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Analysis of the competitiveness survey on Uganda's manufacturing firms[1]

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Executive Summary

Nature of surveyed firms

Out of 393 contacted manufacturing firms selected from 12 sectors, only 144 firms responded to questionnaire for industrial competitive and human resource survey conducted in Uganda from January to March 2005. The survey targeted large and medium manufacturing firms defined as those firms employing at least 30 people and/or with injected capital of at least Ushs 100 million. Over 35% of these firms were in food processing while 23% of firms were engaged in the production of furniture and other manufacturing not elsewhere classified; just less than 10% of firms surveyed were in the production of basic and fabricated metals, machinery and equipment; about 8% firms were in the production of textiles, clothing and leather goods; and just less than 8% of firms are involved in the production of refined petroleum and chemical products. About 40% of sole proprietorship firms were in the production of furniture and other manufacture not specified elsewhere. Private sector ownership is more prevalent in the manufacture of food products (about 39%); followed by the manufacture of furniture and other manufactures not specified elsewhere (about 23%).

Production costs and inventories

Costs of manufacturing activities tend to arise from utilities, raw materials, rent, maintenance and repairs of plant and equipment, salaries and wages, services relating to research and development, and training. Costs relating to the purchase of raw materials were high in 2002 across all manufacturing sectors though they declined in sectors manufacturing food products, and basic and fabricated metal products, etc. Business firms invest (financial and human) resources into research for product and process development given the competition in the commodity market. The survey findings clearly show that firms involved in processed foods spend more on research and development compared to those firms dealing in products from other sectors. Sectors dealing in the food products; nonmetallic mineral products; basic and fabricated metals, machinery and equipment; and manufacture of electrical machinery were major consumers of higher costs relating to raw materials though they declined in the past three years.

Findings from the survey further indicate that costs to the manufacture of textiles, clothing and leather goods; food products; and coke, refined petroleum and chemical products mainly relate to rent, electricity consumption and other sources of energy. Costs relating to electricity were both relatively higher and increasing within sectors dealing in food products; manufacture of non-metallic mineral products; and basic and fabricated metal products; the manufacture of coke and refined petroleum and chemical products; furniture and other manufactures not specified elsewhere. This is not surprising since electricity is an essential input into the production of wood and products thereof; furniture products; refined petroleum and chemical products, etc. Electricity is also critical into the processed foods and production of metallic products.

Costs relating to the maintenance and repair of plant and equipment are prominently high in the manufacture of other non-metallic mineral products; processed foods; agricultural

products; production of basic and fabricated metal products, machinery and equipment. Costs relating to wages and salaries were rising in sectors producing basic and fabricated metal products, machinery and equipment; non-metallic mineral products; and agricultural products between 2001 and 2003, and were high in the manufacture of furniture and other manufactures not specified elsewhere. Across sectors, costs relating to training, research and development are not as high as costs arising from other factors (like raw materials, energy, information technology services, etc.) with the exception of manufacturing firms involved into the production of coke, refined petroleum and chemical products; furniture and other manufacturing not specified elsewhere, and to some extent manufacture of food products.

Firms spend more on promotion, advertising and marketing elements particularly in sectors involved into the production of non-metallic minerals; processed foods, furniture and other manufactures; basic and fabricated metal products. Costs relating to product promotion and marketing rose between 2001 and 2003 in sectors dealing in textiles, clothing and leather goods; manufacture of non-metallic minerals products; and basic and fabricated metal products. Costs relating to promotion, advertising and marketing fluctuated (reducing in 2002 and rising in 2003) in sectors processing foods; manufacturing of coke and refined and chemical products; and furniture and other manufactures not classified elsewhere.

Expenditures on income tax were in sectors manufacturing textiles, clothing and leather products; coke, refined petroleum and chemical products; and the manufacture of basic and fabricated metal products. Expenditures on value added tax were in sectors producing processed foods; coke, refined petroleum and chemical products. Firms manufacturing basic and fabricated metals; and food products spent negligible amounts on VAT.

Inventories of finished products were concentrated in sectors manufacturing textiles, clothing and leather goods particularly in 2001; and furniture products and other manufactures not classified elsewhere. The inventories on raw materials are concentrated in all sectors except those sectors dealing in textiles, clothing and footwear; manufacture of wood and products of wood.

Quality and impact of competitive drivers

Cheap and less skilled labor was identified by about 50% business firms in the agricultural sector; 56% of firms in textiles, clothing and leather goods; and 67% of firms in the manufacture of non-metallic minerals as a good quality competitive factor. Affordable and accessible electricity were critical competitive drivers in sectors dealing in wood products while contact with clients and suppliers; and access to affordable capital were identified as essential competitive drivers by majority of manufacturing firms dealing in non-metallic mineral products; basic and fabricated metal products; machinery and equipment. The quality of final products for export and local consumption was considered to be a critical competitive driver by manufacturing establishments in all sectors particularly in processed foods, textiles and clothing, wood products, refined petroleum and chemical products, basic and fabricated products. The competitiveness of sectors producing agricultural products; processed foods; wood and products thereof; refined petroleum and chemical products; textiles, clothing and leather products was largely affected by the population growth, the size and structure of the domestic market.

Skilled labor was perceived to have positive impact on the competitiveness in sectors producing non-metallic mineral products; wood and products of wood; basic and fabricated metal products while artisans were a critical competitiveness factor in sectors dealing in basic and fabricated metal products; furniture products and other manufactured not specified elsewhere. Accessibility to basic raw materials was perceived to have positive impact on the competitiveness of firms producing processed foods; wood and products of wood; refined petroleum and chemical products; non-metallic minerals products and furniture products while semi-processed raw materials were perceived to have positive impact on the competitiveness of agricultural products.

Suitable land, water supply and raw materials were considered by most of the manufacturing firms as having good impact on the competitiveness among sectors producing non-metallic mineral products; basic and fabricated metals; wood and products of wood; agricultural products, textile, clothing and leather products. The quality of inputs and outputs had positive impact on the competitiveness of sectors producing agricultural products; processed foods; refined petroleum and chemical products; basic and fabricated metals; furniture products and other manufactures.

The size of the domestic market was perceived to have positive impact on the competitiveness of all sectors except those producing furniture products and other manufactures not specified elsewhere; refined petroleum and chemical products; wood and products of wood. The structure of the domestic demand, market differentiation and population growth were perceived to have positive impact on the competitiveness by more than 50% of manufacturing firms producing wood products textiles, clothing and footwear; refined petroleum and chemical products; basic and fabricated metal products.

Changes between 2003 and 2004 and expectations in 2005

The survey information indicates that over 50% of the business firms from almost all sectors reported significant improvements in production, domestic and export sales. Business conditions were reported to have improved by the majority of manufacturing establishments in all sectors but the production of furniture and other manufactures not specified elsewhere. Improvements in domestic and export sales were reported by more than 50% manufacturing firms with exceptions of firms involved in the production of processed foods; basic and fabricated metal products; furniture and other manufactures as regards export sales mainly because such products are largely consumed in the domestic market. Taxes paid out of sales improved in all sectors but those producing processed foods, refined petroleum and chemical products; basic and fabricated metals; and furniture products.

Overall there was considerable optimism expressed by manufacturing firms across sectors regarding production, business conditions, domestic and export demand for products produced by the manufacturing industry in the country. With the exception of business firms dealing in agricultural products, over 50% of those in other sectors expressed improved business conditions in 2004 relative to 2003. Import dumping tended to hamper activities producing textile, clothing and leather products; refined petroleum and chemical products; non-metallic mineral products; basic and fabricated metals products as reported by more than 50% business establishments in those sectors.

It is clear that higher volumes of goods imported were expected by majority of manufacturing firms (about 67%) in production of textiles, clothing and leather products; manufacture of wood products (about 75%); and refined petroleum and chemical products (about 70%). Across sectors, positive expectations of imported goods were reported by more than 50% except sectors involved in agricultural products; food processing; manufacture of furniture and other manufactures not specified elsewhere.

Higher expectations regarding investment in machinery and equipment are in all except sectors producing agricultural products; processed food products; and manufacture of textile, clothing and footwear. Equally, higher investment in land and building were expected in sectors dealing in production of basic metals, fabricated metal products; and manufacture of furniture products. General business conditions such as sales were perceived to improve in subsequent 12 months in almost all manufacturing sectors with the exception of the sector dealing in production of wood products.

Recruitment and training process

Firms in the sector producing textiles, clothing and leather products accord recruits with ordinary secondary school background with better assessment relative to other recruits. Direct recruitment from training institutions (e.g. vocational and technical schools) was reported by more than 50% manufacturing firms involved in production of textile, clothing and footwear; wood products; refined petroleum products and chemical products; non-mineral products; and basic and fabricated products. Direct recruitment from training institutions was reported by 46% manufacturing firms in food processing and 38% of business firms in production of furniture products.

Over 50% of manufacturing firms in all sectors except those dealing in furniture products considered technical institute graduates at recruiting time as having very good technical skills. In production of agricultural products, gender was reported by only 44% of business as an important factor when recruiting into production of agricultural products. Employment experience of recruits was an important factor during the recruitment process in all sectors except those dealing in wood and products of wood; basic and fabricated metal products. Key considerations in sectors producing refined petroleum and chemical products; basic and fabricated products and non-metal mineral products include education with science subjects, ability to read, vocational training, previous experience, education qualifications, personality, age and gender.

Business establishments reported to heavily rely on the use of external institutions for training their workers are largely concentrated in sectors involved in production of agricultural products; refined petroleum and chemical products; non-metallic mineral products; basic and fabricated products. Manufacturing firms reporting existence of training plans were those producing agricultural products; wood and products of wood; refined petroleum and chemical products, and of basic and fabricated metal products.

Briefly, the survey intended to identify sources and constraints of the competitiveness of manufacturing activities seeking the perceptions of about 144 firms in the manufacturing industry in Uganda. Clearly, the competitiveness of most manufactured products in Uganda is affected by the cost of electricity particularly food products; labor and land suitability;

domestic and export demand conditions. The quality and availability of inputs; support services like water utilities; access to finance; employee performance incentives; contact with suppliers and competitors, and interactive with the government also impact on the competitiveness of manufacturing activities in Uganda. Manufacturing firms in Uganda spend relatively less on research and development for upgrading of products and processes relative to high expenditures on product promotion, advertising and marketing. Graduates with technical and vocational training background/skills, and previous work experience are highly regarded during the recruitment process. Most of the recruitment process is through relatives and friends rather than the labor office. University graduates are regarded as high adaptive to working conditions but are less preferred in many activities requiring technical skills like fabrication of metals and furniture production. Firms have arrangements for training their staff but rely heavily on external training services. High expectations in terms of sales, output and investments also raises high future human resource needs which demand for more training.

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1. Background to the industrial survey

This report regards the industrial competitiveness survey commissioned to Economic Policy Research Centre (EPRC) by the United Nations Industrial Development Organization (UNIDO) under the capacity building project for industrial policy development, effective governance and economic management in Uganda. EPRC took a lead role in the survey; collected the required information; undertook preliminary analysis; and provided UNIDO with completed survey questionnaires administered on manufacturing enterprises in Uganda. This analysis focuses on factor and demand conditions; related and impacting on Ugandan industries; firm strategies, structure, quality and environmental management; all of which are an integral part of the generic questionnaire prepared by UNIDO for the survey on medium and large manufacturing firms in Uganda defined as employing at least 30 people (full time employees) and/or with injected capital of at least Ushs 100 million recommended by UNIDO and the Uganda Bureau of Statistics (UBOS). Manufacturing firms for the survey exercise were selected from 12 sectors as advised by UNIDO (details see Table 1).

Table 1: Sectors covered by the industrial survey

Sector (ISIC Code)	Description
1	Agriculture
2	Mining and Quarrying
30	Manufacturing of food products
31	Manufacturing of textiles, clothing and leather goods
32	Manufacturing of wood and products of wood, coke and straw (excluding furniture)
33	Manufacture of coke, refined petroleum products, chemicals and chemical products, plastics rubber and articles thereof
34	Manufacture of other non-metallic mineral products
35	Manufacture of basic metals, fabricated metal products, machinery and equipment
36	Manufacture of electrical machinery
37	Manufacture of radio, television and communication apparatus
38	Manufacture of transport equipment
39	Manufacture of furniture and other manufacturing not elsewhere classified

Source: UNIDO

The survey started on 20 December 2004 with a short briefing of the four technical staff members of the Department of Industry and Technology (DIT) in the Ministry of Tourism, Trade and Industry (MTTI). Four staff from MTTI got involved in the survey exercise as part of capacity building in the Department of Industry and Technology. However, the actual fieldwork exercise of administering the questionnaire, involving 17 field research officers, started early January 2005 and went on till the end of March 2005. A generic questionnaire provided to EPRC (with UNIDO and Government of Uganda logos as was

desired) was administered to 393 medium and large manufacturing firms as defined above. A basic list, from which surveyed business firms were selected, was provided by the Uganda Bureau of Statistics (UBOS) based on the 2000/2001 Uganda Business Inquiry. This was supplemented by lists of manufacturing firms from the Uganda Manufacturers Association (UMA), the Uganda Business Index (UBI) website (http://www.ubi.co.ug) and Uganda National Chamber of Commerce and Industry (UNCCI). This report concentrates on the information obtained through the survey. The rest of the report is follows. Section 2 provides the response of the manufacturing firms surveyed while the analysis of the survey results is given in Section 3 while a summary of results form the human resource survey is given in Section 4.

2. Response of manufacturing firms surveyed

The response from the manufacturing firms surveyed was low and slow, which explains the stretch of the period for the survey (almost three months) and related delays in producing progressive reports. Out of 393 manufacturing firms contacted, only 144 firms responded to both questionnaires for industrial competitive survey and human resource survey (see Table 2). According to information in Table 2, majority of the business firms that responded to the survey were located in Kampala (about 53%) and Jinja (about 10%). This high concentration of manufacturing firms has a number of implications. Manufacturing firms tend to locate their businesses closer to major sources of infrastructural inputs like utilities such as electricity, water as in the case of Jinja, and closer to markets and supporting institutional services like government services, banking, legal and accounting services, etc. as in the case of Kampala.

Better infrastructure like roads may equally have considerable influence on geographical distribution of manufacturing activities for example along Mbarara-Kampala-Jinja-Iganga highway. This would suggest that, to encourage more manufacturing firms to locate in other part of the country particularly rural areas, infrastructure and other ancillary services supportive of manufacturing activities have to be developed to reduce unit costs of production. The concentration can also be reduced by biasing incentives to investors in favor of rural locations. Increased location of manufacturing activities in the countryside

would reduce the influx of workforce migrating to urban areas and would increase income of the rural communities.

The majority of business firms (over 35%) are involved in the processing of food products (Sector 30), about 23% of business firms were engaged in production of furniture and other manufacturing not elsewhere classified (Sector 39). Processed foods comprise meat, fish, dairy; grain milling; bakeries, sugar and jaggery, coffee roasting, coffee and tea processing; animal feeds, other foods while other manufactures in Sector 39 include packaging material; printing; catering; manufactured fishnets; simple computer accessories and graphics, etc. The high proportion of firms involved in the processing of food products is not surprising outcome since the agriculture, largely comprising food and other crops, contributed more than 38% to the country's GDP in the past and the weight of food processing in the index of industrial production was about 39% in 2003.

Table 2: Geographical and sectoral distribution of responding business firms

District\Sector	1	2	30	31	32	33	34	35	36	37	38	39	Total
District													
Kampala	4		27	5	3	10	2	10				16	77
Mubende	2				1								3
Wakiso		1	5		1		1					1	9
Iganga			4						1			1	6
Jinja	1		3	3		1		1				5	14
Mbale				1								1	2
Soroti			2					1				1	4
Lira			4	1								2	7
Bushenyi			2										2
Kabarole												1	1
Kasese	1		2									1	4
Masindi			3									4	7
Mbarara			1		1			2			1		5
Kyenjojo	1			2									3
Total	9	1	53	12	6	11	3	14	1	0	1	33	144

Source: Survey results (2005)

Just less than 10% of the business firms surveyed are engaged in the production of basic and fabricated metals, machinery and equipment; just over 8% firms are in the production of textiles, clothing and leather goods while less than 8% of firms are involved in the production of refined petroleum and chemical products. Sectors dealing in mining and

quarrying (Sector 2); manufacture of electrical machinery (sector 36); radio, television and communication apparatus (sector 37); and manufacturing of transport equipment (sector 38) were excluded from the analysis because of low or no response to the survey questionnaire.

A number of factors are responsible for this relatively slow and low response including (i) outright refusal of firms to fill the questionnaire (ii) reluctance to fill the questionnaire, (ii) the failure to trace and locate the targeted manufacturing firms and (iv) firms that ceased to operate. Majority of the manufacturing firms were skeptical of the intended purpose and end use of the information being sought and therefore refused or were reluctant to release the desired data. Generally, there was limited appreciation across manufacturing firms contacted of the need for filling the survey questionnaire because of widespread perceptions that the data provided would not be given due consideration in the process of designing the country's industrial policy. These perceptions emanate from the limited tangible/positive impact of industrial policy action on the manufacturing activities in the past and the tendency of government actions visibly/mainly being taxation to the activities in the manufacturing sector.

3. Analysis of the industrial survey results

This section represents analysis of the information collected from manufacturing firms indicated in Table 2 and it concentrates on firms' perceptions regarding various factors (e.g. management, production costs, export and domestic orders and sales, etc.) on the competitiveness of their activities. The discussion focuses on a summary survey results while more detailed information is presented in excel files/sheets annexed to the report. Tables annexed to this report are numbered according to the numbering of questions in the questionnaire and it is recommended that the use and/or interpretation of the information in annexes be done together with the questionnaire (also attached).

3.1 Management of business

The management of any business firms is influenced by the ownership structure and legal status of those firms. The survey information on the ownership and legal status of the manufacturing establishments is given in Table 3. In this report, the *within analysis* refers to sectoral distribution of firms given the nature of the legal status (ownership structure). For example,

the within distribution of firms under sole proprietorship was 5% of firms were in Sector 1; 55% of firms were in food products (sector 30); and the remaining 40% were in Sector 39. The *across analysis* refers to distributions of business firms across different kinds of legal status (ownership structure).

The across analysis reveals that about 81% of the manufacturing firms in the survey are of limited liability in nature and about 15% are sole proprietorship while the rest (accounting for 3.8%) are partnership enterprises. The within analysis indicates that about 55% of the sole proprietorship firms are involved in food products and about 40% of sole proprietorship firms are in production of furniture and other manufactures not specified elsewhere. In the case of partnership status, about 60% of firms are in the production of processed foods. Majority of business firms with limited liability are in the production of processed foods (about 35%); followed by the manufacture of furniture and other manufactures not specified elsewhere (about 19%); and the production of basic and fabricated metals (about 11%).

Table 3: Ownership and legal status of enterprise (% of firms)

Legal status				Ownership			
	Sector	Within	Across		**Sector**	**Within**	**Across**
Sole Proprietorship	1	5	0.8	**Private**	1	7	6
	30	55	8.3		2	1	1
	39	40	6.0		30	39	37
	Total	*100*	15.0		31	7	6
Partnership	30	60	2.3		32	4	4
	35	20	0.8		33	8	7
	39	20	0.8		34	2	2
	Total	*100*	3.8		35	10	9
Limited Liability	1	8.3	6.8		39	23	22
	30	35.2	28.6		*Total*	*100*	94
	31	8.3	6.8	***State/Private***	30	20	1
	32	4.6	3.8		32	20	1
	33	9.3	7.5		36	20	1
	34	2.8	2.3		38	20	1
	35	11.1	9.0		39	20	1
	36	0.9	0.8		*Total*	*100*	4
	38	0.9	0.8	**State**	1	33	1
	39	18.5	15.0		30	67	1
	Total	*100*	81.2		*Total*	*100*	2

Notes: The within analysis refers to sectoral firm distribution given the nature of the ownership structure/legal status.
Source: Industrial survey (2005)

The situation is slightly different when one considers business firms along the ownership structure. About 94% of manufacturing firms in the survey are privately owned which is not surprising given the recent policy shift towards more private sector participation in the economy. There are a negligible proportion of business firms which are still wholly owned by the state (2%) or jointly owned by the state and private sector (4%).

Private sector ownership is more prevalent in the manufacture of food products (about 39%), followed by the sector dealing in the manufacture of furniture and other manufactures not specified elsewhere (about 23%). The state ownership is concentrated in the manufacture of food products (about 67%) while its involvement in agricultural sector was reported by 33% of the business establishments only. Food processing has traditionally dominated the industrial sector and this dominance has continued to strengthen, e.g. the weight of food processing in the industrial activities was only 27% in 1987 but rose to about 39% in 1997. The dominance of food processing is a reflection of the agriculture-dominated economy and therefore agro-based manufacturing activities.

