company	Jun. 1992	Jul. 1992	10 Tonnes	Frozen fillets	Jinja
8. Eastern Fisheries Ltd.	Limited Company	May, 1992	May, 1992	5 Tonnes	Frozen fillets	Kampala (Ntinda)
9. Triton	Limited Company	—	—	4 Tonnes	Fish fillets	Bwerenga- (Entebbe)
10. Equatorial Tropical Enterprises Ltd.	Limited Company	—	—	10 Tonnes	Fish fillets	Entebbe
11. Mitchell Ltd	Limited Company	—	1990	10 Tonnes	Fish fillets	—
12. Uganda Marine Products	—	—	1990	5 Tonnes	Fish fillets	Lweza
13. Kaddu Company	—	—	1990	5 Tonnes	Fish fillets	Kasenyi (Entebbe)

APPLICANTS UNDER CONSIDERATION

14. Uganda Food Products	Private Company	17.11.89	—	10 Tonnes	—	K'la. (Proposed)
--------------------------	-----------------	----------	---	-----------	---	------------------

NECLIME DURA LIMITED1 PRESENT STATUS

NECLime Dura is an autonomous subsidiary of the National Enterprise Corporation (NEC) engaged in the mining and processing of limestone for the production of agricultural limestone, chicken feed base rock and building as well as road construction lime. Operations started in late 1989.

The Company operates three quarries A,B,C on a 4,5 sq km concession that include, mature forest. Access is by rail at Dura River Railway Station (some 10 km from Kamwenge and 28 km from Kasese) some 250 metres away.

Proven limestone reserves amount to some 13 million tons of high grade limestone (> 50 % CaO).

Currently road construction firms are the main customers, with total requirements of some 270 000t of hydrated lime for the period 1995-97.

Present capacity is about 12t/d or 4000 t/a of hydrated lime.

Production is labour intensive and experiences many constraints.

The present technology employed is as follows:

1. Mining - blasting then using hammers to manually size the limestone (40 - 80mm) ready for the kiln.
2. Firing - in three (3) hillside kilns using wood as fuel.
3. Slaking - manually on a concrete floor
4. Sieving - two stages using 2mm screens and 0,8 mm screens manually
5. Bagging - in 25kg 3-ply kraft paper bags also manually.

11 FUTURE PLANS

Immediate plans include the mechanisation of the processes involved and the construction of oilfired kilns to obtain a cleaner product.

The production of pozzolana cement using lime and the nearby volcanic ash is envisaged through the introduction of a ball mill and an air separator. The importance of precipitated calcium carbonate (PCC) cannot be overlooked.

Through some of these measures the target set at 30000 t/a of hydrated lime is hoped to be achieved in the near future.

111 REQUIRED MACHINES AND EQUIPMENT

MINING SECTION:

	<u>US \$</u>
Compressor	30,000
Drill steels x 6	3,000
Handdrills x 3, hoses, line lubricators, grinder	20,000
Traxcavator 2, 5 m ³ shovel	170,000
Tipper trucks 4 x 20 t	560,000
Conveyor belt	<u>150,000</u>
	933,000

PROCESSING SECTION

Jaw crusher with feeder	84,000
Vibrating screen x 2	56,000
Ball mill 16 tph	145,000
Balls 20t	65,000
Air separator	50,000
Screw conveyor	50,000
Rotary kiln will accesories 90 tpd	1,600,000
Deduster	90,000
Bagging machine	<u>100,000</u>
	2,240,000

CIVIL WORKS	<u>460,000/-</u>
Production sheds staff quarters	3,633,000
Total	<u>363,300</u>
100 % Contingency	3,996,300

The Jaw Crusher, Vibrating Screen, Screw Conveyor and Drill steels have been ordered for and are on their way to Uganda. One Rotary Kiln is being locally frabricated. A bagging machine is already owned by the company at Dura.