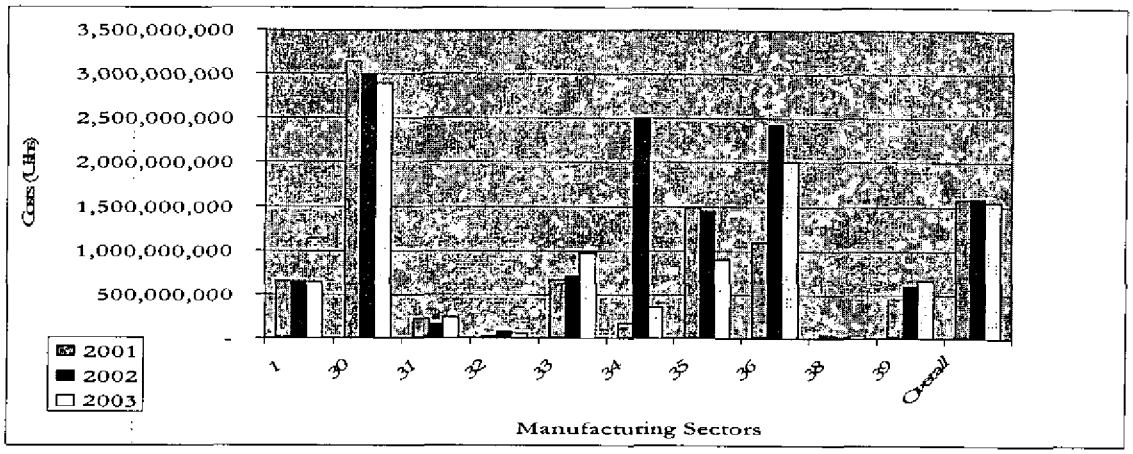
3.2 Nature and amount of costs to business enterprises

Business enterprises were requested to indicate the nature and amount of costs of undertaking their business and findings are illustrated Figure 1. Costs of manufacturing activities tend to arise from utilities, raw materials, rent, maintenance and repairs of plant and equipment, salaries and wages, services relating to research and development, and training. Business firms inject (financial and human) resources into research for innovations; cutting production costs and product development given the competition in the product market. The competition seems however to be more through aggressive product promotion, advertising and marketing than through research and development as indicated by relative resource expenditures devoted to each activity (for details see Table 3.4 in the annex).

About Ushs 39 million and Ushs 38 million were spent on promotion, advertising and marketing in 2001 and 2003 respectively compared to Ushs 21 million and Ushs 16 million devoted on research and product development in the same period. Manufacturing firms involved in food products spend more on research and development compared to those firms dealing in products other than processed food. The probable explanation may be

because of higher competition in the food sub-sector given many firms involved (Table 2); the short-shelf life of the majority of food products and high potential for contamination in the food sub-sector. The research and product development received the least financial expenditure relative to other inputs into production.

Figure 1: Costs of raw materials into manufacturing sectors

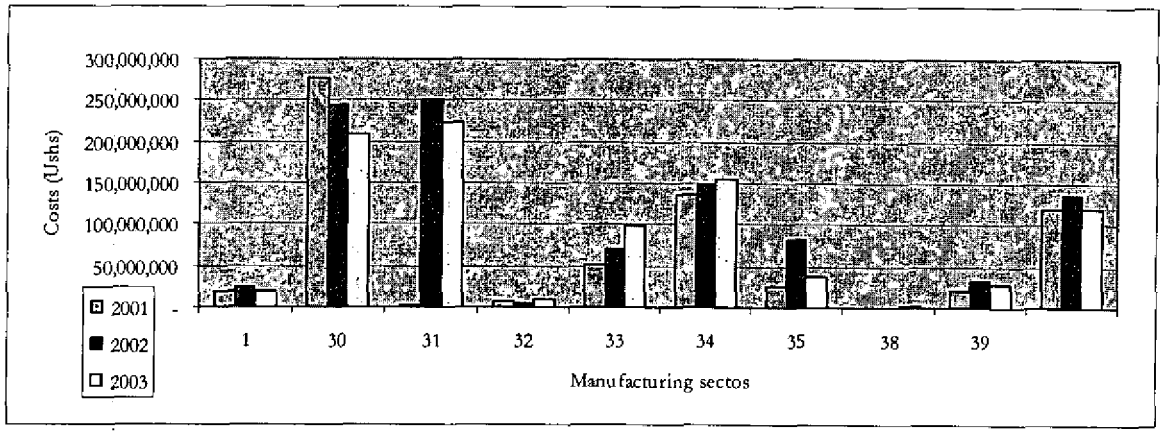


As shown in Figure 1, sectors dealing in the manufactures of foods (sector 30), nonmetallic mineral products (Sector 34); basic and fabricated metals, machinery and equipment (Sector 35); and manufacture of electrical machinery (sector 36) were major consumers of higher costs relating to raw materials though they declined in the last three years. It is clear that costs relating to the purchase of raw materials were high in 2002 across all manufacturing sector though they declined in sectors manufacturing food products and basic metals, fabricated metal products, etc.

Costs to the manufacture of textiles, clothing and leather goods (sector 31); the manufacture of food products (Sector 30); and of coke, refined petroleum products, chemicals and chemical products (sector 33) mainly relate to rent, electricity consumption and other sources of energy. Costs relating to electricity were relatively higher in sectors dealing in food products; manufacture of non-metallic mineral products; and basic metals and other fabricated metal products, etc. It is important to note that, although costs due to electricity were highest in the manufacture of food products, they declined from Ushs 276 million in 2001 to about Ushs 208 million in 2003. This decline might have been due to the substitution of electricity with other sources of energy as tariff rates on consumed electricity increased when the electricity industry in the country was privatized. High costs relating

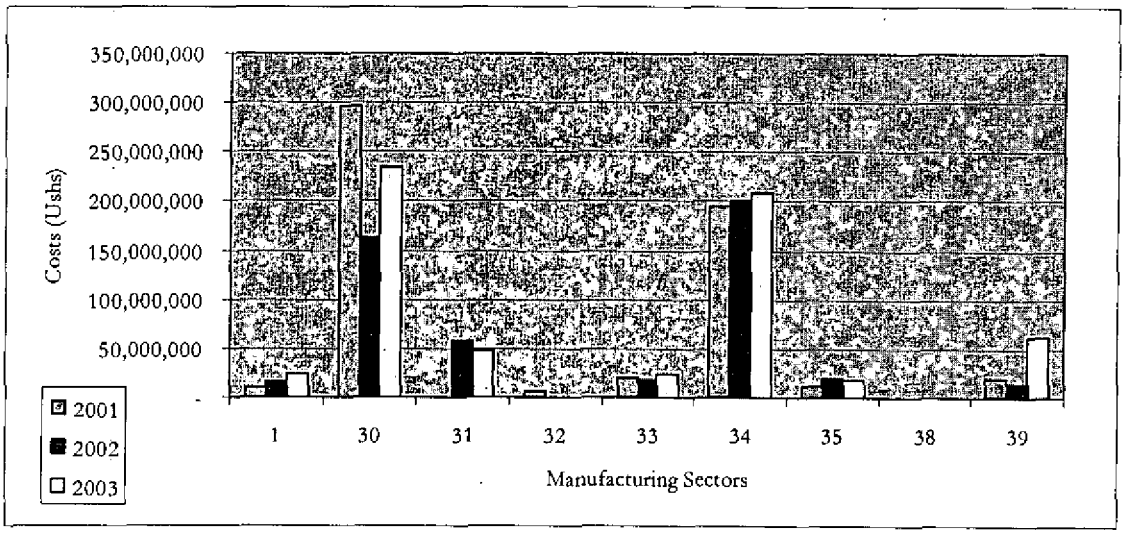
electricity into the production of processed foods may be attributed to the fact that the majority of these food products are perishables whose cold chain has to be maintained to avoid losses.

Figure 2: Costs relating to electricity consumption



High and increasing costs relating to electricity were experienced by firms involved production of non-metallic mineral products; manufacture of coke and refined petroleum and chemical products; and furniture products. This is not surprising since electricity is one of the main inputs into the production of wood and products thereof; furniture products; and chemical products, and is critical into the production of metallic and chemical products.

Figure 3: Costs relating to energy sources other than electricity

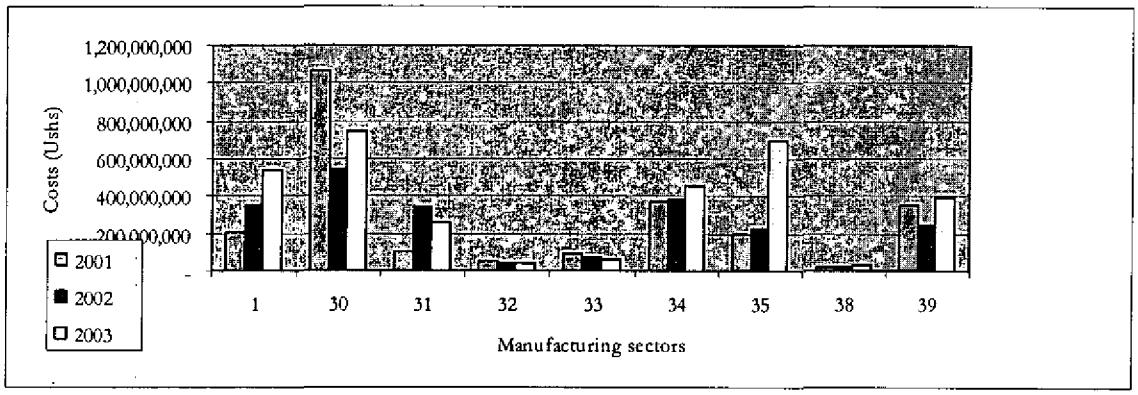


The impact and changes in costs relating to energy from sources other than electricity are provided in Figure 3. The manufacture of non-metallic mineral products such as cement,

brick and tile making (sector 34) and food products including perishables (Sector 30) are worst affected by costs relating to energy from sources other than electricity. The general observation is that the production of processed foods (meat, fish, dairy; grain milling; bakeries, sugar and jaggery, coffee roasting, coffee and tea processing; animal feeds, etc.) requires and consumes considerable amounts energy (both electricity and energy from other sources) since it is largely dealing in processing perishable food products and those needing to be roasted.

Costs relating to the maintenance and repair of plant and equipment are prominently high in the manufacture of other non-metallic mineral products; processed foods; agricultural products; production of basic and fabricated metal products, machinery and equipment. Costs relating to transport services were high with gradual decline for those firms dealing in processed foods but sharply rose in those activities involved in the production of non-metallic mineral products like bricks, tiles, cement, etc.; furniture and other manufactures not specified elsewhere.

Figure 4: Salaries and wages related costs

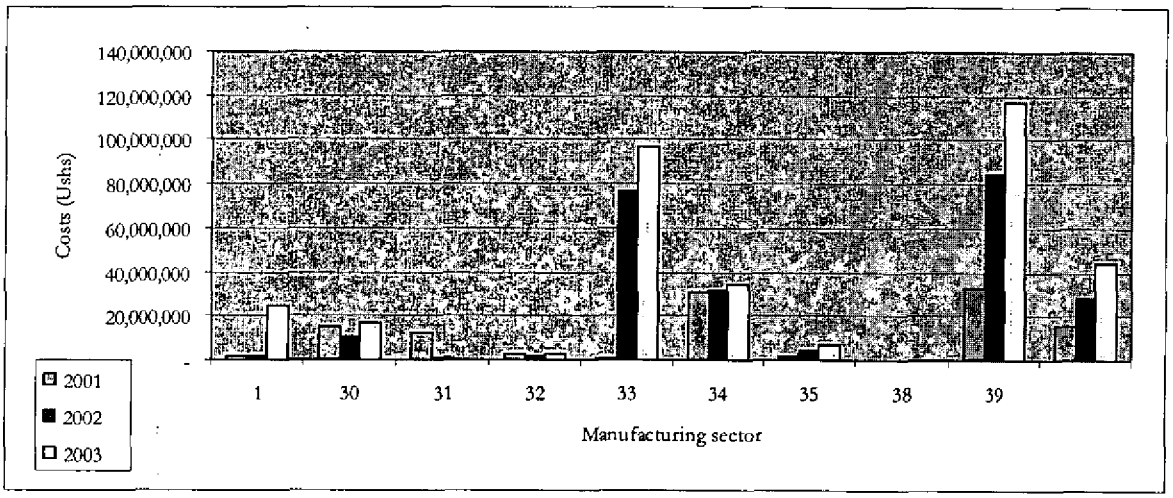


Other costs to the manufacturing enterprises in Uganda tend to arise from salaries and wages, which are relatively higher in the manufacturing of food products notably where they were lowest in 2002 (Figure 4). Costs relating to wages and salaries were rising in sectors producing basic and fabricated metal products, machinery and equipment; non-metallic mineral products; and agricultural products between 2001 and 2003, and were high in the manufacture of furniture and other manufactures no specified elsewhere. High costs relating to salaries may be attributed to the labor-intensive nature of sectors like agricultural products; textiles, clothing and leather goods; non-metallic minerals like brick and tile

making (where issues including sorting, transportation and packaging, etc. require labor services).

Across sectors, costs relating to training, research and development are not as high as those arising from other factors (like raw materials, energy, information technology services, etc.) with the exception of manufacturing firms involved into the production of coke, refined petroleum and chemical products; furniture and other manufacturing not specified elsewhere and, to some extent, the manufacture of food products. This does not imply that costs of doing research for product and process innovations are negligible. Instead, it may be a reflection of the limited research (and therefore innovations) for product and process development that takes place in the Uganda's manufacturing industries. In other words, research and development may not be of an expenditure priority to manufacturing firms in the country. This raises the question of the degree/extent of innovations, upgrading of product and processes that prevail in the Uganda's manufacturing industries.

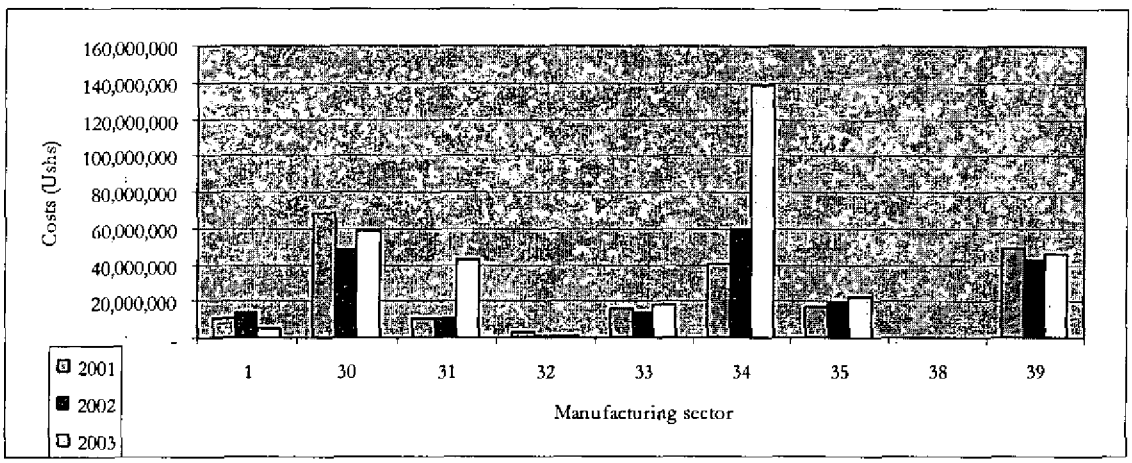
Figure 5: Costs relating to research and development across manufacturing firms



Manufacturing firms also spend on promotion, advertising and marketing of their produce. As Figure 6 shows, firms incurring expenditures on promoting and marketing elements include those in sectors involved in non-metallic minerals, food processing, furniture nd other manufactures, basic metals and fabricated metal products. Costs relating to product promotion and marketing rose between 2001 and 2003 in sectors dealing in textile, clothing and leather goods; manufacture of non-metallic minerals products; and of basic and

fabricated metal products. Such costs have fluctuated (reducing in 2002 and rising in 2003) in sectors processing food products; manufacturing of coke and refined products; and of furniture and other manufactures not classified elsewhere. It is worth noting that resources devoted to promotion, advertising and marketing are actually positive investments for increasing the awareness and competitiveness.

Figures 6: Costs relating to promotion, advertising and marketing



3.3 Level of training of the enterprise manager

The survey also sought information on the education levels of the head of the business establishments across sectors. It is clear from the information presented in Table 4 that there is a limited chance for people with primary education level being chief managers of manufacturing businesses. In general, different levels of jobs require different levels of knowledge and skills, and especially the medium and large firms targeted in the survey need high level of educated and skilled people. About 28% of the enterprise heads reported in the survey were professionals while about 55% of enterprise heads had university training particularly in the manufacture of food products with about 32%. People with vocational and technical training background seem to be required across all sectors in relatively similar proportions though the manufacturing of food products remains outstanding in needing people with such skills. Within sectoral distribution, about 70% are of secondary level of education; about 43% managers had vocational/technical training background while about 32% and 38% of managers in the manufacturing establishments were of professional and University training.

Table 4: Education level of the enterprise head

Level of education	Sector	Within Sector (%)	Across Sector (%)
Primary			
	30	100	1
	Total	100	1
Secondary	30	71	4
	35	14	1
	39	14	1
	Total	100	5
Vocational/Technical	30	43	5
	31	14	2
	33	21	2
	39	21	2
	Total	100	11
Professional	1	8	2
	30	32	9
	31	8	2
	32	5	2
	33	3	1
	34	3	1
	35	5	2
	39	30	8
	Total	100	28
University	1	8	5
	30	38	21
	31	7	4
	32	6	3
	33	7	4
	34	3	2
	35	13	7
	39	17	9
	Total	100	55

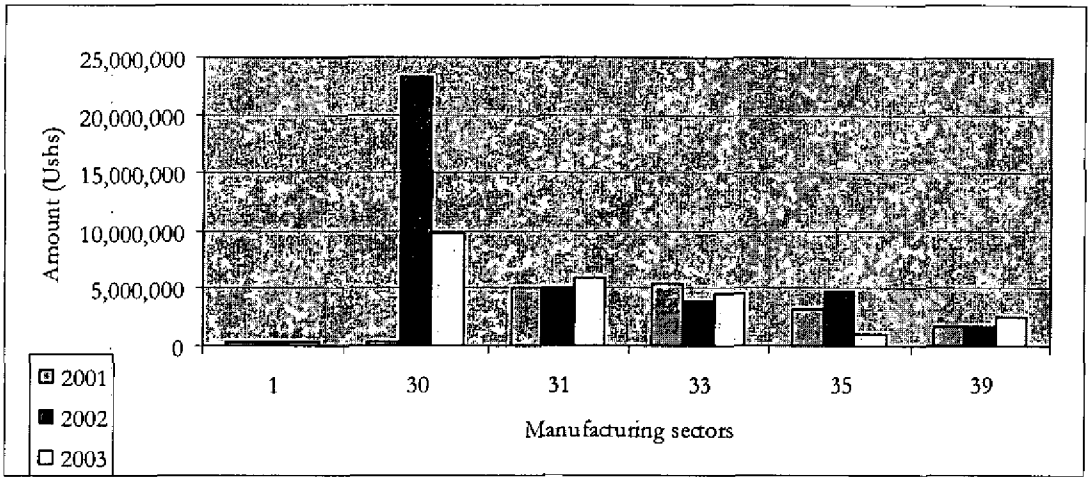
Notes: For definitions of '*within*' and '*across*' see section 3.1 in this report.
Source: Survey (2005)

3.4 Type and level of taxation to enterprise in Uganda

Expenditures on taxation are mainly on income and value added tax. The value added tax in Uganda was rated at 17% which was raised to 18% in the 2005/2006 National Budget. Major expenditures on income tax are in sectors manufacturing textiles, clothing and leather products; coke, refined petroleum and chemical products; and basic and fabricated metal products, etc. (for details see Table 3.5 in the annex). Main expenditures on value added tax are in sectors producing food products; coke and refined petroleum and chemical products.

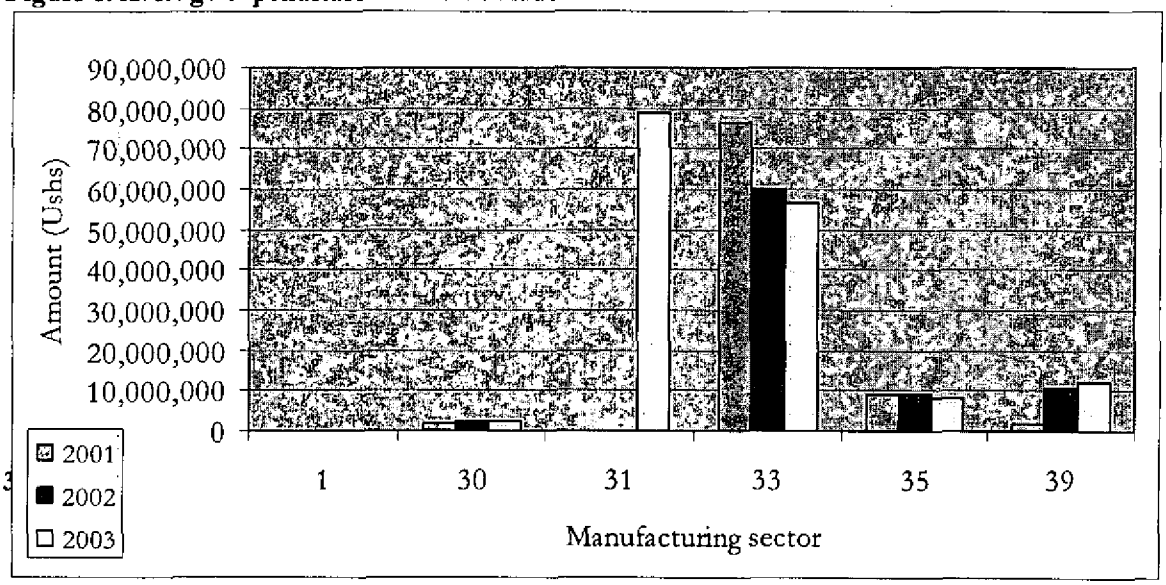
Contributions to the income tax in 2002 mainly came from firms processing food products. Expenditures on income tax were negligible in agriculture-related activities between 2001 and 2003. Expenditures on import duties were highest and increasing in the sector producing basic and fabricated metal products; machinery and equipment largely because they are externally sourced.

Figure 7: Expenditures on income tax



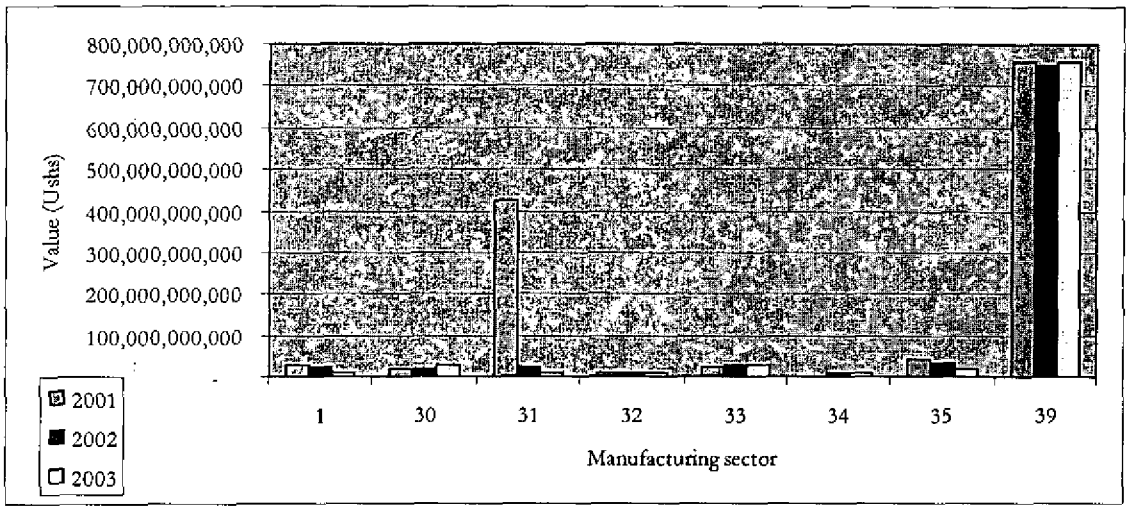
Expenditures on VAT were pronounced more in firms involved in the production of coke, refined petroleum and chemical products and have declined since 2001. Expenditures on VAT by firms dealing in textiles, clothing and leather goods were mainly in 2003, when they reached almost Ushs 80 million (Table 3.5 of the annexes). Firms producing basic and fabricated metals; and food products spent negligible amounts of their resources to VAT.

Figure 8: Average expenditures on Value Added Tax



Equally, the survey sought information on inventories of finished goods, work in progress and raw materials excluding fuel. Inventories of finished products seem to be concentrated in sectors manufacturing textiles, clothing and leather goods particularly in 2001; and the manufacture of furniture products and other manufactures not classified elsewhere. Inventories of finished products are almost negligible in the rest of sectors (details see Tables 4.5 in the annex) indicating that manufactured goods in most sectors directly go the market. Production directly for markets may be a pointer of limited capital among producers.

Figure 9: Average value of inventories for finished goods

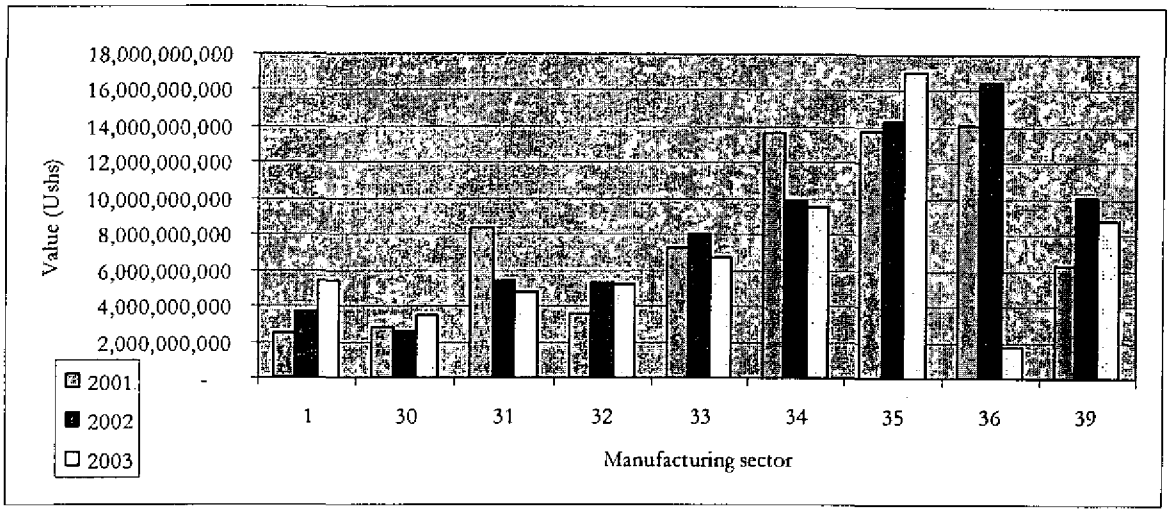


Inventories regarding the work in progress, which have been rising over the tree-year period in almost all the 9 sectors, regarding the work in progress were highly concentrated in sectors dealing in the manufacture of coke, refined petroleum and chemical products; non-metallic mineral products; basic and fabricated metal products, machinery and equipment (Figure 10). Inventories of raw materials are concentrated in all sectors except those sectors dealing in textiles, clothing and leather goods; manufacture of wood and products of wood.

Information on investments in land, building, plant, equipment, research and development is provided in Table 4.8 in the Annex. It is clear that investment expenditures in land and plant construction rose between 2001 and 2003, and are heavily concentrated in those firms involved in production of agricultural products; refined petroleum and chemical products. Investment in equipment as reported in Table 4.8 is concentrated in the production of basic and fabricated metal products, machinery and equipment. Consistent with the previous

discussion, investment expenditures into research and development for innovations, upgrading products and processes is negligible.

Figure 10: Average value of inventories for work in progress



It is clear from the information in Table 4.7 annexed to this report that manufacturing firms invest heavily in the inventory of raw materials, for example, an average investment expenditure of over Ushs 52 billion catered for inventories both in 2001 and 2002 respectively. This high level of inventories may be an indicator of unreliable supply of raw materials probably due to delays in deliveries caused by poor transportation infrastructure and/or slippage on honoring contracts by suppliers. Obviously the amount of capital locked up in these inventories reduces financial resources available for investments and increases costs of production thus impacting on the competitiveness of the manufacturing sector.

3.5 The quality of competitiveness drivers in the manufacturing sector

Manufacturing firms expressed their assessment on the importance of different competitive drivers such as the availability of skilled and unskilled labor, managerial staff, wages, training facilities, land availability, research and other supportive services, utilities raw materials, etc. The information regarding their positive perceptions is provided in Figure 10 though Figure 12 and Table 5 below.

3.5.1 Quality of factor conditions as competitive drivers

Overall and across sectors, main good quality competitive drivers are the accessibility to affordable technical and management staff; availability of raw materials; suitable land and

water supply. Clearly, the availability of cheap and less skilled labor was identified by about 50% business firms in the agricultural sector; 56% of firms in textiles, clothing and leather goods; and 67% of firms in the manufacture of non-metallic minerals as a good quality competitive factor (Figure 11). Less than 50% firms in the rest of the sectors perceived the availability of less skilled labor to be a good quality competitive driver. Generally, firms in all sectors perceived the less skilled labor to be a quality competitive driver though in different degrees.

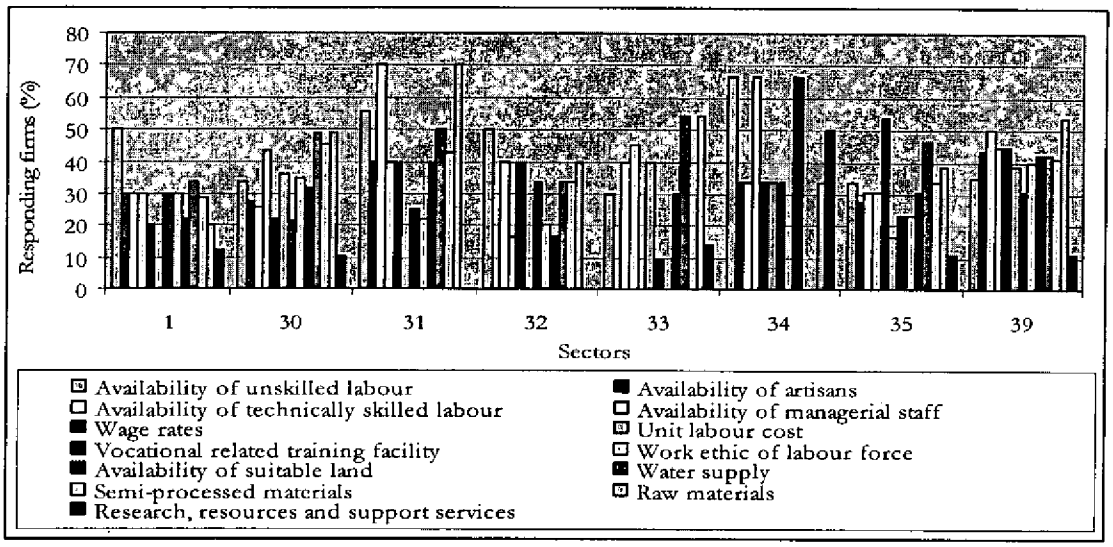
About 44% of business firms identified the availability of suitable land as a very good quality competitive driver while the availability of water supply; work ethic labor force; vocational related training facilities; the availability of managerial staff, artisans and skilled labor were identified by about 30% business establishments/firms as good quality competitive drivers in the agricultural sector. Less than 10% of manufacturing establishments in the agricultural sectors thought that unit labor costs were a good quality competitive driver.

Good quality competitive factors identified by firms in processed foods mainly comprise the availability of managerial staff (by 40%); water supply (by 49%); semi-processed raw materials (by 45%) and basic raw materials (by 49%). Good quality competitive drivers in the manufacture of textiles, clothing and leather goods were mainly the availability of less skilled and skilled labor respectively as identified by about 56% and 70% of manufacturing firms in the sector; water supply and the availability of raw materials identified by 49% business establishments. For those involved in the production of furniture and other manufactures; the availability of artisans and unskilled labor and suitable land were identified by more than 50% of business establishments in the sector; accessibility to skilled labor force, affordable water utilities, and raw materials were identified by about 40% of business firms. Water supply and availability of raw materials, skilled labor and managerial staff were major competitive drivers in the sector dealing in chemicals and refined petroleum products.

Research and supportive services; the availability of suitable land; managerial staff and unskilled labor force were identified by over 50% of business establishments as good quality competitive factors in the production of non-metallic mineral products. The affordable water utilities, availability of suitable land, water and raw materials were perceived to be main factors driving the competitiveness in sectors engaged in the production of basic and

fabricated metal products, machinery and equipment. Main competitive drivers in the manufacturing of furniture and other manufactures not classified elsewhere (Sector 39) are the accessibility to raw materials and skilled labor.

Figure 11: Firms' perceptions for good quality competitiveness drivers (%)



3.5.2 The quality of strategy, structure and rivalry as drivers of competitiveness

The survey sought some information on perceptions of manufacturing firms regarding the strategy, structure and rivalry with respect to the competitiveness of their products and results are given in Table 5. The accessibility to finance; contact with clients and suppliers which were perceived by more than 50% of business establishments in sectors dealing in agricultural products and processed foods to be good quality competitive drivers. Affordable and accessible electricity were critical competitive drivers in sectors dealing in wood and products of wood while contact with clients and suppliers, access to affordable capital were identified as essential competitive drivers by majority of manufacturing firms dealing in non-metallic mineral products; basic and fabricated metal products, machinery and equipment.

Overall and across sectors, major competitiveness driving factors are mainly contact with clients and suppliers, access to affordable financial support and electricity. This basically points to the importance of information on output and input markets and of efficiency of other supportive services like utilities and financial sectors in determining the competitiveness of manufacturing activities in the country. Most of these issues like

information and some utilities have public good element and would require public investment if related costs are to be reduced and the competitiveness is to be improved.

Table 5: Strategy, structure and rivalry perceived to be good quality competitive drivers (%)

Competitiveness driver\Sector	1	30	31	32	33	34	35	39
Co-operation and contact with suppliers	70	65	40	40	90	33	42	44
Co-operation and contact with clients	50	65	20	20	80	33	62	44
Co-operation and contact with competitors	11	29	0	0	40	33	33	16
Co-operation and contact with government	30	32	40	40	18	33	46	42
Employee performance incentives	40	37	40	40	27	33	23	32
Trade and business association support	20	24	22	0	13	0	27	15
Market and product information	10	38	30	40	18	0	31	10
Availability of capital	10	32	30	20	27	33	54	39
Cost of capital	22	18	14	0	44	0	22	27
Project development and financing support	10	35	22	25	33	0	45	36
Access to finance	60	53	29	17	9	33	25	15
Telecommunication services	22	10	11	17	9	0	25	11
Cost of electricity	20	14	10	0	20	0	15	7
Electricity reliability	22	33	33	50	20	0	15	25

Source: Survey (2005)

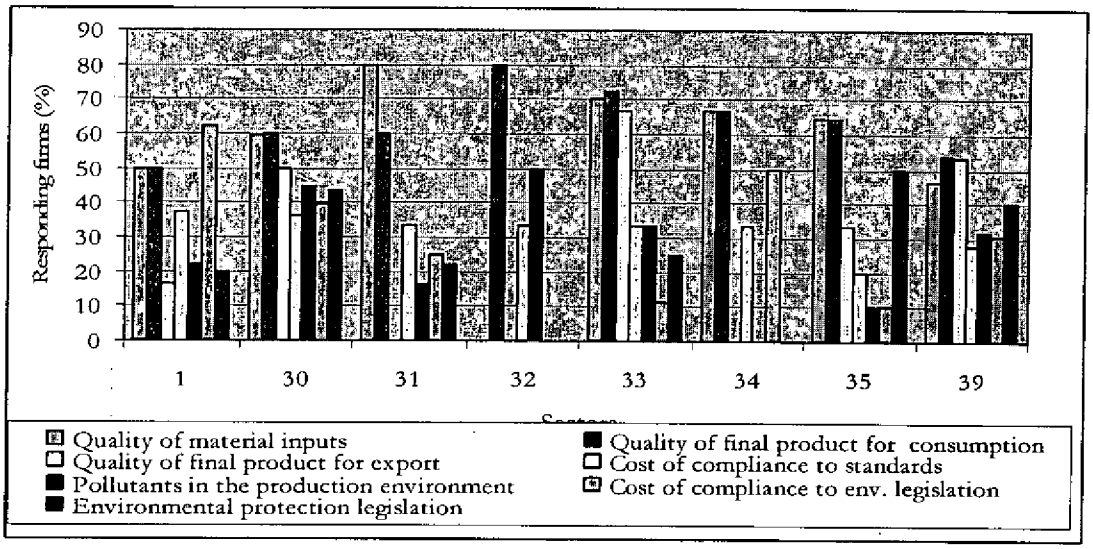
3.6.3 Quality of factors and environment requirements as competitive drivers

The survey also obtained information on the quality of different factors and the environment regarding the competitiveness across business establishments. In general, the quality of raw material inputs; and quality of products for local consumption and export were identified by at least 50% manufacturing establishments across all sub-sectors as being major components of competitiveness in the manufacturing industry in Uganda. Export markets are highly competitive and therefore exports have to be of reasonable good quality to survive in such competitive market environment. Quality of final products for exports was particularly important for the competitiveness of textile, clothing and leather goods; non-metallic mineral products; basic and fabricated metal products and furniture products.

The quality of final products for local consumption was considered to be a critical competitive driver by manufacturing establishments in all sectors particularly in processed foods; textiles, clothing and leather goods; wood and products of wood; refined petroleum and chemical products; basic and fabricated products, machinery and equipment. This is mainly because of stiff competition with imported products that are thought to be a better

quality. This increased competitions acts as incentives for manufacturing firms to be more innovative and improve the quality of their products to survive in the local market.

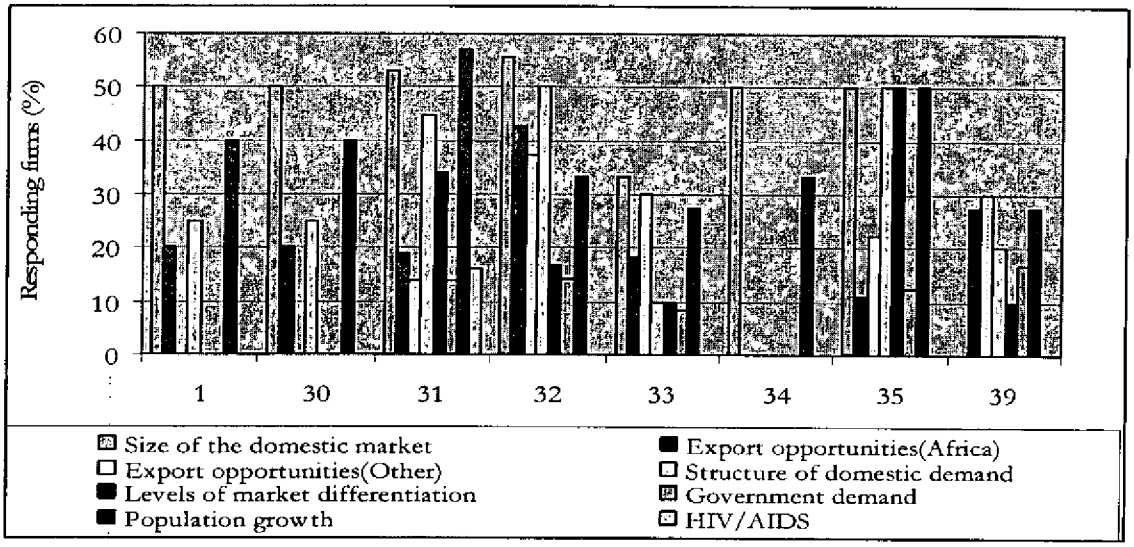
Figure 12: Perceptions on quality of competitive drivers (% of firms)



3.6.4 Demand conditions as competitive drivers

The information regarding demand conditions as drivers of competitiveness is reported in Figure 13. Clearly, the size of the domestic market, population growth, structure of the domestic demand were perceived by more than 50% of business establishments as being key demand drivers of the competitiveness of their products. The competitiveness of sectors producing agricultural products; processed foods; wood and products of wood; refined petroleum and chemical products; textiles, clothing and leather products was largely affected by the population growth, the size and structure of the domestic market. Export opportunities whether in Africa or elsewhere, HIV/AIDS (Uganda is somehow better than many other African countries on issues relating to HIV/AIDS); government demand and market differentiation were not regarded as critical for the competitiveness of manufactured products in Uganda. This implies that manufacturing firms could take advantage of export opportunities if costs of production could reduce and the quality of other competitive drivers is improved.

Figure 13: Demand conditions as good quality drivers of competitiveness



3.6 Factors impacting on the competitiveness of manufactured products

Related to the foregoing identification of the quality of various competitiveness drivers within manufacturing firms in Uganda, the survey also obtained information regarding the impact of those factors on the competitiveness of manufactured products. Information provided in tables in this sub-section refers to proportions of manufacturing establishments in respective sectors with positive perceptions as regards the impact of different factors on the competitiveness of their products.

3.6.1 Impact of factor conditions on the competitiveness

The availability of cheap and less skilled labor was perceived by over 50% of establishments except those dealing in textiles, clothing and leather products; refined petroleum and chemical products as having positive impact on the competitiveness of their products. The availability of skilled labor was perceived to have positive impact of the competitiveness in sectors producing non-metallic mineral products; wood and products of wood; basic and fabricated metal products while the availability of artisans was a critical competitiveness factor in sectors dealing in basic and fabricated metal products, machinery and equipment; furniture and other manufactures not specified elsewhere.

The availability of the managerial staff was perceived by over 50% of business establishments across all sectors, with the exception of those dealing in agricultural products,

textiles, clothing and footwear, as having positive effect on the competitiveness of their products. The accessibility to basic raw materials was perceived to have impact on the competitiveness of firms producing processed foods, wood products, refined petroleum and chemical products, non-metallic minerals products and furniture products while semi-processed raw materials were perceived to have positive impact on the competitiveness of agricultural products.

Table 6a: Factors perceived to have positive impact on the competitiveness (% of responding firms)

Sector	1	30	31	32	33	34	35	39
Availability of unskilled labor	60	50	33	50	40	67	50	54
Availability of artisans	0	28	40	25	0	33	64	55
Availability of skilled labor	33	38	10	40	45	67	69	63
Availability of managerial staff	33	56	30	50	64	67	46	69
Wage rates	50	43	50	40	10	33	33	48
Unit labor cost	30	47	30	20	40	67	33	46
Vocational related training facility	30	22	25	50	27	0	54	23
Work ethic of labor force	33	43	22	40	27	50	25	36
Availability of suitable land	0	33	30	33	56	67	31	38
Water supply	56	52	60	33	50	67	8	42
Semi-processed materials	57	40	29	0	33	0	42	36
Raw materials	50	49	60	60	55	33	31	57
Research and support services	13	15	0	20	14	50	22	22

Notes: Information in the table refers to proportions of firms who expressed positive impact assessment on each competitive factor. Full details are provided in the information annexed to this report.
Source: Survey (2005)

The availability of suitable land, water supply and raw materials were considered by most of the manufacturing firms as having good impact of the competitiveness among sectors producing non-metallic mineral products; basic and fabricated metals; wood and products of wood; agricultural products, textile, clothing and leather products. The impact of research and support services was identified by about 50% of business establishments to have positive impact on the competitiveness of the manufacturing of non-metallic mineral products only. The research and other supportive services seem to have limited impact on the competitiveness of products in other sectors in the country. This may explain the low expenditures on research and development by manufacturing firms we saw earlier on in our discussion. Equally, returns on investments into research and development are indirect and long-term in nature and majority of the manufacturing firms may not perceive the importance to (and benefits of) such investments.