AFRICAN CERAMICS COMPANY LIMITED

STATUS REPORT FOR THE NON-METALLIC MINERAL SUB-SECTOR.PRESENTED BY WILLIAM L.S.MUSOKE.1. INTRODUCTION1.1 BACKGROUND.

The company was incorporated in 1967 as a limited liability company and the factory is located at Kasiyirize, Kyaggwe via Namugongo. The factory was commissioned in 1969 but due to unforeseen technical constraints, production came to a halt in 1971. Following years of industrial recession in the 1970s, it was only in 1979 that negotiations with the commonwealth secretariat started. The recommendations thereafter were implemented in 1983. The rehabilitation task was accomplished by May 1985 and the factory was opened in July 1985. It was planned that a volume of 650,000 assorted units would be produced annually hence saving on foreign exchange expenditure and also to provide employment. Furthermore, it was planned that sanitary ware and wall tiles would be manufactured and simultaneously processed materials would be supplied to detergent, pharmaceuticals and paints manufacturers.

1.2 PAST PERFORMANCE

The technical problems of the 1970s still persisted after rehabilitation in aspects such as body formulation and quality control hence the company operated far below the capacity. The political instability in 1985 grossly hampered the operations of the company hence meaningful output could be registered from 1988. Generally, the company has all along faced severe working capital bottlenecks.

1.3 RAW MATERIALS1.3.1 LOCAL

During rehabilitation, English ball clay was imported and incorporated in the body formulation at the time but through series of trials, the company succeeded in making up a body with purely the locally available materials. Hence the subsequent basic constituent raw materials became Ball clay from Mukono, Lake sand from Dimu, Kaolin plus pegmatite from Bushenyi.

1.3.2 IMPORTED

For decoration purposes, clay products undergo firing processes which in most cases involve glazing. A glaze is a mixture of oxides and minerals which adheres to the clay body when sufficiently heated. Therefore materials such as glazes, colours, stains and plaster of Paris (dehydrated gypsum) have to be imported for the manufacture of tableware.

1.4 ELECTRICITY

Some of the causes of poor performance have been due to the erratic power supply. The Kiln firings were always interrupted hence the production defects and the power charges were unnecessarily high. The company had purchased a stand-by generator set of 500Kva to enable the operation of the two kilns simultaneously, in addition to the other operations.

1.5 TRANSPORT

The company lacked vehicles to transport the raw materials, staff and finished products meanwhile access to the factory is characterised by poor roads. The telephone system was destroyed during the war.

1.6 TECHNOLOGY

Most of the machinery and equipment is quite old and outdated. The wet-method of processing the raw materials was employed, followed by de-watering and lastly de-airing on extrusion. The use of the oil-fired tunnel kilns which permitted a continuous firing was discontinued in the 1970s due to their high capacity. On the other hand, the newly installed electric kilns in 1984, could only permit intermittent firings meanwhile their capacity was rather too low to yield the desired output. Most of the manufacturing machines were semi-automatic. When the company ran short of the transparent glaze which had proved more acceptable in the market the company resorted to the cheap opaque glaze which was more labour intensive. As a result, the decoration technique was complicated whereby three firings were required instead of two. Colours, stains and lithographs were hence used in decoration and they were all imported. The company did not produce single-fired wares, several spares were not locally available thus importation was inevitable.

1.7 BANKING

Over the years since its inception, the company received loans from institutions such as the East African Development Bank, United States Agency for International Development, Uganda Development Corporation, Ugadev Bank and Uganda Commercial Bank. Despite all those efforts the company remained grossly under-capitalised.

1.8 PRODUCTS

The company produced assorted ceramic tableware which was hollow or flat and either pressed or cast. The wares included mugs, cups, saucers, pots, bowls, vases, dishes, tumblers, ashtrays and other specialised articles.