3.6.2 Impact of the firm's strategy, structure and rivalry on the competitiveness

The information on positive perceptions regarding the impact of the firms' strategy, structure and rivalry on the competitiveness of their products is given in Table 6b. In general, the contact with clients, suppliers, competitors; access to finance; availability and affordable telecommunication services were perceived to have positive impact on the competitiveness of products produced in all sub-sectors under consideration. Telecommunication services, contact with clients and suppliers impact positively on agricultural products; refined petroleum and chemical products as indicated by over 50% of business establishment in those sectors. Factors impacting positively on the competitiveness of firms dealing in food processing mainly include the contact with clients and suppliers, market and product information and access to finance. Those with positive impact on the competitiveness in the manufacture of textiles, clothing and leather goods mainly include contact with suppliers, government and competitors; employee performance incentives; and telecommunication services.

Table 6b: Positive impact perceptions regarding strategy, structure and rivalry on the competitiveness (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Contact with suppliers	60	71	60	60	0	33	58	48
Contact with clients	60	75	40	40	67	33	69	64
Contact with competitors	22	31	75	75	56	0	54	40
Contact with government	20	29	60	60	50	33	62	46
Employee performance incentives	40	43	60	60	20	0	8	56
Trade & business association support	10	33	33	40	38	0	45	19
Market & product information	20	55	20	20	9	0	46	43
Availability of capital	20	34	30	40	45	33	46	36
Cost of capital	30	19	0	25	22	0	30	19
Project development and financing support	11	33	14	50	63	0	22	27
Access to finance	20	58	33	50	63	33	40	50
Telecommunication services	50	16	57	33	73	0	42	19
Cost of electricity	10	16	11	33	27	0	0	11
Electricity reliability	30	32	20	17	20	0	15	15

Notes: Information in this table refers to proportions of firms who expressed positive impact assessment on each competitive factor. Full details are provided in the information annexed to this report.
Source: Survey (2005)

Development and support services; access to finance; employee performance incentives; contact with suppliers, competitors and government are perceived to have positive impact on the competitiveness of wood products. Contact with clients, government and competitors; access to finance and finance support; and telecommunication services were considered to have positive effect on the competitiveness of non-metallic mineral products. The production of basic and fabricated metals is positively affected by contacts with clients, suppliers, competitors and government while furniture products are affected by incentives to employees and access to finance. Employee incentives (e.g. job promotions, etc.) were perceived to have positive impact on the competitiveness of manufactured products by about 60% of business establishments dealing in textiles, clothing and footwear; wood products and by about 56% of firms producing furniture products.

3.7.3 Impact of quality and environmental factors on the competitiveness

Information regarding the impact of the quality of inputs and products, and the environment on the competitiveness of the manufacturing sector is provided in Table 6c. Generally, the quality of material inputs, final product for domestic consumption and export, compliance to standards, environmental protection were all perceived to impact positively on the competitiveness of products produced by all manufacturing sectors. The positive impact of quality of inputs and outputs on the competitiveness was of particular significance in sectors producing agricultural products; processed foods; refined petroleum products; chemicals and chemical products; basic and fabricated metals; and furniture products.

Table 6c: Quality and environment factors perceived to have positive impact on the competitiveness (% of responding firms)

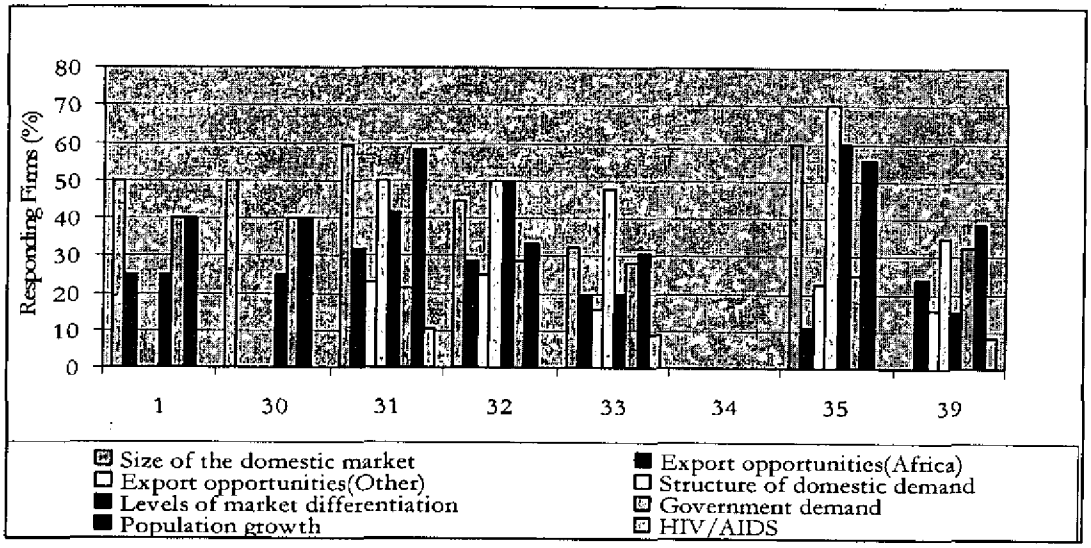
Factor\Sector	1	30	31	32	33	34	35	39
Quality of material inputs	30	57	70	0	67	67	71	50
Quality of final product	38	68	50	60	70	67	71	58
Quality of product for export	50	55	13	0	67	100	11	47
Compliance to standards	25	42	22	75	50	67	50	32
Pollutants in the production	22	41	33	25	25	0	10	27
Environmental requirements	50	47	25	50	13	0	20	26
Environmental protection	30	56	33	67	29	0	25	28

Notes: Information in the table refers to proportions of firms who expressed positive impact assessment on each competitive factor. Full details are provided in the information annexed to this report.
Source: Industrial survey (2005)

3.7.4 Impact of demand conditions on the competitiveness of the industrial sector

The size of the domestic market was perceived as having positive impact on the competitiveness of products produced in all sectors except those producing furniture products and other manufactures not specified elsewhere; refined petroleum and chemical products; wood and products thereof (Figure 14). The structure of the domestic demand, market differentiation and population growth were perceived to have positive impact on the competitiveness by more than 50% of manufacturing firms producing wood products textiles, clothing and footwear; refined petroleum and chemical products; basic and fabricated metal products. Other factors identified in Figure 14 were not considered by the majority of firms in various sectors as having positive effects on the competitiveness of products produced by respective sectors.

Figure 14: Demand conditions perceived to have positive impact on the competitiveness



3.8 Activities and expectations in the Uganda's manufacturing industry

This section discusses the survey information on comparative activities and expectations over the period and across different manufacturing firms in various sectors. Basically, the discussion focuses on activities during October-December 2004 relative to the same quarter in 2003 and expectations in January-March 2005. Essentially, issues discussed include current

and expected domestic sales and orders; production and sources of production costs; planned raw materials and final output, delivery periods, etc. The section also looks into the impact of shortages of various inputs into production on manufacturing firms.

3.8.1 Production and market conditions

Majority of the manufacturing firms reported improvements in production, demand and market conditions; sales taxes, purchase prices, labor unit costs in the last quarter of 2004 compared to the same quarter in 2003 (Table 7a). Specifically, over 50% business firms from almost all sectors reported significant improvement in production, domestic and export sales. Business conditions; domestic and export orders were reported by the majority of manufacturing firms across all sectors to have improved in 2004 compared to the same quarter in the previous year. Improvement in filled orders, fixed investment, worked hours per factory worker, average domestic and export sale price were reported by less than 50% of the business firms between 2003 and 2004. Significant improvements in factors identified in Table 7a were reported in the sector involved in the production of coke, refined petroleum and chemical products. Business conditions were reported to have improved by the majority of manufacturing establishments in all sectors but furniture products.

Table 7a: Improvements in the last quarter of 2004 relative to the same quarter in the previous year (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Domestic sales	63	58	78	100	75	50	69	30
Export Sales	67	40	75	100	67	50	17	25
Production	67	61	78	100	75	50	69	35
Domestic orders received	63	59	44	67	88	100	73	40
Export orders received	60	50	25	100	57	50	20	22
Unfilled orders, etc.	29	34	17	33	20	100	29	11
Business conditions	56	49	63	67	88	50	62	33
Factory workers	63	15	33	67	38	0	38	24
Hours worked per factory worker	25	12	13	100	13	50	23	11
Fixed investment	44	22	33	33	38	50	50	25
Average cost	63	46	63	0	50	50	50	45
Labor unit cost	75	25	29	67	33	50	36	40
Average purchase price	25	41	63	100	50	50	64	50
Average domestic sale price	14	21	50	0	17	0	33	16
Average export sale price	43	20	50	0	25	0	33	17
Taxes paid as % of sales	60	39	67	33	60	100	40	27

Notes: Information in this table refers to proportions of firms who expressed positive assessment. Full details are provided in the information annexed to the report.
Source: Industrial survey (2005)

Improvements in domestic and export sales were reported by more than 50% of firms exception those firms involved in the production of processed foods, basic and fabricated metal products, furniture and other manufactures as regards export sales mainly because such products are largely consumed in the domestic market. Improvements in export sales regarding other products like textiles, clothing and leather goods may probably be because of improved economic growth and market opportunities like those under AGOA of the USA and everything but arms (EBA) in the case of European Union (EU). Taxes paid out of sales improved in all sectors but those producing processed foods, refined petroleum and chemical products; basic and fabricated metals; and furniture products.

Table 7b: Improvement expectations January-March 2005 relative to the previous quarter (% of firms)

Sector	1	30	31	32	33	34	35	39
Domestic sales	56	65	78	67	100	0	85	76
Export Sales	50	36	100	67	83	0	50	56
Production	60	65	67	67	88	0	85	71
Domestic orders received	50	62	78	67	100	0	75	65
Export orders received	50	36	75	67	71	50	57	45
Unfilled orders, etc.	29	23	17	33	20	100	38	30
Business conditions	40	62	88	33	88	50	62	60
Factory workers	44	25	44	50	38	0	38	32
Hours worked per factory worker	25	26	38	67	25	50	31	29
Fixed investment	20	29	17	0	50	50	58	33
Average cost	44	41	50	67	20	50	80	43
Labor unit cost	44	29	71	0	40	50	45	29
Average purchase price	44	41	63	50	20	50	91	62
Average domestic sale price	38	33	75	0	40	0	40	30
Average export sale price	43	22	67	0	25	0	50	33
Sales taxes	80	38	71	33	50	100	40	35

Notes: Information in this table refers to proportions of firms who expressed positive assessment. Full details are provided in the information annexed to the report.
Source: industrial survey (2005)

The survey also sought information regarding optimism of manufacturing establishment on their activities in the first quarter of 2005 relative to the last quarter of 2004 (details in Table 7b). More than 50% of business firms from almost all sectors were optimistic of improvements in domestic and export sales, production, domestic and export orders, taxes from sales and average production costs in the first quarter of 2005. Only in a few sectors,

manufacturing firms expressed positive expectations regarding improvements business conditions, labor unit costs, number of factory workers, fixed investment unfilled orders in the first quarter of 2005. Overall, there was considerable optimism expressed by manufacturing firms across sectors regarding production, business conditions, domestic and export demand for products produced by the manufacturing industry in the country. Average export prices are expected to improve export orders received in the sector dealing in textiles, clothing and leather goods.

3.8.2 Relative stocks of raw materials and delivery periods

Survey results regarding stocks of raw materials relative to planned; finished goods relative to expected; and level of output relative to the capacity; influence of business conditions and order delivery periods in the last quarter of 2004 relative to the same quarter in 2003 are given in Tables 8a and 8b. More than 70% of manufacturing firms reported raw material relative to planned as being sufficiently better in 2004 relative to 2003 while more than 60% of business establishment ranked finished goods relative to expected being sufficiently better in 2004 compared to the quarter of 2003 with an exception of firms dealing in furniture.

Table 8a: Status in October-December 2004 relative to the same quarter in the previous year (% of responding firms)

	1	30	31	32	33	34	35	39
Raw materials Vs planned								
Too high	11	12	13	100	0	100	9	5
Sufficient	78	76	75	0	89	0	73	90
Finished goods Vs Expected								
Too high	11	18	43	67	13	50	10	89
Sufficient	67	71	43	33	75	50	60	11
Longer delivery period of orders	17	7	50	0	29	0	18	5
Level of output below capacity	20	27	50	0	56	0	45	44
Satisfied with business conditions (sales)	44	53	86	0	75	0	73	65

Notes: Information in the table refers to proportions of firms who expressed positive assessment. Full details are provided in the information annexed to the report.
Source: Industrial survey (2005)

Manufacturing establishments in all sectors except in production of textiles, clothing and leather goods experienced shorter delivery period of orders in the last quarter of 2004 compared to the same quarter in 2003. Less than 50% of manufacturing firms (with the exception of those dealing in textile, clothing and leather goods; and refined petroleum and

chemical products) experienced output levels below capacity in 2004 compared to 2003. With the exception of business firms dealing in agricultural products, over 50% of those in other sectors expressed improved business conditions in 2004 relative to 2003.

The information regarding expectations of the first quarter of 2005 compared to the last quarter of 2004 are given in table 8b. Raw materials relative to planned were expected to be sufficient by more than 70% of business establishments in each of sectors except sectors producing basic and fabricate metals, machinery and equipment. Equally, over 70% of manufacturing firms in each of the sectors except those producing wood products expected sufficient finished goods in the first quarter of 2005 compared to the last quarter of 2004.

Delivery periods of orders were expected to be shorter in the period of January-March 2005 compared to the last quarter of 2004 while firms were satisfied that business conditions would be better in the first quarter of 2005 compared to business environment in the last quarter of 2004. More than 50% of manufacturing firms expecting levels of output to be below the capacity in the first quarter of 2005 relative to last quarter of 2004 were from two sectors basically producing textiles, clothing, and leather goods; wood and products of wood.

Table 8b: Expectations in January-March 2005 compared to the previous quarter (% of firms)

Sector	1	30	31	32	33	34	35	39
Raw materials relative to planned								
Too high	0	21	14	100	0	100	27	5
Sufficient	89	71	86	0	88	0	45	95
Finished goods relative to expected								
Too high	11	20	17	67	14	100	10	5
Sufficient	78	71	83	33	71	0	60	84
Longer delivery period of orders	0	8	33	0	17	0	18	5
Level of output below capacity	20	36	50	0	56	0	25	47
Satisfied with business conditions (sales)	70	71	71	0	89	0	70	81

Source: industrial survey (2005)

3.9 Factors hampering manufacturing activities in 2004

The survey obtained information on factors hampering activities of manufacturing firms in different sectors in the last quarter of 2004 relative to the same quarter in 2003 and on expectations in the first quarter of 2005. The survey output is given in Tables 9a and 9b.

Information given in Table 9a compares the seriousness of factors hampering manufacturing activities in the last quarter of 2004 with similar factors in the same quarter of 2003.

In general, shortages of electricity; of raw materials; and of machinery and equipment seriously hampered economic activities in almost all sectors in October-December 2004 relative to the same period in 2003. This increases costs of production in form of lost days or investments into thermal generators; hamper the competitiveness of products; and reduce the production capacity to fulfill domestic and export orders.

Table 9a: Factors seriously hampering activities in last quarter of 2004 relative to same quarter in 2003 (% firms)

Sector	1	30	31	32	33	34	35	39
Shortage of skilled labor	44	13	38	25	40	33	29	17
Shortage of semi-skilled labor	22	2	13	0	0	0	21	4
Shortage of unskilled labor	33	6	0	25	0	0	15	13
Shortage of managerial staff	33	21	25	25	20	33	21	17
Shortage of raw materials	60	30	88	75	50	33	36	33
Shortage of water	11	27	38	25	40	33	21	17
Shortage of electricity	78	67	88	50	90	100	54	65
Shortage of other utilities	0	16	0	0	25	0	23	23
Shortage of machinery and equipment	33	41	57	50	40	50	8	25
Poor maintenance and support services	13	22	29	25	20	0	18	40
Shortage of packaging materials	38	24	33	0	29	0	0	21
Short term interest rates	56	28	71	25	38	0	64	37
Insufficient demand	13	27	57	25	22	33	45	18
Interface with URA	25	26	57	0	33	33	36	14
Multiple levies, taxes & permit costs	29	29	43	0	11	33	15	14
Import tariffs	43	27	60	25	33	33	33	24
Import dumping	14	33	57	25	70	50	50	41
Bribery and corruption (red tape)	63	30	29	25	30	100	25	19
Availability of medium term finance	44	11	14	50	13	0	42	24
Land leasing	13	15	0	25	0	0	8	10
Interface with government	33	13	14	0	0	0	0	5

Notes: Information in this table refers to proportions of firms who expressed serious hampering assessment. Full details are provided in the information annexed to the report.
Source: industrial survey (2005)

High short term interest rates, insufficient demand and interface with the Uganda Revenue Authority (URA) were more problematic in sectors dealing in textile, clothing and footwear in 2004. Import dumping tended to hamper activities producing textile, clothing and leather products; refined petroleum and chemical products; non-metallic mineral products; basic and

fabricated metal products as reported by more than 50% business establishments in those sectors. About 65% of business establishments dealing in production of furniture and other manufactures not classified elsewhere (Sector 39) considered availability of electricity as a major factor hampering their activities. Table 2 shows that most of the firms in Sector 39 are located in Kampala (16 firms), Jinja (5 firms) and Masindi (4 firms).

Over 55% of business establishments dealing in agricultural products (largely perishables) identified shortage of electricity; short term interest rates; bribery and corruption as major constraint hampering their activities while those in food processing identified shortage of electricity as the most binding constraint. Shortage of raw materials, electricity, machinery and equipment; short term interest rates; insufficient demand and interface with the URA; import tariff and import dumping were perceived by more than 55% firms to be major hampering factors activities of producing textiles, clothing and leather goods; refined petroleum products; non-metallic mineral products; basic and fabricated metal products; machinery and equipment.

A good amount of second hand items including clothes, fridges, vehicles, etc. that come to Uganda are low priced compared to domestically produced products, which puts local producers of import-competing products at competitive disadvantage in the domestic market. Import dumping was particularly a problem in sectors involved in production of refined petroleum and chemical products; non-metallic mineral products; basic and fabricated metal products. Production of textiles, clothing and leather goods were seriously hampered by shortage of raw materials, shortage of electricity, machinery and equipment; interest rates, insufficient demand, import tariffs, interface with the URA and import dumping while those in production of wood products were hampered by shortage and/or affordability of medium term finance.

The survey sought information of factors that hampered manufacturing activities in the last two quarters of 2004 (Table 9b). Over 50% of manufacturing establishments involved in production of wood products identified shortage of raw materials and utilities like electricity and water; and machinery and equipment as major factors constraining their activities. Red tape (bribery and corruption), insufficient demand, medium term finance and leasing of land were identified as factors hampering activities by about 33% of firms involved in production

of wood products. Shortage of electricity, import dumping and red tape were more pronounced in sectors producing non-metallic mineral products. Affordable and accessible medium term finance is the factor most likely leading to shortages of machinery and equipment that are hampering manufacturing activities.

Interface with the Uganda Revenue authority was the main constraining factors in the production of refined petroleum and chemical products. Shortage of semi-skilled labor and of raw materials were the two major factors negatively impacting on the production textile, clothing and leather goods as identified by 86% and 50% of firms respectively. Food processing was largely constrained by shortages of electricity while constraints in the production of agricultural products are largely multiple levies, taxes and permits costs; import tariffs and red tape.

Table 9b: Factors hampering activities in 4th relative to 3rd quarter of 2004 (% of responding firms)

Sector	1	30	31	32	33	34	35	39
Shortage of skilled labor	22	2	14	0	0	0	0	9
Shortage of semi-skilled labor	0	0	86	0	0	0	0	9
Shortage of unskilled labor	13	7	0	33	0	0	0	5
Shortage of managerial staff	11	9	17	0	0	0	0	14
Shortage of raw materials	0	16	50	67	0	0	20	9
Shortage of water	11	9	0	67	14	0	9	18
Shortage of electricity	33	55	14	67	43	67	30	36
Shortage of other utilities	13	10	0	0	20	0	18	5
Shortage of machinery and equipment	25	12	0	50	0	0	0	10
Poor maintenance and support services	25	15	0	0	0	0	0	5
Shortage of packaging materials	29	3	20	0	33	0	0	7
Short term interest rates	33	16	17	0	25	0	11	16
Insufficient demand	75	11	17	33	17	33	10	11
Interface with URA	14	11	0	0	75	0	0	10
Multiple levies, taxes & permit costs	*88*	*9*	*0*	*0*	*20*	*0*	*10*	*10*
Import tariffs	86	14	0	0	20	0	9	24
Import dumping	17	15	33	0	33	100	9	25
Bribery and corruption (red tape)	50	20	0	33	0	100	10	11
Availability of medium term finance	13	5	0	33	0	0	0	0
Land leasing	14	6	0	33	0	0	9	5
Interface with government	17	5	0	0	0	0	0	0

Notes: Information in this table refers to proportions of firms who expressed serious hampering assessment. Full details are provided in the information annexed to the report.
Source: Industrial survey (2005)

3.10 Expectations among manufacturing firms regarding their activities

Information regarding expectations of manufacturing activities across sectors is provided in Table 10. It clear that higher volumes of goods imported were expected by majority of manufacturing firms (about 67%) in production of textiles, clothing and leather products; manufacture of wood products (about 75%); and refined petroleum and chemical products (about 70%). Across sectors, positive expectations of imported goods were reported by more than 50% except sectors involved in agricultural products; food processing; manufacture of furniture and other manufactures not specified elsewhere.

Export of goods were expected to be higher over the subsequent 12 months by more than 50% of firms in all sectors except those dealing in processed foods; textile, clothing and leather products; and manufacture of furniture, most of which are consumed domestically. Higher expectations regarding investment in machinery and equipment are in all except sectors producing agricultural products; processed food products; and manufacture of textile, clothing and footwear. Equally, higher investment in land and building were expected in sectors producing basic metals, fabricated metal products; and manufacture of furniture products. General business conditions such as sales were perceived to improve in subsequent 12 months in almost all manufacturing sectors except the sector dealing in production of wood and products of wood. Optimism regarding investments in new capacity was higher in all but two sectors producing coke, refined petroleum products, chemicals and chemical products; and of non-metallic mineral products.

Table 10: Higher expectations of business firms over a period of 12 months (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Volume of goods imported	40	44	67	75	70	67	55	47
Volume of goods exported	67	43	43	50	63	100	63	36
Investment in machinery and equipment	38	39	29	60	50	67	73	60
Investment in land and buildings	25	33	29	20	33	67	55	33
General business conditions (sales)	60	59	100	40	80	67	62	64
Investment in new capacity (next 12 months)	57	50	86	75	22	33	67	68

Notes: Information in this table refers to proportions of firms who expressed positive impact assessment on each competitive factor. Full details are provided in the information annexed to the report.
Source: Industrial survey (2005)

Manufacturing firms covered by the survey expressed their perceptions on factors likely to seriously impact on their activities in subsequent 12 months and results are given in Table 11. There are variations in how different factors impact on the country's manufacturing activities. In the agriculture sector, all factors in Table 11 but access to raw materials and cost

of leasing land were perceived to be less influential in seriously limiting the investment in that sector in subsequent 12 months. More than 50% of manufacturing firms identified access to electricity as a major limiting factor to investment in food processing in the next 12 months. With the exception of tax structure, access to electricity, and lack of managerial skills and investment support; other factors (as specified in Table 11) were perceived by more than 50% of manufacturing firms dealing in textile, clothing and footwear as likely to have detrimental impact on investment plans in the subsequent 12 months.

Main limiting factors in the production of coke, petroleum and chemical products are access to electricity and raw materials while insufficient demand, access to electricity and lack of internal financial resources were major constraining factors in the production of wood products. Limiting factors in the manufacture of non-metal mineral products are mainly accessibility to electricity, cost of leasing land, cost and access to credit while credit accessibility, lack of managerial skills and investment support were the main issues raised by manufacturers in production of basic and fabricated metals. The main constraining factors identified by producers of furniture and furniture products were access to electricity and cost of credit.

Table 11: Factors likely to seriously limit investment over next 12 months (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Insufficient demand	43	35	38	50	30	0	21	29
Cost of credit	63	32	50	25	30	67	57	56
Lack of credit	38	27	50	20	30	67	36	38
Tax structure	50	40	38	20	30	33	36	36
Access to electricity	78	54	38	60	60	100	46	56
Access to water	50	15	63	25	30	33	7	4
Access to raw materials	43	27	75	40	50	33	43	24
Lack of financial resources (internal)	50	33	50	60	10	33	36	44
Cost of leasing land	14	16	50	-	10	50	15	14
Lack of managerial skills and investment support	57	6	38	40	20	33	54	17

Source: Survey (2005)

Section B: Industrial human resource survey

4.0 Introduction

The objective of the survey on human resource conditions and needs was to understand the employment composition; nature and categories of skills required in different sectors; nature, level and impact of education and training; factors impacting on the productivity of labor and those constraining investment; the nature, method and level of recruitment, the duration of the probation period. Essentially, this section looks at human resource characteristics in terms of current education, experience and skill needs; nature and forms of training and future manpower requirements.

4.1 Suitability of recruits with different experience and educational background

Firms expressed their assessment of the capability of university graduates at the recruiting time and survey results are provided in Table B1a. Across the board, few firms considered university graduates at recruiting time as very good with technical skills, willingness to learn and adapt to new working environment; ability to solve problems and commitment to the job. However, majority of manufacturing firms perceived university graduates to have great potential of being trained and easily adapting to environment in each sector as regards these features as over 50% of manufacturing firms across all sectors rated university graduates as being good on such features. The willingness to learn was considered to be a feature associated with University graduates at the recruiting time. The high adaptation potential among university graduate simply reflects the nature of the content of the current university courses in terms of relevancy to market needs, i.e. current courses at the university are supply-driven rather than demand-driven.

Table B1a: Suitability of University graduates at recruiting time (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Technical Capabilities/Skills	33	52	56	40		100	27	50
Non-technical knowledge	20	41	67	40	50	0	30	38
Knowledge in English	50	65	67	33	33	100	36	42
Willingness to learn	50	37	67	67	17	0	45	48
Adaptation to work environment	40	46	33	17	17	100	55	38
Ability to solve problems	0	23		33	50	0	20	28
Commitment to the job	0	26	22	17	83	0	9	20

Source: Industrial survey (2005)

Manufacturing firms were also asked to express their perceptions regarding the capabilities of technical school and vocational training graduates at the recruiting time and survey results are provided in Tables B1b and B1c below. Over 50% of manufacturing firms in all sectors but that dealing in furniture and other manufactures considered technical institute graduates at recruiting time as very good with technical skills. Graduates from technical institutes were thought to have good non-technical knowledge largely by those firms in sectors dealing in agricultural products; textiles, clothing and leather; and petroleum and chemical products while technical graduates were perceived to be suitable with non-technical knowledge, knowledge in English; willingness to learn; adaptation and commitment to job by majority in manufacturing firms producing non-metallic mineral products. That is, majority of the firms perceived technical school graduates to some extent to have potential of easily acquainting themselves with work requirements in some sectors as indicated by perceptions of over 50% of firms across all sectors.

Table B1b: Suitability of technical institutes graduates at recruiting time (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Technical skills	88	54	50	83	57	0	50	44
Non-technical knowledge	57	38	50	17	57	50	36	48
Willingness to learn	38	62	40	33	43	50	36	42
Adaptation to work	57	51	40	33	29	100	42	52
Ability to solve problems	50	49	20	50	57	0	42	38
Commitment to the job	50	48	30	33	43	100	17	42

Source: Industrial survey (2005)

Table B1c provides information on the perceptions of firms regarding the suitability of graduates from vocational schools at the recruiting time. Across the board, manufacturing firms perceives vocational school graduates to be more suitable for their tasks than university graduates at the recruiting time particularly with non-technical knowledge, adaptation capacity, commitment to job, ability to solve problems. It is also the case that firms perceived vocational graduates to be more suited for their responsibilities at the recruiting time than graduates from technical schools.

Manufacturing firms were also asked to express their perceptions regarding the capabilities of technical school and vocational training graduates at the recruiting time and survey results are provided in Tables B1b and B1c below. Over 50% of manufacturing firms in all sectors but that dealing in furniture and other manufactures considered technical institute graduates at recruiting time as very good with technical skills. Graduates from technical institutes were thought to have good non-technical knowledge largely by those firms in sectors dealing in agricultural products; textiles, clothing and leather; and petroleum and chemical products while technical graduates were perceived to be suitable with non-technical knowledge, knowledge in English; willingness to learn; adaptation and commitment to job by majority in manufacturing firms producing non-metallic mineral products. That is, majority of the firms perceived technical school graduates to some extent to have potential of easily acquainting themselves with work requirements in some sectors as indicated by perceptions of over 50% of firms across all sectors.

Table B1b: Suitability of technical institutes graduates at recruiting time (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Technical skills	88	54	50	83	57	0	50	44
Non-technical knowledge	57	38	50	17	57	50	36	48
Willingness to learn	38	62	40	33	43	50	36	42
Adaptation to work	57	51	40	33	29	100	42	52
Ability to solve problems	50	49	20	50	57	0	42	38
Commitment to the job	50	48	30	33	43	100	17	42

Source: Industrial survey (2005)

Table B1c provides information on the perceptions of firms regarding the suitability of graduates from vocational schools at the recruiting time. Across the board, manufacturing firms perceives vocational school graduates to be more suitable for their tasks than university graduates at the recruiting time particularly with non-technical knowledge, adaptation capacity, commitment to job, ability to solve problems. It is also the case that firms perceived vocational graduates to be more suited for their responsibilities at the recruiting time than graduates from technical schools.

Table B1c: Suitability of vocational school graduates at recruiting time (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Technical skills	71	60	43	20	71	100	20	48
Non-technical knowledge	86	44	29	60	57	50	22	40
Knowledge in English	50	45	29	40	83	50	30	36
Willingness to learn	57	56	57	80	67	100	40	54
Adaptation capacity	43	57	43	40	43		60	50
Ability to solve problems	57	39	71	60	57	50	33	40
Commitment to the job	57	61	29	60	71	50	40	28

Source: industrial survey (2005)

Firms' perceptions regarding the suitability of recruits with ordinary secondary schools as captured in the survey are given in Table 41d. It is clear that majority of business firms across all sectors considered recruits with secondary school background to be suitable for their tasks with a few exceptions. This may be attributed to the fact that recruits with secondary school level of education have no specific areas of specialization and are likely to be under guided supervision in most cases in sectors dealing in agricultural products; textile clothing and leather goods; manufacturing on non-metallic minerals like tiles and brick making, etc. In additions, such recruits are still young with energy, mental ability and curiosity to learn, discover and adapt to conditions and work environment.

Table B1d: Positive assessment of ordinary secondary school (% of firms)

Factor\Sector	1	30	31	32	33	34	35	39
Technical skills	86	40	67	50	71	50	40	48
Non-technical knowledge	71	43	67	17	57	100	20	44
Knowledge in English	57	47	56	50	71	100	60	54
Willingness to learn	71	60	56	17	57	100	10	58
Adaptation to work	43	51	56	33	57	100	30	36
Ability to solve problems	57	44	56	33	43	50	20	44
Commitment to job	71	35	33	50	71	100	60	44

Source: Industrial survey (2005)

Recruitment requirements taken into consideration are more stringent in sectors producing non-metallic mineral products like cement and tiles followed by those in the production of textiles, clothing and leather products. Firms in the sector producing textiles, clothing and leather products accord recruits with ordinary secondary school background with better assessment relative to other recruits. Reasons for this may include high preferences for more

diverse skills rather than education level per among firms involved in the production of textiles, clothing and leather products.

4.2 Recruitment channels in 2003

Different sectors recruit their employees through different channels as indicated by the percentages of firms in table B2. Over 70% of the manufacturing establishments across all sectors reported to have recruited their workers through relatives and friends while there is less reliance on recruitment through labor service/agents with the exception of sectors producing textiles, clothing and footwear. About 60%-80% of manufacturing establishments in all but two sectors dealing in wood and furniture products reported to have recruited their employees through advertisements.

Direct recruitment from training institutions (*e.g. vocational and technical schools*) was reported by more than 50% manufacturing firms involved in production of textile, clothing and leather products; wood products; refined petroleum products and chemical products; non-mineral products; basic and fabricated products. This may be a reflection of the practical nature of these activities where trainees often do their industrial practical sessions in some of these manufacturing firms. It may also be reflecting the shortage of such skilled resource persons relative to the market demand. Direct recruitment from training institutions was reported by 46% manufacturing firms in food processing and 38% of business firms in production of furniture products. With the exception of sectors dealing in food processing and furniture products, manufacturing firms dealing in the rest of the sectors recruited through other means not specified in Table B2 in 2003.

Table B2: Recruiting channels in 2003 (% of firms)

Channel\Sector	1	30	31	32	33	35	39
Direct recruitment from training institutions	25	46	75	67	50	86	38
Recruitment through labor office	0	5	50	0	25	33	8
Recruitment through advertisements	60	59	67	33	80	86	40
Recruitment through relatives and friends	86	82	100	75	88	71	81
Recruitment through other means in 2003	100	25	67	50	50	67	25

Source: Industrial survey (2005)

4.3 Key factors considered in the recruitment process

Many factors are taken into consideration during the recruitment process. They include training background; the reputation of where candidates got training; experience of the candidate; age and gender, etc. Survey findings regarding relative weights attached by manufacturing firms in different sectors when recruiting their employees are given in Table B3a through B3c.

4.3.1 Recruitment of skilled workers

As shown by the information given in Table B3a, factors given importance when recruiting skilled workers in the sector involved in production of agricultural products include (i) vocational education (ii) education with science subjects (iii) the ability to read (iv) the reputation of the training institution (v) personality and other features. In the production of agricultural products, gender was reported by only 44% of business firms as an important factor when recruiting staff. Personality, age and gender are reported by less than 45% of firms in food processing as key factors during the process of recruiting skilled workers. More than 50% of firms attach great importance on most features like vocational education, reputation of the training institution, qualification papers, etc (see Table B3a for details) while recruiting skilled workers. Vocational training, science subjects, ability to read, possession of certificate, and gender were reported by firms involved in production of textile, clothing and leather as key factors critical during the recruitment process. Employment experience of recruits was an important factor during the recruitment process in all sectors except those dealing in wood and products of wood; basic and fabricated metal products. Qualifications (diploma/certificates) are reported to be a key requirement by majority of firms across all sectors.

Table B3a: Importance of factors in recruiting skilled workers (% of responding firms)

Sector		1	30	31	32	33	34	35	39
Science subjects	Very important	25	28	44	83	29	50	60	32
	Important	63	60	56	17	57	50	20	54
Ability to read	*Very important*	38	44	30	83	88	0	91	46
	Important	50	51	70	17	13	100	9	46
Vocational education	Very important	63	29	30	33	29	50	42	32
	Important	25	67	60	67	43	50	42	61
Employment Experience	Very important	29	30	20	33	50	100	50	37

Sector		1	30	31	32	33	34	35	39
	Important	71	57	60	50	25	0	40	56
Reputation of the training ins.	Very important	25	16	20	33	25	50	45	15
	Important	50	56	40	17	50	50	36	41
Diploma/Certificate	Very important	50	17	10	33	38	0	36	25
	Important	50	67	90	50	50	100	55	64
Personality	Very Important	25	43	40	50	50	50	36	43
	Important	75	45	50	33	50	50	55	46
Age	Very important	22	34	20	0	25	0	27	29
	Important	67	48	70	67	63	50	45	46
Gender	Very important	22	14	10	17	0	0	18	32
	Important	44	44	40	33	29	50	55	14
Other features	Very important	67	25	33	0	67	0	0	50
	Important	33	33	67	0	0	0	25	17

Source: industrial survey (2005)

Survey results show that less than 33% business firms producing wood products, refined petroleum and chemical products thought vocation educational; the reputation of the training institution and gender were important issues in the process of recruiting skilled workers. All factors were considered to be critical in recruitment process by at least 50% of business firms involved in production of non-metallic minerals. Key factors while recruiting skilled workers into the production of basic and fabricated metals and furniture products are mainly the ability to read, education with science subjects, employment experience, qualification papers, personality and gender. The reputation of the training institution was particularly not a key factor when recruiting into sectors producing textiles, clothing and leather goods; wood and products of wood; basic and fabricated products; and furniture and other manufactures not specified elsewhere.

4.3.2 Recruitment of technicians

A number of features are taken into account when recruiting technicians and the survey findings are given in Table B3b. All factors identified in Table B3b are reported by more than 50% of firms as being essential during the exercise of recruiting technicians into the production of food products; textiles, clothing and leather products. Education with science subjects, ability to read; qualification papers (certificates/diplomas), previous experience; personality, age and gender were cross-cutting features considered by firms when recruiting technicians particularly in the sector producing basic and fabricated metal products.

In the agricultural sector, factors given importance when recruiting technician include (i) vocational education (ii) education with science subjects (iii) the ability to read (iv) the reputation of the training institution (v) personality, gender and other features. The reputation of the training institution and gender are reported by less than 30% of firms as key factors taken into account during the process of recruiting technicians into production of textiles, clothing and furniture while manufacturing firms involved in the food processing attach less importance on personality when recruiting their technical. The reputation of the training institution was not considered by many firms producing wood and products of wood while previous experience and the reputation of the training institution and gender reported by less than 50% firms in production refined petroleum and chemical products as key factors considered during the recruitment of technicians.

Table B3b: Importance of factors in recruiting a technician (% of responding firms)

Factor\Sector		1	30	31	32	33	34	35	39
Education in science subjects	Very important	63	54	57	83	57	100	58	46
	Important	38	46	43	17	14	0	42	43
Ability to read	Very important	63	36	25	60	57	0	50	46
	Important	38	62	75	40	43	100	50	54
Vocational training	Very Important	50	40	63	50	57	0	50	52
	Important	50	58	38	50	29	100	50	44
Previous Experience	Very Important	25	28	25	67	43	0	18	50
	Important	75	65	63	17	43	100	64	32
Reputation of the training inst.	Very Important	38	23	13	33	43	0	36	14
	Important	50	51	38	17	29	100	45	50
Diploma/Certificate	Very Important	50	29	50	50	57	0	18	43
	Important	50	67	50	50	43	100	82	54
Personality	Very Important	25	36	25	50	43	50	45	50
	Important	75	56	63	33	57	50	55	43
Age	Very Important	25	21	13	0	0	0	18	33
	Important	63	55	63	67	86	50	73	52
Gender	Very Important	0	8	25	0	14	0	27	25
	Important	50	50	25	50	43	0	45	29
Other features	Very important	33	10	0	25	0	0	33	0
	Important	67	30	0	50	0	60	33	0

Source: Industrial survey (2005)

4.3.3 Recruitment of University graduates

Information regarding key factors taken into account when recruiting university graduates is given in Table B3c. Across the board, key factors taken into account when recruiting

university graduates are qualifications (certificate/diploma); previous experience; personality and gender. In the production of agricultural goods, critical factors in recruiting university graduates into the production of agricultural products include science subjects, ability to read, vocational training, and certificates as reported by more than 50% business firms involved in these commodities while personality and qualification papers are considered to be important. Personality, qualifications, the reputation of the training institution and science subjects were reported by over 50% manufacturing establishments to be key factors given emphasis when recruiting university graduates the processing of food products.

Age, personality, previous experience, ability to read and science subjects are reported to have higher weight during the process of recruiting university graduated into the production of textiles, clothing and leather goods. Vocational training, ability to read, science subjects and personality are key factors considered when recruiting university graduates in the production of wood and furniture products since they were reported by more than 50% of manufacturing firms engaged in production of these commodities. Key consideration in sectors producing refined petroleum products, chemical products, basic and fabricated products and non-metal mineral products include education with science subjects, ability to read, vocational training, previous experience, education qualifications, personality, age and gender.

Table B3c: Importance of factors in recruiting university graduates (% of responding firms)

Factor\Sector		1	30	31	32	33	34	35	39
Education in science subject	Very important	57	36	50	60	67	0	50	38
	Important	43	58	33	40	0	100	50	50
Ability to read	Very important	71	65	57	100	83	0	70	56
	Important	29	32	43	0	0	100	30	44
Vocational training	Very important	71	23	14	0	33	0	40	13
	Important	29	49	71	100	50	100	40	58
Previous experience	Very important	29	35	14	20	33	0	20	24
	Important	71	43	86	60	50	0	60	44
Training institution	Very important	43	28	43	20	50	0	30	32
	Important	57	53	14	40	33	100	50	44
Diploma/Certificate	Very important	57	35	57	40	67	0	30	39
	Important	43	55	43	60	33	0	70	52
Personality	Very important	14	50	57	40	83	0	50	50
	Important	86	50	43	40	17	100	50	50
Age	Very important	43	30	100	20	67	100	30	40
	Important	43	54	0	40	17	0	50	36

Factor\Sector		1	30	31	32	33	34	35	39
Gender	Very important	14	8	17	40	40	100	11	36
	Important	43	47	17	60	60	0	56	20
Other feature	Very important	33	20	0	67	0	33	0	0
	Important	33	20	0	0	50	33	0	0

Source: Industrial survey (2005)

4.4 Method of training staff

Information relating to training of staff is given in Table B4. It is clear that, across all sectors, over 60% manufacturing establishments provide in-house training for their workers and, with the exception of the sector involved in food processing, over 50% business firms reported to have in-house training program in progress. Business establishments reported to heavily rely on the use of external institutions for training their workers are largely concentrated in sectors involved in production of agricultural products refined petroleum and chemical products; non-metallic mineral products; basic and fabricated products.

It is equally clear that training plans are designed by own-staff in the majority of the manufacturing firms across all sectors. It is only in the production of textiles, clothing and footwear that business firms rely on both own staff and consultants in designing their training plans. Manufacturing firms reporting existence of training plans were in sectors producing agricultural products, wood products, refined petroleum and chemical products, and of basic and fabricated metal products. The low level of use of external training institutions indicates weakness for both the firms and human resource enterprises/trainers.

Table B4: In-house instructions and training by various trainers (% of responding firms)

Factor\Sector	1	30	31	32	33	34	35	39
In-house training for workers	63	73	90	100	60	100	100	61
In-house training program	50	36	50	67	50	100	82	21
Use of external institution to train	67	23	44	67	14	50	50	11
Formal training outside enterprise	50	42	44	50	29	50	58	21
Existence of a training plan	50	46	44	67	50	0	50	23
Design of the training plan (own staff)	75	67	50	100	60	86	63	0
Design of the training plan (consultant)	25	33	50	0	40	14	38	0

Source: Industrial survey (2005)

The information regarding the level of education of the human resource manager is provided in Table B5 below and it shows that in most business establishments across all sectors the human resource managers were largely University and college graduates. Education levels below college seem not to be suitable to produce human resource managers. University graduate human resource managers were reported by more than 50% business firms across all sectors.