1.9 MARKET

Despite the quality problems of the products, the company faced stiff competition from imported ceramic ware, glassware, plastics (local and imported) and enamelware. Local potteries were not a major threat. Before the factory closed down, the company had no more sales outlet in Kampala due to financial constraints. Hence due to the unreliable quality of the products, market positioning proved erratic against the prevailing distinctive prices in the market. Big hotels and other institutions could buy products that met the quality standards.

2. DIVESTITURE OF AFRICAN CERAMICS COMPANY LIMITED

2.1 PRIVATISATION

The Government decided to divest its interest (94.6%) in the company in 1992. The sale was first advertised in October 1993 and after concerted efforts to sell the company by the Ministry of Finance and Economic Planning, it was offered to Muhindo Enterprises Limited in May 1996.

2.2 CONCISE BUSINESS PLAN

There will be an investment of US\$2.5 million and production will be increased to 5 million units annually. A large volume will comprise flatwares which have been in production already while new production lines will be introduced to manufacture wall/floor tiles and electrical porcelain. Rehabilitation of the plant will be the first phase.

June 29th, 1996

HIMA CEMENT (1994) LIMITED -
NON-METALLIC SUB-SECTOR CONTRIBUTION:

by

EPHRAIM GUMISIRIZA.

The new management of Hima Cement (1994) Limited who bought that factory from Privatisation Unit of Ministry of Finance and Economic Planning took over the running of the plant on 27th December 1994.

They found the plant running at 150 tons per day using production line No. II. After take over, in the first quarter (by March 1995) Hima Factory, was already producing at average of 350 tons of cement per day, inspite of various constraints including power. Today, the factory is producing at 500 tons per day and will reach 600 tons per day by the end of June when full rehabilitation of Line II, the quarry, and the packing Line are completed. The new management comprises of private investors.

Rehabilitation:

Part I: Rehabilitation, Renovation and Optimisation Programme - 900 tons per day.

The programme of Rehabilitation, and Renovation of Hima Factory will bring the production capacity to 900 tons per day by the first quarter of 1997, along with the Optimisation Programme for both production Lines II and I. The management will also complete the new plans for the environment aspects and infrasture facilities by then.

Part II: Expansion for Capacity from 900 Tons per day to 1500 tons per day .

This programme will be completed by the first quarter of the year 2000, and will upgrade in capacity of Hima Factory from 900 tons to 1500 tons per of cement per day. Such a programme will also take into consideration the environmental aspects and the additional infracture. Many jobs will be created by then.

New Products:A. Pozzolana Cement

Hima Cement (1994) Limited has plans to introduce Pozzolana Cement in the near future, mainly for low cost-housing. Pozzolana cement is usually sold at a price 20% lower than ordinary Portland cement, to cater for the needs of mainly rural population and also for low cost housing in urban areas. A study has been made by Hima experts of Geological survey and mines department. The project will use the volcanic as the pozzolanic material, and is available in Bunyaruguru - Bushenyi district.

B: Rapid Setting Cement and other types of Cement:

The Research & Development division at Hima has already introduced the Rapid setting cement on our market and tests with this cement have already been carried out successfully. This type of cement is very good for making blocks, slabs and other cement pavements which need to set quickly. We also have plans to make special High strength cement for Road Construction, and other Building and Construction Sector Industry.

Product Quality:

Our product has already met the standards of this latest British standards specifications NS 12 (1991). We would like Government to enforce this type of standard for all Portland cement sold in the country. This will expose the higher pricing of Pozzolanic cement made by Bamburi from Kenya, normally marketed and sold as ordinary Portland cement.

Demand of Cement in Uganda:

The current demand of cement is far more than the local production, but by the end of 1997, the production of cement at Hima and Tororo in the hands of the private investors will already have met all the National Demand. The present consumption and demand for cement is between 250,000 tons and 300,000 tons per annum with an annual growth of 15%. This growth is expected to continue or even increase with the high level of sustained growth and development in Uganda. In 1994, Uganda imported over 200,000 tons of cement about 80% its requirements.

Problems:

1. We have a lot of problems with power supplies from UEB, power is on and off which spoils our kilns when it comes back, it is not steady. UEB tariffs are very high compared with the same supply in our neighbouring countries Tanzania and Kenya.

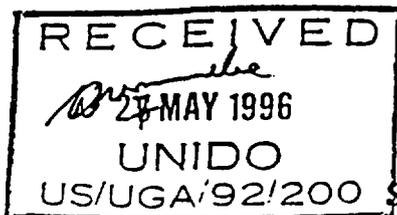
Generally, power is not available in areas where minerals are to be mined e.g. in Bundibujo where gypsum is mined. There is no power I understand kaolin mining in Bushenyi by Muhindo enterprises is also having similar problems.

2. Railway Transport Tariff is very high for daily transport of cement from factory to the market, the rates should be revised to reflect market prices since all other aspects of the market are liberalised.

3. Smuggling and Damping Problems:

Kenya's Bamburi and Tanzania's Tanga are damping their products at cheap prices on our market. Because when you include Transport costs on top of production costs, their cement should not be selling as low as it is. Bamburi is marketing Pozzalanic cement as Portland cement, while the former should be cheaper by 20% even in costs of production and quality rating.

ANNEXURE					
PRODUCTS - SIGNIFICANT CONTRIBUTION TO UGANDA ECONOMY					
S/NO	PRODUCTS MANUFACTURED	FOREIGN EARNING	FOREIGN EXCHANGE SAVING	INTRA SECTORAL LINKAGES	EMPLOYMENT GENERATION/ SKILL DEVELOPMENT
1	Aluminium Products	Y	Y	Y	Y
2	Wire Products	Y	Y	Y	Y
3	Steel Products		Y	Y	
4	Hoes & Wheel Barrows	Y	Y		Y
5	Hospital Beds, Tables & Chairs		Y	Y	Y
6	Aluminium and Steel Holloware		Y	Y	
7	Truck and Bus Bodies		Y		Y
8	Bicycle and Components	Y	Y		Y
9	Metal Fabrication		Y	Y	Y
10	Exhaust Pipes		Y		Y
11	Hand Tools, Spare Parts and farm implements		Y		Y
12	Tin Mining	Y			
13	Steel Wool		Y	Y	
14	Foundry		Y	Y	Y
15	Roofing Sheets	Y	Y		Y
16	Hot Rolled Steel Profiles	Y	Y		Y
17	Enamelware and Number Plates	Y	Y		Y
18	Hand Pumps, Spare Parts	Y	Y		Y



25 January 1996

STATUS REPORT

ESTABLISHMENT OF A SUITABLE TANNING FACILITY TO
PROCESS NILE PERCH FISH SKINS INTO FASHIONABLE LEATHER IN
JINJA, UGANDA IN CO-OPERATION WITH GOMBA FISHING INDUSTRIES

US/UGA/92/200

1. Registration of Uganda Fish Skin Tannery Ltd., Jinja

The registration of the Uganda Fish Skin Tannery Ltd., is attached as Annex 1.

2. Construction of the building

The tannery building measuring 45m x 14m has been completed. Windows and a sliding door will be fixed by the beginning of February 1996. Installation of power and water supplies will be carried out during February 1996, and the internal and external channel systems of the tannery wet section will be completed by mid February 1996.