Table B5: Level of education of the human resource manager (% of reporting firms)

Level of training\Sector		1	30	31	32	33	34	35	39
None	None	13	0	11	0	0	0	0	0
Primary	Primary	0	0	0	0	14	0	0	4
Junior Sec.	Junior Sec.	0	2	0	0	14	0	0	0
Senior Sec.	Senior Sec.	0	9	0	0	0	0	8	4
College	College	13	23	11		14	100	33	25
University	University	75	65	78	100	57	0	58	67

The information given in Table B6 indicates that there are links between manufacturing firms and banks. More than 80% of business establishments in all sectors are reported to have an account with banks and over 60% of them in all sectors are reported to have ever received loans from the banking sector. Very advanced banking are reported majority of firms in sectors dealing in manufactures of other non-metallic minerals products; and textiles, clothing and leather products.

Table B6: Proportion of manufacturing firms with links to banks (%)

Factor\Sector	Sector	1	30	31	32	33	34	35	39
Firms having an account with a bank	Yes	88	96	100	100	100	100	92	93
Firms that ever received loan from the bank	Yes	86	65	89	67	78	100	92	68

Source: Survey (2005)

5. Conclusions

The survey intended to identify sources and constraints of the competitiveness of manufacturing activities seeking the perceptions of about 144 firms in the manufacturing industry in Uganda. The survey findings clearly show that the competitiveness of processed food; textile, clothing and leather products; refined petroleum and chemical products; basic and fabricated metal products, machinery and equipment; non-metallic metals; furniture

products is affected by the cost and availability of electricity, labor and land suitability; domestic and export demand conditions.

Additional factors affecting the competitiveness of the manufacturing sector in Uganda include the quality and availability of inputs; support services like water utilities; access to finance; employee performance incentives; contact with suppliers and competitors, and interactive with the government. Instead of increasing expenditures on research and development the upgrading of products and processes, manufacturing firms heavily spend on product promotion, advertising and marketing. This raises concerns regarding the scope for product innovations and production process development in the manufacturing sectors in the country.

On the human resource aspect, the survey findings suggest that graduates with technical and vocational training background/skills, and previous work experience were highly regarded during the recruitment process. It is also clear that majority of manufacturing firms recruit through relatives and friends but not through the labor office. University graduates are regarded as high adaptive to working conditions but are less preferred in many activities requiring technical skills like fabrication of metals and furniture production. Firms have arrangements for training their staff but rely heavily on external training services. High expectations in terms of sales, output and investments also raises high future human resource needs which demand for more training.

Annexes

Table 1: Distribution of business firms in the survey

Table 1a: Sectoral Distribution of Business Firms

	Sector	1	2	30	31	32	33	34	35	36	37	38	39	Total
District														
Kampala		4		27	5	3	10	2	10				16	77
Mubende		2				1								3
Wakiso			1	5		1		1					1	9
Iganga				4						1			1	6
Jinja		1		3	3		1		1				5	14
Mbale					1								1	2
Soroti				2					1				1	4
Lira				4	1								2	7
Bushenyi				2										2
Kabarole													1	1
Kasese		1		2									1	4
Masindi				3									4	7
Mbarara				1		1			2			1		5
Kyenjojo		1			2									3
Total		9	1	53	12	6	11	3	14	1	0	1	33	144

Table 1b: Sectoral Distribution of Responding Business Firms (%)

District	**Sector**	**1**	**2**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**Total**
Kampala														
Mubende		5		35	6	4	13	3	13				21	100
Wakiso		67				33								100
Iganga			11	56		11		11					11	100
Jinja				67						17			17	100
Mbale		7		21	21		7		7				36	100
Soroti					50								50	100
Lira				50					25				25	100
Bushenyi				57	14								29	100
Kabarole				100										100
Kasese													100	100
Masindi		25		50									25	100
Mbarara				43									57	100
Kyenjojo				20		20			40			20		100
		33			67									100

Table 2.1: Ownership and legal status of enterprise

Table 2.1a: Ownership status of enterprise

	Sector	Freq.	Within (%)	Across (%)
Sole Proprietorship	1	1	5	0.8
	30	11	55	8
	39	8	40	6
	Total	20	*100*	15
Partnership	30	3	60	2
	35	1	20	1
	39	1	20	1
	Total	*5*	*100*	*4*
Limited Liability	1	9	8	7
	30	38	35	29
	31	9	8	7
	32	5	5	4
	33	10	9	8
	34	3	3	2
	35	12	11	9
	36	1	1	1
	38	1	1	1
	39	20	19	15
	Total	*108*	*100*	*81*

Table 2.1b: Ownership and legal status of enterprise

	Sector	Freq.	Within (%)	Across (%)
Private	1	9	7	6
	2	1	1	1
	30	52	39	37
	31	9	7	6
	32	5	4	4
	33	10	8	7
	34	3	2	2
	35	13	10	9
	39	31	23	22
	Total	*133*	*100*	*94*
State & Private	30	1	20	1
	32	1	20	1
	36	1	20	1
	38	1	20	1
	39	1	20	1
	Total	*5*	*100*	*4*
State	1	1	33	1
	30	2	67	1
	Total	*3*	*100*	*2*

Table 2.4: Highest level of education of the enterprise manager

	Sector	Number	Within Sector(%)
Primary			
	30	1	100
	Total	*1*	*100*
Secondary			
	30	5	71
	35	1	14
	39	1	14
	Total	*7*	*100*
Vocational/Technical			
	30	6	43
	31	2	14
	33	3	21
	39	3	21
	Total	*14*	*100*
Professional			
	1	3	8
	30	12	32
	31	3	8
	32	2	5
	33	1	3
	34	1	3
	35	2	5
	36	1	3
	38	1	3
	39	11	30
	Total	*37*	*100*
University			
	1	6	8
	2	1	1
	30	27	38
	31	5	7
	32	4	6
	33	5	7
	34	2	3
	35	9	13
	39	12	17
	Total	*71*	*100*

Table 2.7: Average initial start up capital (Ushs)

Sector	Firms	Average amount
1	6	907,000,000
2	0	0
30	37	577,000,000
31	5	277,000,000
32	5	747,000,000
33	7	189,000,000
34	3	18,400,000
35	10	1,630,000,000
36	1	1,200,000
38	1	202,000,000
39	22	306,000,000
Sectoral average	*97*	*582,000,000*

Table 3.4: Source and average amount of costs to business firms (Ushs)

sector	(a) Raw Material			(b) Rent			(c) Electricity		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
1	653,000,000	651,000,000	645,000,000	41,200,000	7,934,320	7,617,880	18,400,000	23,500,000	18,600,000
30	3,140,000,000	2,990,000,000	2,890,000,000	32,800,000	25,000,000	42,400,000	276,000,000	244,000,000	208,000,000
31	225,000,000	166,000,000	239,000,000	4,359,000	221,000,000	72,100,000	2,823,863	250,000,000	223,000,000
32	21,500,000	77,800,000	53,200,000	11,500,000	11,200,000	11,000,000	7,435,074	5,531,584	8,439,844
33	669,000,000	712,000,000	970,000,000	114,000,000	27,400,000	38,700,000	50,800,000	70,700,000	97,600,000
34	180,000,000	2,500,000,000	350,000,000	7,785,700	7,210,000	9,012,500	136,000,000	147,000,000	154,000,000
35	1,490,000,000	1,450,000,000	900,000,000	34,800,000	36,800,000	35,000,000	26,600,000	62,900,000	36,400,000
38	41,100,000	16,600,000	32,200,000	2,501,500	3,851,400	5,898,100	774,000	648,000	1,354,400
39	451,000,000	599,000,000	659,000,000	46,800,000	123,000,000	49,200,000	22,200,000	31,800,000	27,800,000
Sectoral average	1,580,000,000	1,590,000,000	1,550,000,000	44,600,000	53,000,000	39,100,000	119,000,000	136,000,000	119,000,000

sector	(d) Other Energy (Fuel, gas, etc.)			(e) Transport			(f) Telephone and information Technology services		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
1	9,881,137	16,600,000	24,200,000	97,200,000	375,000,000	146,000,000	17,700,000	6,439,333	23,900,000
30	297,000,000	163,000,000	234,000,000	195,000,000	179,000,000	105,000,000	30,800,000	25,500,000	26,000,000
31	.	58,300,000	47,900,000	9,822,511	18,300,000	12,900,000	6,340,964	7,689,474	31,400,000
32	6,609,475	448,075	438,750	6,506,667	10,400,000	5,066,954	3,708,663	3,461,623	5,596,191
33	19,000,000	17,800,000	23,200,000	16,800,000	18,000,000	20,800,000	12,800,000	16,100,000	18,500,000
34	195,000,000	201,000,000	208,000,000	11,100,000,000	119,000,000	124,000,000	30,700,000	31,700,000	33,900,000
35	11,200,000	19,000,000	18,100,000	27,700,000	29,200,000	26,700,000	8,653,694	11,000,000	11,500,000
38	638,000	248,800	329,800	4,868,450	936,400	4,981,350	390,000	45,000	133,400
39	19,100,000	14,500,000	62,300,000	61,700,000	56,400,000	392,000,000	38,900,000	35,300,000	39,200,000
Sectoral average	142,000,000	88,700,000	137,000,000	369,000,000	108,000,000	139,000,000	24,300,000	21,500,000	25,300,000

sector	(g) Promotion, advertising and marketing			(h) Maintenance and repair of plant and equipment			(i) Research and Development		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
1	10,300,000	13,400,000	5,585,058	73,700,000	54,900,000	105,000,000	1,467,500	829,150	11,100,000
30	68,700,000	47,800,000	58,200,000	325,000,000	213,000,000	151,000,000	34,200,000	35,700,000	26,400,000
31	10,300,000	10,800,000	42,600,000	2,948,208	4,217,953	10,000,000	.	.	13,200,000
32	3,462,000	788,820	1,270,125	3,658,700	4,315,171	5,505,509	200,000	300,000	1,210,000
33	15,700,000	13,600,000	17,900,000	18,400,000	22,400,000	44,800,000	12,100,000	6,614,241	6,560,522
34	40,800,000	59,800,000	139,000,000	2,420,000,000	3,230,000,000	3,540,000,000	.	.	.
35	17,600,000	18,700,000	22,300,000	15,400,000	25,900,000	21,400,000	6,333,500	4,200,000	11,000,000
38	110,000	219,000	180,000	968,700	746,000	576,800	.	.	.
39	49,300,000	42,600,000	45,700,000	69,900,000	50,000,000	79,900,000	14,600,000	103,000,000	6,351,070
Sectoral average	39,500,000	30,100,000	38,400,000	158,000,000	130,000,000	126,000,000	21,100,000	39,800,000	16,200,000

sector	(j) Salaries and wages			(k) Training		
	2001	2002	2003	2001	2002	2003
1	212,000,000	347,000,000	533,000,000	1,732,035	2,085,500	24,600,000
30	1,070,000,000	543,000,000	746,000,000	15,000,000	10,300,000	17,000,000
31	100,000,000	343,000,000	259,000,000	12,700,000	487,179	307,000
32	47,000,000	45,200,000	44,500,000	2,372,433	2,112,933	2,781,200
33	94,400,000	75,700,000	60,800,000	1,000,000	77,000,000	96,600,000
34	369,000,000	385,000,000	460,000,000	30,500,000	32,000,000	34,700,000
35	192,000,000	229,000,000	692,000,000	1,589,800	4,161,750	6,743,290
38	20,200,000	18,600,000	25,900,000	.	.	.
39	356,000,000	245,000,000	388,000,000	32,400,000	84,400,000	117,000,000
Sectoral average	508,000,000	339,000,000	520,000,000	16,100,000	28,400,000	43,800,000

Table 3.5: Type and average amount of taxation (Ushs)

Sector	(a) Income tax			(b) Import duties					
	2001	2002	2003	2001	2002	2003			
1	400,000	400,000	400,000	27,500,000	57,100,000	40,500,000			
30	400,000	23,300,000	9,732,744	.	.	.			
31	5,104,275	5,080,275	5,895,065	.	.	63,200,000			
33	5,440,510	3,946,640	4,590,339	.	.	.			
35	3,250,000	4,750,000	1,000,000	93,100,000	220,000,000	250,000,000			
39	1,761,000	1,675,250	2,476,000	.	.	.			
Sectoral Average	2,670,848	9,219,464	5,115,071	71,200,000	139,000,000	118,000,000			

Sector	(c) Value added tax			(d) Other direct taxes			(e) Other indirect taxes		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
1	.	.	.	43,200,000	34,700,000	45,700,000	.	.	.
30	2,098,433	2,394,549	2,239,474	.	150,000	150,000	.	.	.
31	.	.	78,900,000	.	.	.	.	.	.
33	76,500,000	59,800,000	56,400,000	.	.	.	.	.	.
35	9,223,000	9,223,000	8,285,000	8,481,000	.	.	837,500	2,659,000	3,100,000
39	2,045,369	10,500,000	12,300,000	390,000	624,000	624,000	.	3,132,192	4,557,473
Sectoral Average	24,400,000	20,600,000	26,800,000	23,800,000	17,500,000	23,100,000	837,500	2,895,596	3,828,737

Table 3.6: Average value of imports (Ushs)

sector	2001	2002	2003
1	1,690,000,000	2,000,000,000	1,190,000,000
30	.	156,000,000	462,000,000
31	.	.	604,000,000
33	.	.	.
35	.	.	.
39	18,000,000	.	.
Sectoral average	856,000,000	1,080,000,000	751,000,000

Table 3.7: Average value of exports (Ushs)

2001	2002	2003
9,370,000,000	10,800,000,000	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
9,370,000,000	10,800,000,000	.

Table 4.5: Average value of inventories for finished goods (Ushs)

Sector\Year	2001	2002	2003
1	26,500,000,000	25,000,000,000	9,130,000,000
30	16,900,000,000	18,600,000,000	30,300,000,000
31	426,000,000,000	21,100,000,000	9,720,000,000
32	7,800,000,000	7,020,000,000	8,230,000,000
33	25,500,000,000	30,400,000,000	28,800,000,000
34	2,210,000,000	9,600,000,000	10,200,000,000
35	40,600,000,000	34,400,000,000	19,200,000,000
39	759,000,000,000	749,000,000,000	758,000,000,000
Sectoral average	306,000,000,000	162,000,000,000	156,000,000,000

Table 4.6: Average value of inventories for work in progress (Ushs)

Sector\Year	2001	2002	2003
1	2,540,000,000	3,650,000,000	5,460,000,000
30	2,800,000,000	2,620,000,000	3,510,000,000
31	8,310,000,000	5,370,000,000	4,730,000,000
32	3,540,000,000	5,310,000,000	5,230,000,000
33	7,290,000,000	8,070,000,000	6,750,000,000
34	13,700,000,000	9,880,000,000	9,560,000,000
35	13,800,000,000	14,300,000,000	17,000,000,000
36	14,100,000,000	16,500,000,000	1,760,000,000
39	6,260,000,000	10,100,000,000	8,830,000,000
Sectoral average	8,090,000,000	8,000,000,000	7,240,000,000

Table 4.7: Average value of inventories of raw materials (Ushs)

Sector\Year	2001	2002
1	26,200,000,000	25,700,000,000
30	115,000,000,000	119,000,000,000
31	1,940,000,000	3,620,000,000
32	5,720,000,000	4,790,000,000
33	7,790,000,000	8,780,000,000
34	13,600,000,000	5,300,000,000
35	45,700,000,000	43,300,000,000
36	30,100,000,000	47,900,000,000
39	16,600,000,000	14,700,000,000
Sectoral average	52,500,000,000	53,000,000,000

Table 4.8: Average investment expenditures (Ushs)

	(a0 Land			(b) Plant Construction		
Sector\Year	2001	2002	2003	2001	2002	2003
1	2,280,000,000	6,070,000,000	3,410,000,000	2,060,000,000	3,740,000,000	1,860,000,000
30	23,000,000	12,000,000	.	26,000,000	11,000,000	13,400,000
31	.	.	780,000,000	.	.	500,000,000
33	526,000,000	546,000,000	570,000,000	432,000,000	125,000,000	112,000,000
35	55,600,000	55,600,000	55,600,000	159,000,000	176,000,000	155,000,000
39	.	5,000,000	5,000,000	.	.	17,900,000
Sectoral average	1,030,000,000	1,340,000,000	1,370,000,000	704,000,000	707,000,000	471,000,000

	(c) Equipment			(d) Research and development			(e) Innovation		
Sector\Year	2001	2002	2003	2001	2002	2003	2001	2002	2003
1	3,000,000	.	3,000,000	.	.	.	.	.	.
30	*3,285,000*	*84,900,000*	*51,400,000*	.	.	.	.	.	*500,000*
31	.	.	6,000,000	.	.	.	.	.	.
33	29,800,000	11,500,000	9,463,333	.	.	.	.	.	.
35	299,000,000	298,000,000	297,000,000	1,667,000	2,400,000	.	.	.	.
39	200,000	350,000	150,000	.	.	.	.	.	100,000
Sectoral average	67,200,000	96,000,000	58,800,000	1,667,000	2,400,000	.	.	.	300,000

Table 4.1: Rate of capacity utilization (%age)

	Attainable capacity			Installed capacity		
Sector	2001	2002	2003	2001	2002	2003
1	.	.	.	.	.	.
30	.	.	.	41	87	76
31	.	.	.	.	.	.
33	.	.	.	.	.	.
35	.	.	.	45	45	45
39	.	70	70	.	90	90

Note: Entries with dots imply that there were no repsonse in those sectors.

Table 5: Workers and labor relations

Table 5.1a: Category of workers by profession and sector

			category				
Sector	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
1	3	1	0	0	3	0	7
30	11	1	4	7	4	1	28
31	2	2	1	0	0	1	6
32	3	0	0	1	0	0	4
33	1	2	0	1	0	0	4
34	1	0	0	0	0	0	1
35	3	2	1	0	0	1	7
36	1	0	0	0	0	0	1
38	0	1	0	0	0	0	1
39	5	5	3	3	2	0	18
Total	30	14	9	12	9	3	77

Table 5.1b: Category of wo

			category				
Sector	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
1	43	14	0	0	43	0	100
30	39	4	14	25	14	4	100
31	33	33	17	0	0	17	100
32	75	0	0	25	0	0	100
33	25	50	0	25	0	0	100
34	100	0	0	0	0	0	100
35	43	29	14	0	0	14	100
36	100	0	0	0	0	0	100
38	0	100	0	0	0	0	100
39	28	28	17	17	11	0	100
Total	39	18	12	16	12	4	100

TABLE 5.1c: Workers distribution (sector and geographical)

Region	**Central**		**Eastern**		**Western**	
Sector	**Number**	**Percent**	**Number**	**Percent**	**Freq.**	**Percent**
1	6	7	1	3	2	9
2	1	1				
30	32	36	13	39	10	45
31	5	6	5	15		
32	5	6			1	5
33	10	11	1	3		
34	3	3				
35	10	11	2	6	2	9
36			1	3		
38					1	5
39	17	19	10	30	6	27
Total	*89*	*100*	*33*	*100*	*22*	*100*

Table 5.3: Highest level of education (% of responding workers)

Sector	**1**	**30**	**31**	**33**	**35**	**39**	**Total**
Secondary	20	60	0	20	0	0	100
Technical	0	0	33	17	33	17	100
University	13	38	0	0	25	25	100

Table 5.4: Areas of specialty

Specialty	**Number workers**	**Percent**
Business administration	56	35
Food processing	9	6
Mechanics & engineering	23	15
Others	11	7
No response	59	37
Total	158	100

Table 5.13: Total number of working hours a day

Sector\Hours worked	7 hrs	8 hrs	9 hrs	10 hrs	11hrs
1	0	50	0	50	0
30	17	17	17	50	0
31	0	0	50	0	50
33	0	0	0	100	0
35	0	100	0	0	0
39	0	67	33	0	0

Table 5.15: Labor relation problem (% of workers)

Sector	1	30	31	32	33	35	39	Total
Low pay	9	39	13	4	0	9	26	100
Lack of communication	20	20	0	20	0	20	20	100
Poor working conditions	11	67	0	0	11	0	11	100
Others	11	22	11	0	11	11	33	100
None	0	67	0	0	11	0	22	100

Table 5.14a: Number of workers reporting days lost due to absenteeism

Days lost\Sector	1	30	31	35	39	Total
1	0	2	0	1	0	3
2	0	0	0	1	0	1
3	0	0	0	0	1	1
4	1	0	0	0	0	1
5	0	0	0	0	1	1
10	0	0	1	0	0	1
Total	1	2	1	2	2	8

Table 5.14b: Number of workers reporting days lost due to ill health

Days lost\Sector	1	30	31	35	39	Total
2	0	1	0	0	1	2
3	0	1	1	0	0	2
4	1	0	0	0	0	1
5	0	0	0	3	2	5
7	0	1	0	0	0	1
20	0	0	1	0	0	1
Total	1	3	2	3	3	12

Table 5.14c: Number of workers reporting days lost due to other reasons like social problems and maternity leave

Days lost\Sector	1	30	31	33	35	39	Total
1	0	1	0	0	0	0	1
2	0	2	0	0	0	1	3
3	0	1	0	0	1	1	3
4	1	0	0	0	1	0	2
5	0	0	1	0	0	0	1
8	1	0	0	0	0	0	1
10	0	0	0	0	0	1	1
14	0	0	1	0	0	0	1
15	0	0	0	1	0	0	1
21	0	1	0	0	0	0	1
36	0	1	0	0	0	0	1
45	0	0	0	0	2	0	2
Total	2	6	2	1	4	3	18