3. Machinery and Equipment

3.1 The project US/UGA/92/200 has up to now, supplied and delivered to site the following equipment:

	USS
- one fish skin fleshing machine (Spain)	28,953
- three stainless steel tanning drums (Germany)	48,426
- chemicals to process trial lots of fish skin into chrome crusted leather (Germany, Switzerland, Netherlands)	4,716

3.2 In addition, the following machines have been requested and are expected to be supplied and delivered to the project site by the end of February 1996:

	USS
- one fully reconditioned shaving, and	
- one fully reconditioned buffing machine including spare parts and transport (Germany)	29,500

4. Tanning and Finishing of Nile Perch Fish Skins

During the end of 1994, about 10,000 raw fish skins were tanned into chrome-crusted leather under very rudimentary and difficult conditions at an Ugandan-based hide tannery. The large experimental trials were conducted under the technical supervision of the UNIDO Tanning Expert. The initial plans to process the chrome-crusted skins into finished leather of varied appearance and colour shades in Switzerland, Austria, Israel and South Africa experienced technical problems as the interested companies are specialized in other types of leather manufacture. Some thousand retanned skins were further finished in the referred plants. The final results, however, were not of the quality expected. A small range of well-styled samples of leather goods and footwear were manufactured in Austria, which

created interest in the trade. At the beginning of 1995, about 3,000 crusted fish skins of various sizes (50-90 cm long) were air-freighted from Gomba Fishing Industries, Jinja to Messrs. W. Scheiber and Co., Vienna (a well established leather trading firm). A part of the consignment was utilized to carry out experimental processing and finishing at two tanneries in Austria. During the International Leather Fair held in Paris, France in September 1995, contacts were made with representatives of the international trade specialized in exotic leather and novelty leather products.

The most promising contact and possible future co-operation in the field of fish skin leather finishing and product development was established with Mr. Pertti Hellemaa, Chairman of the Friitala Group of companies and leather projects manufacture, in Ulvila, Finland. In order to explore possible assistance to fund components of the equipment needed for the setting-up of the fish skin tannery in Uganda as well as expertise in the product development and marketing, Mr. Felsner also visited the office of the Common Fund for Commodities (CFC), in Amsterdam, Holland, on 7 September 1995 to discuss the range of issues on the subject matter with senior officers - Mr. Olowude and Mr. Lu. CFC has indicated its interest in assisting the project. The first measure, however, was to confirm the support from the private project promoters. A meeting in this respect was convened in Nairobi on 23 November 1995.

In the meantime, 500 crusted fish skins were sent from Messrs. Schreiber and Co. to Friitala tannery. The referred 500 skins were dyed and finished on the advice of Mr. Hellemaa into six different fashion colours. Leather products, including an elegant blouson, were manufactured at the Friitala-owned design studio.

In order to provide a better matching base for a more uniform selection of skins with regards to shape, length and size of scales, Friitala required at least another 1,000 skins for further finishing. The requirements were discussed with Mr. Schreiber on 5 January 1996, and following our discussion, 1,650 skins were shipped to Finland on 10 January 1996.

According to Mr. Hellemaa, all the skins will be dressed into various types of finishes and different colour shades by March 1996. It was further agreed to return a portion of the finished skins to Messrs. Schreiber & Co. in Vienna for organizing a larger range of footwear sample production with a renowned shoe manufacturer such as Gabor and Hogl of Austria, as well as with producers of fashionable leather goods. This will take place between February - April 1996.

5. Technical Expertise in Fish Skin Leather Processing

It is planned to field Mr. Steve Roberts, (Australia), an internationally known fish skin tanning and finishing expert, to Jinja, Uganda. His assignment is expected to commence in the middle of April 1996 and is based on a cost sharing arrangement (see annexes) between the Gomba Fishing Industries Ltd. and the UNIDO project US/UGA/92/200. Mr. Roberts will start-up the crust fish skin leather production, initially 500 skins per day, which will be increased to 700-800 per day by June 1996.

6. Technical Co-operation Arrangements

The project promoters have agreed in principle that while for the time being the semi-processed fish skins will be finished at Friitala, a comprehensive range of leather products made from Nile perch fish skin leather is to be developed in Finland, Austria, Italy and possibly Switzerland with the purpose of officially presenting it to the international market.

In balanced stages with the transfer of processing technologies, the leather dyeing and finishing operation will be gradually shifted from Finland to Uganda, once the technical capacity to absorb the new technologies has been created on a sustainable basis. Although the cost of product development in countries with a high labour cost element can not be easily added to the final merchandise, it provides the means to shorten substantially the time span usually required to launch a basically new quality product on the international market.

7. Foreseen Marketing Strategies

In consultation with the project promoters and other interested parties contacted, it has been agreed that the following product marketing strategies should be adopted:

- International familiarization and information campaign on the fish skin leather product range which will include brochures, articles and a video film highlighting the sequences from fishing to tanning and leather products manufacture.
- Assessment of the potential and requirements of the international market through a well designed and well defined marketing study.
- Promotion of the finished products through selected international trade fairs.

8. Assistance sought from Common Fund for Commodities

The modalities of assistance offered by CFC to the project have been well received, studied and elaborated by the private investors and project promoters. The indicated framework of assistance was also discussed with interested partners likely to be involved in future co-operation. It was agreed that CFC assistance would be most welcome to contribute towards the expansion of the project operation in Uganda, thus allowing for the setting-up of a well equipped fish skin leather finishing unit, and in this way, provide the infrastructural base for the overall transfer of the developed dyeing and finishing technologies from Europe to Uganda. Such a programme also requires funds for the supply of additional expertise in transferring the acquired technologies and broaden the international experience in marketing of these novelty products.

For this reason, the following plan of action has been endorsed by the project promoters and involved companies:

- February 1996 - Preparation of a draft project document for assistance in the Nile perch fish skins product utilization and development through CFC based on CFC format (Felsner).
- March 1996 - Obtain comments and possible endorsement from the project investors and promoters (Felsner).
- April 1996 - Prepare the final draft project document and forward to CFC for comments (Felsner).
- May 1996 (2nd half) - Mission of Messrs. Karmali, Kuypers, Felsner to Vienna (UNIDO); Schreiber to Finland (Friitala), Hellemaa and finally discussions with CFC in Amsterdam on the submitted project document and elaboration of further action recommended to obtain possible funding of the project.

It is planned that by May 1996, about 3,000 - 5,000 chrome crusted Nile perch fish skins emanating from the new process will have been dyed and finished in a wide selection of colours at Friitala tannery, and that part of them manufactured into a variety of fashionable leather products in co-operation with interested companies.

Paper and Paperboard Production,
Exports & Apparent Consumption

	1967	1968	1970	1971	1972		1990	1991	1992
IMPORTS (MT)									
A) Paper & Board									
- Newsprint	911	1,080	1,061	1,557	723		151	257	653
- Printings & Writings	2,288	2,243	2,692	2,676	452		1,793	1,301	2,228
- Kraft	1,935	2,149	4,691	6,918	4,924		885	1,094	558
- Other Paper & Board	1,053	1,144	2,018	2,458	1,795		218	629	797
- Packaging	146	99	41	34	24		677	186	585
- Impregnated & Coated	234	374	657	768	677		47	447	68
B) Total Imports of Paper, Board & Finished Products	6,896	7,626	11,541	14,772	8,794		6,742	5,972	7,904
C) Pulp & Waste Paper	208	1,405	2,305	2,904	1,736		312	1	17
D) RE-EXPORT (MT)	52	15	13	17	8		9	4	26
E) PAPCO PRODUCTION (MT)	-	(1,024) ^e	(1,790) ^e	(2,290) ^e	1,620		393	270	286
TOTAL APPARENT CONSUMPTION *	6,844	8,635	13,318	17,045	10,406		7,126	6,238	8,164
POPULATION (million)	8.757	9.126	9.759	10.014	10.277		16.597	16.672	17.521
CONSUMPTION OF PAPER, BOARD & FINISHED PRODUCTS (kg/capita)	0.78	0.95	1.36	1.70	1.01		0.43	0.37	0.47

Notes: 1969 trade figures not available

e estimate

* Total Apparent Consumption = (B + E - D)

Refer to Annexes 4 & 5 for details and sources

MINISTRY OF TRADE AND INDUSTRY

Areas of immediate concern and needing technical assistance

1. Project Idea: Strengthening the Ministry of Trade and Industry in its new role under a Private Sector led Industrial Growth.