Table 6: Competitive factors																
Table 6A: Demand Conditions (%age of responding business firms)																
	1		30		31		32		33		34		35		39	
	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Impact	Quality
Size of the domestic market																
Very poor/Very negative	0	0	0	0	6	4	11	11	0	4	0	0	10	10		
Poor/Negative	17	17	17	17	10	8	11	11	17	16	50	50	10	10		
Fair/Neutral	0	0	0	0	24	16	11	33	17	28			10	10		
Good/Positive	50	50	50	50	53	59	56	44	33	32	50	0	50	60		
Very good/Very positive	33	33	33	33	6	12	11		33	20	0	50	20	10		
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Export opportunities (Africa)																
Very poor/Very negative	60	25	60	25	22	14	43	43	0	33	0	0	0	0	27	29
Poor/Negative	0	25	0	25	41	37	0	0	27	24	100	100	11	11	18	10
Fair/Neutral	0	0	0	25	19	17	0	29	55	24			44	22	27	38
Good/Positive	20	25	20		19	31	43	29	18	19			11	11	27	24
Very good/Very positive	20	25	20	25			14						33	56		
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Export opportunities (Other)																
Very poor/Very negative	100	50	100	50	31	20	25	25	0	32	0	0	44	22	30	21
Poor/Negative	0	0	0	0	33	29	25	25	30	42	100	100	33	22	30	26
Fair/Neutral	0	50		50	17	26		13	30	11	0	0	0	33	10	32
Good/Positive	0		0	0	14	23	38	25	30	16	0	0	22	22	30	16
Very good/Very positive	0	0	0	0	6	3	13	13	10	0	0	0	0	0	0	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Structure of domestic demand																
Very poor/Very negative	0	0	0	0	11	7	13	0	10	0	0	0	0	0	10	0
Poor/Negative	0	33	0	33	11	11	13	25	20	4	0	0	10	10	20	9
Fair/Neutral	50	33	50	33	32	33	25	25	30	48	100	100	20	10	30	57
Good/Positive	25	0	25		45	50	50	50	10	48	0	0	50	70	20	35
Very good/Very positive	25	33	25	33	2	0	0	0	30	0	0	0	20	10	20	0
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Levels of market differentiation																
Very poor/Very negative	0	0	0	0	7	5	17	0	10	0	0	0	0	0	0	0
Poor/Negative	0	25		25	20	20	17	17		10	0	0	10	10	10	25
Fair/Neutral	75	25	75	25	39	34	50	33	70	65	100	100	30	20	70	55
Good/Positive	0	25	0	25	34	41	17	50	10	20	0	0	50	60	10	15
Very good/Very positive	25	25	25	25	0	0	0	0	10	5	0	0	10	10	10	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Government demand																
Very poor/Very negative	20	0	20	0	14	7	0	0	0	12	33	33	25	13	0	0
Poor/Negative	0	0	0	0	30	21	43	43	17	40	0	0	13	25	0	24

Fair/Neutral	60	20	60	20	42	45	29	29	58	20	67	67	50	38	58	40
Good/Positive	0	40		40	14	21	14	29	8	28	0	0	13	25	17	32
Very good/Very positive	20	40	20	40	0	5	14	0	17	0	0	0	0	0	25	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Population growth																
Very poor/Very negative	20	0	20	0	4	4	0	0	9	0	0	0	0	0	0	0
Poor/Negative	0	0	0	0	8	4	11	22	0	4	0	0	0	11	0	12
Fair/Neutral	20	40	20	40	27	25	33	44	36	58	67	67	50	33	45	42
Good/Positive	40	40	40	40	57	58	33	33	27	31	33	0	50	56	27	38
Very good/Very positive	20	20	20	20	4	8	22	0	27	8	0	33	0	0	27	8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
HIV/AIDS																
Very poor/Very negative	20	20	20	20	16	16	25	25	9	9	0	0	14	0	9	13
Poor/Negative	20	40	20	40	26	33	25	25	45	39			57	63	55	33
Fair/Neutral	40	20	40	20	38	37	38	50	45	43	100	67	29	38	27	42
Good/Positive	0	0	0	0	16	10	0	0	0	9	0	0	0	0	0	8
Very good/Very positive	20	20		20	4	4	13	0	0	0	0	33	0	0	9	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 6a: Percentage of manufacturing firms who were positive on competitiveness factors (summary)																	
		1		30		31		32		33		34		35		39	
Sector	Firms' Perceptions	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact
Availability of unskilled labor	Good quality/Positive impact	50	60	33	50	56	33	50	50	30	40	67	67	33	50	35	54
	Very good quality/Very positive impact	30	10	39	28	11	22	17	17	0	0	0	0	25	17	23	15
Availability of artisans	Good quality/Positive impact	30	0	27	28	40	40	0	25	0	0	33	33	27	64	43	55
	Very good quality/Very positive impact	0	30	25	26	20	10	50	5	0	0	0	0	36	18	9	14
Availability of technically skilled labor	Good quality/Positive impact	30	33	25	38	70	10	40	40	40	45	33	67	31	69	50	63
	Very good quality/Very positive impact	0	0	20	20	0	0	20	20	10	18	0	0	38	8	11	11
Availability of managerial staff	Good quality/Positive impact	30	33	43	56	40	30	17	50	45	64	67	67	31	46	45	69
	Very good quality/Very positive impact	10	22	22	16	30	30	0	0	9	9	0	0	38	31	21	14
Wage rates	Good quality/Positive impact	20	50	22	43	40	50	40	40		10	33	33	54	33	45	48
	Very good quality/Very positive impact	0	0	14	14	10	0	0	0	0	10	33	33	15	0	3	3
Unit labor cost			30	36	47	0	30	0	20	40	40	33	67	17	33	38	46
	Very good quality/Very positive impact	10	20	4	8	0	20	0	20	10	0	0	0	0	0	12	12
Vocational related training facility	Good quality/Positive impact	30	30	21	22	25	25	33	50	9	27	33		23	54	31	23
	Very good quality/Very positive impact	0	0	2	7	13	13	0	0	9	18	0	0	0	0	4	8
Work ethic of labor force	Good quality/Positive impact	30	33	35	43	22	22	20	40	0	27	0	50	23	25	40	36
	Very good quality/Very positive impact	10	22	4	6	22	22	0	0	0	9	0	0	8	0	16	16
Availability of suitable land	Good quality/Positive impact	22	0	32	33	40	30	17	33	30	56	67	67	31	31	42	38
	Very good quality/Very positive impact	44	22	36	35	30	40	67	67	10	0	0	0	54	54	27	23
Water supply	Good quality/Positive impact	33	56	49	52	50	60	33	33	55	50	0	67	46	8	42	42
	Very good quality/Very positive impact	11	11	20	20	30	20	17	33	9	20	0	0	15	0	38	38
Semi-processed materials	Good quality/Positive impact	29	57	45	40	43	29	33	0	0	33	0	0	33	42	41	36
	Very good quality/Very positive impact	14	14	13	17	14	14	0	0	0	0	0	0	8	0	18	18
Raw materials	Good quality/Positive impact	20	50	49	49	70	60	40	60	55	55	33	33	38	31	54	57
	Very good quality/Very positive impact	20	10	20	28	10	20	0	0	9	9	33	33	23	31	14	14
Research, resources and support services	Good quality/Positive impact	13	13	10	15	0	0	0	20	14	14	50	50	11	22	11	22
	Very good quality/Very positive impact	13	0	4	11	13	25	0	0	0	0	0	0	0	0	7	7
Table 6b: FIRM STRATEGY, STRUCTURE AND RIVALRY																	
Co-operation & contact with suppliers	Good quality/Positive impact	70	60	65	71	40	60	40	60	90		33	33	42	58	44	48
	Very good quality/Very positive impact	10	20	10	14	20	40	20	40		22	33	33	17	17	16	20
Co-operation & contact with clients	Good quality/Positive impact	50	60	65	75	20	40	20	40	80	67	33	33	62	69	44	64
	Very good quality/Very positive impact	30	20	10	12	40	40	40	40	10	22	33	33	15	15	20	16
Co-operation & contact with competitors	Good quality/Positive impact	11	22	29	31	0	75		75	40	56	33	0	33	54	16	40
	Very good quality/Very positive impact	11	11	0	8	0	0	0	0	0	0	0	0	0	0	8	4
Co-operation & contact with government	Good quality/Positive impact	30	20	32	29	40	60	40	60	18	50	33	33	46	62	42	46
	Very good quality/Very positive impact	10	10	4	10	20	20	20	20	0	0	0	0	8	8	8	12
Employee performance incentives	Good quality/Positive impact	40	40	37	43	40	60	40	60	27	20	33		23	8	32	56
	Very good quality/Very positive impact	20	10	2	4	0	0	0	0	0	10	0	33	8	0	16	12
Trade & business association support	Good quality/Positive impact	20	10	24	33	22	33	0	40	13	38	0	0	27	45	15	19
	Very good quality/Very positive impact	0	0	2	6	11	0	0	0	13	0	0	0	27	18	12	12
Market & product information	Good quality/Positive impact	10	20	38	55	30	20	40	20	18	9	0	0	31	46	10	43
	Very good quality/Very positive impact	10		4	6	20	30	20	0	0	0	0	0	0	23	0	14
Availability of capital	Good quality/Positive impact	10	20	32	34	30	30	20	40	27	45	33	33	54	46	39	36
	Very good quality/Very positive impact	0	10	6	14	0	0	0	0	0	9	0	0	0	0	7	18
Cost of capital	Good quality/Positive impact	22	30	18	19	14	0	0	25	44	22	0	0	22	30	27	19
	Very good quality/Very positive impact	0	0	2	12	0	0	0	0	0	0	0	0	0	0	8	7

Project development and financing support	Good quality/Positive impact	10	11	35	33	22	14	25	50	33	63	0	0	45	22	36	27
	Very good quality/Very positive impact	10		6	15	11	14	0	0	11	0	0	0	0	0	7	12
Access to finance	Good quality/Positive impact	60	20	53	58	29	33	17	50	9	63	33	33	25	40	15	50
	Very good quality/Very positive impact	0	10	14	17	14	11	17	0	0	13	0	0	33	0	0	11
Telecommunication services	Good quality/Positive impact	22	50	10	16	11	57	17	33	9	73	0	0	25	42	11	19
	Very good quality/Very positive impact	0	0	0	10	0	0	0	17	0	9	0	0	0	17	0	0
Cost of electricity	Good quality/Positive impact	20	10	14	16	10	11	0	33	20	27	0	0	15	0	7	11
	Very good quality/Very positive impact	10		2	8	10	0	0	17	0	9	0	0	8	0	4	7
Electricity reliability	Good quality/Positive impact	22	30	33	32	33	20	50	17	20	20	0	0	15	15	25	15
	Very good quality/Very positive impact	56	0	2	2	22	10	0	0	0	10	0	0	15	0	4	7
Table 6c: QUALITY & ENVIRONMENT																	
Quality of material inputs	Good quality/Positive impact	50	30	60	57	80	70	0	0	70	67	67	67	64	71	46	50
	Very good quality/Very positive impact	10	60	15	25	10	10	0	0	10	11			14	14	27	27
Quality of final product for consumption	Good quality/Positive impact	50	38	60	68	60	50	80	60	73	70	67	67	64	71	54	58
	Very good quality/Very positive impact	13	25	30	30	20	20	20	40	27	30	33	33	21	21	35	35
Quality of final product for export	Good quality/Positive impact	17	50	50	55	0	13	0	0	67	67	0	100	33	11	53	47
	Very good quality/Very positive impact	17		20	20	50	25	0	0	33	33	100	0	33	44	20	13
Cost of compliance to standards	Good quality/Positive impact	38	25	36	42	33	22	33	75	33	50	33	67	20	50	28	32
	Very good quality/Very positive impact	25	25	11	10	22	22	0	0	0	0	33	0	0	10	52	48
Pollutants in the production environment	Good quality/Positive impact	22	22	45	41	17	33	50	25	33	25	0	0	10	10	32	27
	Very good quality/Very positive impact	0	0	4	9	17	0	0	0	0	13	0	0	20	0	18	5
Cost of compliance to env. legislation	Good quality/Positive impact	63	50	40	47	25	25	0	50	11	13	50	0	10	20	30	26
	Very good quality/Very positive impact	0	13	9	7	13	13	0	0	0	13	0	0	10	0	4	4
Environmental protection legislation	Good quality/Positive impact	20	30	43	56	22	33	0	67	25	29	0	0	50	25	40	28
	Very good quality/Very positive impact	20	10	2	4	11	11	0	0	0	0	0	0	0	0	8	12

Table 6d: Demand Conditions (%age of responding business firms)																			
		1		30		31		32		33		34		35		39			
	Firms' Perceptions	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact	Quality	Impact		
Size of the domestic market	Good quality/Positive impact	50	50	50	50	53	59	56	44	33	32	50	0	50	60	0	0		
	Very good quality/Very positive impact	33	33	33	33	6	12	11		33	20	0	50	20	10	0	0		
Export opportunities Africa)	Good quality/Positive impact	20	25	20		19	31	43	29	18	19	0	0	11	11	27	24		
	Very good quality/Very positive impact	20	25	20	25	0	0	0	0	0	0	0	0	33	56	0	0		
Export opportunities (Other)	Good quality/Positive impact	0	0	0	0	14	23	38	25	30	16	0	0	22	22	30	16		
	Very good quality/Very positive impact	0	0	0	0	6	3	13	13	10	0	0	0	0	0	0	5		
Structure of domestic demand	Good quality/Positive impact	25	0	25	0	45	50	50	50	10	48	0	0	50	70	20	35		
	Very good quality/Very positive impact	25	33	25	33	2	0	100	100	30	0	0	0	20	10	20			
Levels of market differentiation	Good quality/Positive impact		25		25	34	41	17	50	10	20	0	0	50	60	10	15		
	Very good quality/Very positive impact	25	25	25	25	0	0	0	0	10	5	0	0	10	10	10	5		
Government demand	Good quality/Positive impact		40		40	14	21	14	29	8	28	0	0	13	25	17	32		
	Very good quality/Very positive impact	20	40	20	40	0	5	14	0	17	0	0	0	0	0	25	4		
Population growth	Good quality/Positive impact	40	40	40	40	57	58	33	33	27	31	33	0	50	56	27	38		
	Very good quality/Very positive impact	20	20	20	20	4	8	22	0	27	8	0	33	0	0	27	8		
HIV/AIDS	Good quality/Positive impact	0	0	0	0	16	10	0	0	0	9	0	0	0	0	0	8		
	Very good quality/Very positive impact	20	20	0	20	4	4	13	0	0	0	0	33	0	0	9	4		

Table 6: Competitiveness Factors																
Table 6B: Factor conditions																
Table 6B.1 Human Resources																
	1		**30**		**31**		**32**		**33**		**34**		**35**		**39**	
	Quality	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**	**Quality**	**Impact**
Availability of unskilled labor																
Very poor/Very negative	10	10	4	2	0	0	17	17	10	10	0	0	0	0	0	0
Poor/Negative	0	10	4	8	0	11	0	0	10	30	0	0	8	0	4	0
Fair/Neutral	10	10	20	12	33	33	17	17	50	20	33	33	33	8	38	31
Good/Positive	50	60	33	50	56	33	50	50	30	40	67	67	33	50	35	54
Very good/Very positive	30	10	39	28	11	22	17	17					25	17	23	15
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	75	100	100
Availability of artisans																
Very poor/Very negative	10	10	0	0	0	20	0	0	14	0	0	0	0	0	0	0
Poor/Negative	20	10	9	7	20		25	25	14	38			18	18	9	5
Fair/Neutral	40	50	39	40	20	30	25		71	63	67	67	18		39	27
Good/Positive	30		27	28	40	40		25	0	0	33	33	27	64	43	55
Very good/Very positive	0	30	25	26	20	10	50	5	0	0	0	0	36	18	9	14
Total	100	100	100	100	100	100	100	55	100	100	100	100	100	100	100	100
Availability of technically skilled labor																
Very poor/Very negative	20	22			10	10										4
Poor/Negative	20	11	12	14					30	27			23	23	11	7
Fair/Neutral	30	33	43	28	20	80	40	40	20	9	67	33	8	0	29	15
Good/Positive	30	33	25	38	70	10	40	40	40	45	33	67	31	69	50	63
Very good/Very positive	0	0	20	20	0	0	20	20	10	18	0	0	38	8	11	11
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Availability of managerial staff																
Very poor/Very negative	20	11	4	4	0	10	0	0	0	0	0	0	0	0	0	0
Poor/Negative	10	22	14	10	10		17	17	0	0	0	0	0	0	7	3
Fair/Neutral	30	11	18	14	20	30	67	33	45	27	33	33	31	23	28	14
Good/Positive	30	33	43	56	40	30	17	50	45	64	67	67	31	46	45	69
Very good/Very positive	10	22	22	16	30	30	0	0	9	9	0	0	38	31	21	14
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Wage rates																
Very poor/Very negative	20	0	0	4	0	10	0	0	0	10	0	0	0	0	0	0
Poor/Negative	50	30	24	24	10	10	40	40	50	10				33	24	21
Fair/Neutral	10	20	40	14	40	30	20	20	50	60	33	33	31	33	28	28
Good/Positive	20	50	22	43	40	50	40	40		10	33	33	54	33	45	48
Very good/Very positive			14	14	10					10	33	33	15		3	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Unit labor cost																
Very poor/Very negative	10	10	4	4	0	10	0	0	0	0	0	0	0	0	0	0
Poor/Negative	0	0	10	16	50	40	40	40	0	0	0	0	33	17	8	23
Fair/Neutral	80	40	46	24	50		60	20	50	60	67	33	50	50	42	19
Good/Positive	0	30	36	47	0	30	0	20	40	40	33	67	17	33	38	46
Very good/Very positive	10	20	4	8	0	20	0	20	10	0	0	0	0	0	12	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Vocational related training facility																
Very poor/Very negative	30	20	15	9	13	25	0	0	9	18	0	0	15	8	12	12
Poor/Negative	20	30	30	33	38	38	50	50	55	27	33	67	15	23	27	23
Fair/Neutral	20	20	32	30	13	0	17	0	18	9	33	33	46	15	27	35
Good/Positive	30	30	21	22	25	25	33	50	9	27	33	0	23	54	31	23
Very good/Very positive	0	0	2	7	13	13	0	0	9	18	0	0	0	0	4	8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Work ethic of labor force																
Very poor/Very negative	10	11	4	4	22	22	20	0	18	9	0	0	0	8	12	12
Poor/Negative	10	33	10	10		11	20	40	18	18	0	0	31	33	0	4
Fair/Neutral	40	0	47	37	33	22	40	20	64	36	100	50	38	33	32	32
Good/Positive	30	33	35	43	22	22	20	40	0	27	0	50	23	25	40	36
Very good/Very positive	10	22	4	6	22	22	0	0	0	9	0	0	8	0	16	16
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Availability of suitable land																
Very poor/Very negative	11	0	2	9	0	0	17	0	10	11	0	0	0	8	0	4
Poor/Negative	0	11	13	7	10	10	0	0	30	22	0	0	8	8	8	12
Fair/Neutral	22	67	17	17	20	20	0	0	20	11	33	33	8	0	23	23
Good/Positive	22	0	32	33	40	30	17	33	30	56	67	67	31	31	42	38
Very good/Very positive	44	22	36	35	30	40	67	67	10	0	0	0	54	54	27	23
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Water supply																
Very poor/Very negative	11	11	0	2	0	0	17	0	0	10	67	0	0	8	0	0
Poor/Negative	0	11	14	12	0	0	17	17	18	10	33	0	0	38	8	8
Fair/Neutral	44	11	18	14	20	20	17	17	18	10	0	33	38	46	12	12
Good/Positive	33	56	49	52	50	60	33	33	55	50	0	67	46	8	42	42
Very good/Very positive	11	11	20	20	30	20	17	33	9	20	0	0	15	0	38	38
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Semi-processed materials																
Very poor/Very negative	0	0	3	2	0	0	0	33	11	11	0	0	0	8	9	0
Poor/Negative	14	14	10	17	0	14	67	33	44	44	0	0	33	33	5	9
Fair/Neutral	43	14	30	24	43	43	0	33	44	11	100	100	25	17	27	36
Good/Positive	29	57	45	40	43	29	33	0	0	33	0	0	33	42	41	36