Background and Justification: The policy stance of the NRM government is towards a liberal, open economy, in which the role of Government in the productive sector is to a large extent downsized, while the private sector is given more prominence in policy formulation and implementation. The GOU has privatized nearly all state owned enterprises, and in the current Rehabilitation and Development Plan (1993/94 - 1995/96) has stated that, apart from providing the physical infrastructure, the role of Government will be to support and facilitate the efforts of the private sector who are the real wealth and employment creators.

The liberalization, deregulation and decentralization policies of the Government, adopted in recent years, have left the MTI with few of its traditional functions and power. It now has to redefine its functions in the light of the prevailing macro-economic policies, as well as the emerging trade environment. To do this, the Ministry has to retool its kit, as it were, and learn new skills and vocabulary called for.

Project Objective: To strengthen the ministry of Trade, Industry and Cooperatives, and the associated institutions to play a more supportive and facilitative role to the private sector.

Project Components:

- Study the structure and functions of the various directorates and departments and recommend redefinition of functions;
- Identify training needs of various cadres of officials. This may involve job reclassification after a thorough job analysis of current requirements;
- Creation of a Department of Small-Scale Industries to be the focal point for coordinating the now decentralized District Industrial Development to Local Governments;
- Strengthening the Industrial and Technological Information Unit to become computer-based and with facilities for linking to similar databases in the country.

2. Project Idea: Industrial Opportunity Survey of 39 Districts

Background and Justification: An earlier assistance had been used to carry out survey of about 12 districts, and based on the findings, the industrial growth centre pilot projects at Mbale and Mbarara were established. Prior to replicating the Mbarara experience in other areas, there is a need to study the remaining districts and update the information from the earlier studies.

Project Objective: To establish a basis for deciding the nature of industrial activities that need to be promoted and supported in various areas of Uganda based on identified natural advantages of each area. The Mbarara and Mbale Growth Center projects were not unqualified success

stories. In fact, in a number of areas, the project strategy may have to be changed. The industrial opportunity studies will also help to identify the kind of extension services relevant to traditional non-farm activities in each area.

3. Project idea: Replication of the Mbarara Industrial Growth Center with modifications

Project Strategy: To carry out a proper assessment of the experience of the Mbale and Mbarara by interviewing the participants and recommending changes in subsequent projects.

4. Project Idea: Assistance in developing Industrial Estates or Industrial Areas.

5. On-going or projects under discussion:

Leather Development in East Africa
Uganda National Bureau of Standards
Mbale Industrial Growth Centre

6. Project Idea: Institutional Infrastructure Development

Project Objective: To assist the GOU to establish the regulatory and support institutions needed for the efficient functioning of the private sector.

Project Components: Full project document will need to be developed for each of the following;

A legal and institutional framework for technology transfer, acquisition, etc.
An industrial research institute,
Industrial development centres.

7. Project Idea: Revitalizing the Directorate of Cooperatives and the Uganda Cooperative Alliance to play a more active role in the organization of domestic factor markets, resource (savings) mobilization and financial intermediation to members.

Assistance to the Private Sector

8. Project Idea: Continued support to Uganda Manufacturers Association to facilitate the activities of the SCGs.

Justification: The SMID approach has now been fully elaborated and functioning in Uganda. The newly formed SCGs have either just come together for the first time or have recently been registered as an association. It is envisaged that it will be some time (2 to 3 years) before they will be able to sustain their own secretariats and fund their own office. So there is need to continue to support the Management Support Unit in UMA to continue providing the support and coordination of meetings, and to assist UMA to broaden its activities to the Northern districts.

9. Capacity Building at the Enterprise Level. This will come as requests for training, technical workshops, etc.