Very good/Very positive	14	14	13	17	14	14	0	0	0	0	0	0	8	0	18	18
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Raw materials																
Very poor/Very negative	20	10	2	2	0	10	0	0	18	18	0	0	8	8	0	4
Poor/Negative	20	20	2	9	0	0	20	40	18	18	0	0	23	31	7	14
Fair/Neutral	20	10	27	13	20	10	40	0	0	0	33	33	8	0	25	11
Good/Positive	20	50	49	49	70	60	40	60	55	55	33	33	38	31	54	57
Very good/Very positive	20	10	20	28	10	20			9	9	33	33	23	31	14	14
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Research facilities, resources and support services																
Very poor/Very negative	38	13	17	17	25	38	40	40	0	0	0	0	0	0	15	7
Poor/Negative	25	50	33	21	25	13	40	40	57	43	50	50	67	56	44	30
Fair/Neutral	13	25	35	36	38	25	20		29	43	0	0	22	22	22	33
Good/Positive	13	13	10	15	0	0	0	20	14	14	50	50	11	22	11	22
Very good/Very positive	13	0	4	11	13	25	0	0	0	0	0	0	0	0	7	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Table 6B.2: FIRM STRATEGY, STRUCTURE AND RIVALRY																
Co-operation & contact with suppliers																
Very poor/Very negative																
Poor/Negative	0	0	2	2	0	0	0	0	0	11	0	0	0	0	8	8
Fair/Neutral	20	20	23	14	40		40		10	67	33	33	42	25	32	24
Good/Positive	70	60	65	71	40	60	40	60	90	0	33	33	42	58	44	48
Very good/Very positive	10	20	10	14	20	40	20	40	0	22	33	33	17	17	16	20
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Co-operation & contact with clients																
Very poor/Very negative																
Poor/Negative	0	0	2	2	0	0	0	0	0	0	0	0	0	0	8	4
Fair/Neutral	20	20	23	12	40	20	40	20	10	11	33	33	23	15	28	16
Good/Positive	50	60	65	75	20	40	20	40	80	67	33	33	62	69	44	64
Very good/Very positive	30	20	10	12	40	40	40	40	10	22	33	33	15	15	20	16
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Co-operation & contact with competitors																
Very poor/Very negative	0	0	6	4	0	0	0	0	0	0	0	0	0	0	8	8
Poor/Negative	44	33	21	22	0	25	0	25	30	11	33	33	17	15	32	16
Fair/Neutral	33	33	44	35	100	0	100	0	30	33	33	67	50	31	36	32
Good/Positive	11	22	29	31	0	75	0	75	40	56	33	0	33	54	16	40
Very good/Very positive	11	11	0	8	0	0	0	0	0	0	0	0	0	0	8	4
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Co-operation & contact with government																
Very poor/Very negative	10	10	6	8	0	0	0	0	0	0	0	0	0	0	0	0

Poor/Negative	20	30	14	10	0	20	0	20	18	10	33	33	15	15	15	8
Fair/Neutral	30	30	44	43	40	0	40	0	64	40	33	33	31	15	35	35
Good/Positive	30	20	32	29	40	60	40	60	18	50	33	33	46	62	42	46
Very good/Very positive	10	10	4	10	20	20	20	20	0	0	0	0	8	8	8	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Employee performance incentives																
Very poor/Very negative	0	10	6	6	0	0	0	0	9	10	0	0	0	31	8	4
Poor/Negative	0	10	10	8	40	40	40	40	36	20	0	0	46	31	12	8
Fair/Neutral	40	30	46	39	20		20	0	27	40	67	67	23	31	32	20
Good/Positive	40	40	37	43	40	60	40	60	27	20	33	0	23	8	32	56
Very good/Very positive	20	10	2	4	0	0	0	0	0	10	0	33	8	0	16	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Trade & business association support																
Very poor/Very negative	30	30	10	10	0	0	20	20	0	0	0	0	0	0	8	0
Poor/Negative	20	30	20	14	44	44	20	20	13	0	50	50	9	9	31	23
Fair/Neutral	30	30	44	37	22	22	60	20	63	63	50	50	36	27	35	46
Good/Positive	20	10	24	33	22	33	0	40	13	38	0	0	27	45	15	19
Very good/Very positive	0	0	2	6	11	0	0	0	13	0	0	0	27	18	12	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Market & product information																
Very poor/Very negative	30	20	8	8	10	10	0	0	0	27	33	33	15	15	14	4
Poor/Negative	20	30	14	12	20	30	20	20	27	36	33	33	8	8	48	7
Fair/Neutral	30	30	36	18	20	10	20	60	55	27	33	33	46	8	28	32
Good/Positive	10	20	38	55	30	20	40	20	18	9	0	0	31	46	10	43
Very good/Very positive	10	0	4	6	20	30	20	0	0	0	0	0	0	23	0	14
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Availability of capital																
Very poor/Very negative	0	10	8	4	20	40	20	20	0	0	0	0	0	0	0	4
Poor/Negative	40	40	14	16	20	10		20	18	18	33	33	8	38	21	18
Fair/Neutral	50	20	40	32	30	20	60	20	55	27	33	33	38	15	32	25
Good/Positive	10	20	32	34	30	30	20	40	27	45	33	33	54	46	39	36
Very good/Very positive	0	10	6	14	0	0	0	0	0	9	0	0	0	0	7	18
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Cost of capital																
Very poor/Very negative	22	20	20	14	29	33	25	25	0	0	0	50	11	20	12	19
Poor/Negative	33	40	25	30	29	44	25	25	44	33	100	50	33	30	27	22
Fair/Neutral	22	10	34	26	29	22	50	25	11	44	0	0	33	20	27	33
Good/Positive	22	30	18	19	14	0	0	25	44	22	0	0	22	30	27	19
Very good/Very positive	0	0	2	12	0	0	0	0	0	0	0	0	0	0	8	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Project development and financing support																	
Very poor/Very negative	20	22	13	11	11	29	25	25	0	0	33	0	0	22	11	12	
Poor/Negative	20	33	8	15	22	14	25		11	25	33	100	18	22	25	27	
Fair/Neutral	40	33	38	26	33	29	25	25	44	13	33	0	36	33	21	23	
Good/Positive	10	11	35	33	22	14	25	50	33	63	0	0	45	22	36	27	
Very good/Very positive	10	0	6	15	11	14	0	0	11	0	0	0	0	0	7	12	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Access to finance																	
Very poor/Very negative	10	20	2	2	29	11	0	25	0	0	0	33	8	10	4	21	
Poor/Negative	10	20	6	4	0	22	17	25	36	13	0	33	8	30	26	11	
Fair/Neutral	20	30	24	19	29	22	50	0	55	13	67	0	25	20	56	7	
Good/Positive	60	20	53	58	29	33	17	50	9	63	33	33	25	40	15	50	
Very good/Very positive	0	10	14	17	14	11	17	0	0	13	0	0	33	0	0	11	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Telecommunication services																	
Very poor/Very negative	33	10	28	22	22	29	0	0	36	0	33	33	33	8	32	7	
Poor/Negative	44	20	26	18	33	14	50	0	36	0	67	67	25	8	18	19	
Fair/Neutral	0	20	36	33	33	0	33	50	18	18	0	0	17	25	39	56	
Good/Positive	22	50	10	16	11	57	17	33	9	73	0	0	25	42	11	19	
Very good/Very positive	0	0	0	10	0	0	0	17	0	9	0	0	0	17	0	0	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Cost of electricity																	
Very poor/Very negative	40	50	37	38	20	33	0	0	0	36	33	67	46	58	37	29	
Poor/Negative	20	30	33	26	30	22	33	33	40	18	67	33	23	8	26	25	
Fair/Neutral	10	10	14	12	30	33	67	17	40	9	0	0	8	33	26	29	
Good/Positive	20	10	14	16	10	11	0	33	20	27	0	0	15	0	7	11	
Very good/Very positive	10	0	2	8	10	0	0	17	0	9	0	0	8	0	4	7	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Electricity reliability																	
Very poor/Very negative	0	40	13	9	11	40	0	33	20	50	0	67	8	54	21	48	
Poor/Negative	11	20	13	18	0	10	17	50	30	10	67	33	38	31	33	7	
Fair/Neutral	11	10	38	39	33	20	33	0	30	10	33	0	23	0	17	22	
Good/Positive	22	30	33	32	33	20	50	17	20	20	0	0	15	15	25	15	
Very good/Very positive	56	0	2	2	22	10	0	0	0	10	0	0	15	0	4	7	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Table 6B.3: QUALITY & ENVIRONMENT																	
Quality of material inputs																	
Very poor/Very negative	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Poor/Negative	0	0	0	0	0	0	40	40	0	0	0	0	7	14	8	4	
Fair/Neutral	40	10	25	18	10	20	60	60	20	22	33	33	14	0	19	19	

Good/Positive	50	30	60	57	80	70	0	0	70	67	67	67	64	71	46	50
Very good/Very positive	10	60	15	25	10	10	0	0	10	11	0	0	14	14	27	27
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Quality of final product for domestic consumption																
Very poor/Very negative	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poor/Negative	0	13	0	0	0	0	0	0	0	0	0	0	0	0	8	4
Fair/Neutral	38	25	10	2	20	30	0	0	0	0	0	0	14	7	4	4
Good/Positive	50	38	60	68	60	50	80	60	73	70	67	67	64	71	54	58
Very good/Very positive	13	25	30	30	20	20	20	40	27	30	33	33	21	21	35	35
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Quality of final product for export																
Very poor/Very negative	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poor/Negative	0	0	10	5	50	25	0	0	0	0	0	100	0	0	20	13
Fair/Neutral	67	33	20	20	0	38	100	100	0	0	0	0	33	44	7	27
Good/Positive	17	50	50	55	0	13	0	0	67	67	0	100	33	11	53	47
Very good/Very positive	17		20	20	50	25	0	0	33	33	100	0	33	44	20	13
Total	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100
Cost of compliance to standards																
Very poor/Very negative	0	0	0	4	0	11	0	0	0	0	0	0	0	0	0	0
Poor/Negative	13	13	6	4	22	11	0	0	11	13	0	0	20	20	4	4
Fair/Neutral	25	38	47	40	22	33	67	25	56	38	33	33	60	20	8	4
Good/Positive	38	25	36	42	33	22	33	75	33	50	33	67	20	50	28	32
Very good/Very positive	25	25	11	10	22	22	0	0	0	0	33	0	0	10	52	48
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Pollutants in the production environment																
Very poor/Very negative	11	11	4	7	17	33	0	0	0	0	0	0	0	0	5	5
Poor/Negative	22	22	15	15	33	17	0	25	0	13	0	0	10	60	23	23
Fair/Neutral	44	44	32	28	17	17	50	50	67	50	100	100	60	30	23	41
Good/Positive	22	22	45	41	17	33	50	25	33	25	0	0	10	10	32	27
Very good/Very positive	0	0	4	9	17	0	0	0	0	13	0	0	20	0	18	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Cost of compliance to environmental legislation																
Very poor/Very negative	13	13	2	7	13	25	0	0	0	0	0	0	0	0	4	4
Poor/Negative	0	0	21	19	25	13	25	25	11	25	0	0	20	20	17	22
Fair/Neutral	25	25	28	21	25	25	75	25	78	50	50	100	60	60	43	43
Good/Positive	63	50	40	47	25	25	0	50	11	13	50	0	10	20	30	26
Very good/Very positive	0	13	9	7	13	13	0	0	0	13	0	0	10	0	4	4
Total	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100
Environmental protection legislation																
Very poor/Very negative	10	30	4	4	0	11	0	0	13	14	0	0	0	0	4	0

Poor/Negative	30	0	9	13	33	33	33	33	13	0	0	0	13	0	16	24
Fair/Neutral	20	30	41	22	33	11	67	0	50	57	100	100	38	75	32	36
Good/Positive	20	30	43	56	22	33	0	67	25	29	0	0	50	25	40	28
Very good/Very positive	20	10	2	4	11	11	0	0	0	0	0	0	0	0	8	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 7.1: Quarterly Comparison of Economic Performance (% of responding business firms)																
Sector	1		30		31		32		33		34		35		39	
Variable\Quarter	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
Volume of domestic sales																
Up	63	56	58	65	78	78	100	67	75	100	50		69	85	30	76
Same	13	11	25	30	11	11			13		50	50	8		40	19
Down	25	33	18	5	11	11	100	33	13			50	23	15	30	5
Total	100	100	100	100	100	100		100	100	100	100	100	100	100	100	100
Volume of export Sales																
Up	67	50	40	36	75	100	100	67	67	83	50		17	50	25	56
Same		33	33	57	25				33	17	50	100	50	33	63	33
Down	33	17	27	7				33					33	17	13	11
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Volume of production																
Up	67	60	61	65	78	67	100	67	75	88	50		69	85	35	71
Same	11	10	24	28		22			13	13	50	50	8	15	50	19
Down	22	30	15	8	22	11		33	13			50	23		15	10
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Volume of domestic orders received																
Up	63	50	59	62	44	78	67	67	88	100	100		73	75	40	65
Same	13	25	31	33	44	22						100		8	45	25
Down	25	25	10	5	11		33	33	13				27	17	15	10
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Volume of export orders received																
Up	60	50	50	36	25	75	100	67	57	71	50	50	20	57	22	45
Same	20	33	36	64	75	25			29	14	50	50	40	29	67	55
Down	20	17	14					33	14	14			40	14	11	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Unfilled orders relative to total assets																
Up	29	29	34	23	17	17	33	33	20	20	100	100	29	38	11	30
Same	29	43	38	45	67	50	67	67	80	20			43	50	42	55
Down	43	29	28	32	17	33				60			29	13	47	15
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
General business conditions (e.g. sales, etc.)																
Up	56	40	49	62	63	88	67	33	88	88	50	50	62	62	33	60
Same	11	40	32	33	13	13	33	67	13	13	50	50	23	23	44	35

Q1 = October-December 2004
Q2 = January-March 2005

Down	33	20	20	5	25								15	15	22	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of factory workers																
Up	63	44	15	25	33	44	67	50	38	38			38	38	24	32
Same	13	33	73	75	33	44	33	50	63	63	100	100	38	46	67	64
Down	25	22	12		33	11							23	15	10	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average hours worked per factory worker																
Up	25	25	12	26	13	38	100	67	13	25	50	50	23	31	11	29
Same	75	75	76	69	75	63		33	88	75	50	50	77	69	79	67
Down			12	5	13										11	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Fixed investment																
Up	44	20	22	29	33	17	33		38	50	50	50	50	58	25	33
Same	44	70	70	71	67	83	67	100	50	38	50	50	42	33	70	67
Down	11	10	8						13	13			8	8	5	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average total cost per unit of production																
Up	63	44	46	41	63	50		67	50	20	50	50	50	80	45	43
Same	38	56	46	51	25	38	67	33	17	20	50	50	40	10	50	38
Down			8	8	13	13	33		33	60			10	10	5	19
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Labor cost per unit of production																
Up	75	44	25	29	29	71	67		33	40	50	50	36	45	40	29
Same	25	56	68	61	43	14	33	100	33	20	50	50	64	55	60	52
Down			8	11	29	14			33	40						19
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average purchase price per unit of production																
Up	25	44	41	41	63	63	100	50	50	20	50	50	64	91	50	62
Same	50	44	49	51	13	38		50	50	60	50	50	27	9	45	33
Down	25	11	10	8	25					20			9		5	5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average domestic sale price per unit of production																
Up	14	38	21	33	50	75			17	40			33	40	16	30
Same	57	38	64	51	38	25	33	33	83	40	100	100	56	40	74	65
Down	29	25	15	15	13		67	67		20			11	20	11	5

Q1 = October-December 2004
Q2 = January-March 2005

Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Average export sale price per unit of production																
Up	43	43	20	22	50	67			25	25			33	50	17	33
Same	43	43	65	72	50	33	67	67	50	50	100	100	67	50	67	67
Down	14	14	15	6	..		33	33	25	25	..				17	100
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Taxes paid as % of sales																
Up	60	80	39	38	67	71	33	33	60	50	100	100	40	40	27	35
Same	40	20	48	52	17	29	67	67	40	50			40	20	67	53
Down			13	10	17						100	100	20	40	7	12
Total	100	100	100	100	100	100	100	100	100	100						
Raw materials relative planned production																
Too high	11		12	21	13	14	100	100			100	100	9	27	5	5
Sufficient	78	89	76	71	75	86			89	88			73	45	90	95
Too low	11	11	12	8	13				11	13			18	27	5	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Finished goods relative to expected																
Too high	11	11	18	20	43	17	67	67	13	14	50	100	10	10	89	5
Sufficient	67	78	71	71	43	83	33	33	75	71	50		60	60	11	84
Too low	22	11	11	9	14				13	14			30	30		11
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Delivery period of orders																
Longer	17		7	8	50	33			29	17			18	18	5	5
Same		33	61	56	17	50			43	17			64	55	55	50
Shorter	83	67	29	32	33	17			29	67			18	27	40	40
Total	100	100	100	100	100	100			100	100			100	100	100	100
Level of output below capacity																
Yes	20	20	27	36	50	50			56	56			45	25	44	47
No	70	70	65	58	50	50			44	44			55	75	56	53
No response	10	10	8	6												
Total	100	100	100	100	100	100			100	100			100	100	100	100
Rating of business conditions (sales)																
Satisfactory	44	70	53	71	86	71			75	89			73	70	65	81
Unsatisfactory	56	30	47	29	14	29			25	11			27	30	35	19
Total	100	100	100	100	100	100			100	100			100	100	100	100

Q1 = October-December 2004
Q2 = January-March 2005

Table 7.2: Factors hampering activities																
Sector	1		30		31		32		33		34		35		39	
Factor\Quarter	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
Shortage of skilled labor																
Seriously/Deteriorated	44	22	13	2	38	14	25		40		33		29		17	9
Slightly/Remained the same		67	46	60	50	71	75	100	30	71	33	100	43	83	33	64
Not at all/improved	11	11	40	38	13	14			30	29	33		29	17	50	27
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of Semi-skilled labor																
Seriously/Deteriorated	22		2		13	86							21		4	9
Slightly/Remained the same	56	75	39	73	75	14	100	100	40	86	33	100	50	73	43	57
Not at all/improved	22	25	59	27	13				60	14	67		29	27	52	35
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of unskilled labor																
Seriously/Deteriorated	33	13	6	7			25	33					15		13	5
Slightly/Remained the same	22	63	23	67	50	86	50	33	30	86	33	100	38	70	17	64
Not at all/improved	44	25	71	27	50	14	25	33	70	14	67		46	30	70	32
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of managerial staff																
Seriously/Deteriorated	33	11	21	9	25	17	25		20		33		21		17	14
Slightly/Remained the same	33	67	33	62	63	50	75	100	30	86	33	67	43	70	26	41
Not at all/improved	33	22	46	29	13	33			50	14	33	33	36	30	57	45
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of raw materials																
Seriously/Deteriorated	60		30	16	88	50	75	67	50		33		36	20	33	9
Slightly/Remained the same	10	78	48	44	13	17	25		30	57	33	67	36	40	38	64
Not at all/improved	30	22	22	40		33		33	20	43	33	33	29	40	29	27
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of water																
Seriously/Deteriorated	11	11	27	9	38		25	67	40	14	33		21	9	17	18
Slightly/Remained the same	33	56	21	64	38	83	25	33	40	71		100	43	55	42	59
Not at all/improved	56	33	52	27	25	17	50		20	14	67		36	36	42	23
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of Electricity																
Seriously/Deteriorated	78	33	67	55	88	14	50	67	90	43	100	67	54	30	65	36
Slightly/Remained the same	11	44	23	39		43	25	33	10	29		33	38	50	9	50
Not at all/improved	11	22	10	7	13	43	25			29			8	20	26	14
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of other utilities																
Seriously/Deteriorated		13	16	10					25	20			23	18	23	5
Slightly/Remained the same	100	63	56	67	100	50	100	100	75	60	100	50	54	64	55	85
Not at all/improved		25	29	23		50				20		50	23	18	23	10
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of machinery and equipment																
Seriously/Deteriorated	33	25	41	12	57		50	50	40		50		8		25	10
Slightly/Remained the same	44	50	39	59	43	40	50	50	60	43			62	60	50	67
Not at all/improved	22	25	20	29		60				57	50	100	31	40	25	24
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shortage of maintenance and support services																
Seriously/Deteriorated	13	25	22	15	29		25		20				18		40	5
Slightly/Remained the same	63	63	45	59	71	50	75	100	40	83	50	100	45	88	40	55
Not at all/improved	25	13	33	27		50			40	17	50		36	13	20	40

Q1 = October-December 2004
Q2= July-September 2004

Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Shortage of packaging materials																	
Seriously/Deteriorated	38	29	24	3	33	20			29	33					21	7	
Slightly/Remained the same	50	57	51	71	67	20	75	67	57	67	67	100	40	63	36	60	
Not at all/improved	13	14	24	26		60	25	33	14		33		60	38	43	33	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Level of short term interest rates																	
Seriously/Deteriorated	56	33	28	16	71	17	25		38	25			64	11	37	16	
Slightly/Remained the same	33	44	43	63	29	50	50	67	38	50	100	100	36	78	37	74	
Not at all/improved	11	22	28	21		33	25	33	25	25				11	26	11	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Insufficient demand for your products																	
Seriously/Deteriorated	13	75	27	11	57	17	25	33	22	17	33	33	45	10	18	11	
Slightly/Remained the same	50	25	42	55	29	83	25	67	56	83	33	67	27	70	41	63	
Not at all/improved	38		31	34	14		50		22		33		27	20	41	26	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Interface with URA and interpretation of law																	
Seriously/Deteriorated	25	14	26	11	57				33	75	33		36		14	10	
Slightly/Remained the same	38	71	49	66	29	17	50	100	56	25	67	67	29	90	59	75	
Not at all/improved	38	14	26	24	14	83	50		11			33	36	10	27	15	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Multiple levies, taxes and permit costs																	
Seriously/Deteriorated	29	88	29	9	43				11	20	33		15	10	14	10	
Slightly/Remained the same	57	13	49	73	43	33	50	67	67	80	67	100	54	80	55	70	
Not at all/improved	14		22	18	14	67	50	33	22				31	10	32	20	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Import tariffs																	
Seriously/Deteriorated	43	86	27	14	60		25		33	20	33		33	9	24	24	
Slightly/Remained the same	57	14	30	71	40	75	75	100	44	60	67	100	58	64	47	71	
Not at all/improved			43	14		25			22	20			8	27	29	6	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Import dumping on domestic market																	
Seriously/Deteriorated	14	17	33	15	57	33	25		70	33	50	100	50	9	41	25	
Slightly/Remained the same	57	33	28	67	29	67	50	67		67	50		33	73	12	56	
Not at all/improved	29	50	40	18	14		25	33	30				17	18	47	19	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Bribery and corruption (red tape)																	
Seriously/Deteriorated	63	50	30	20	29		25	33	30		100	100	25	10	19	11	
Slightly/Remained the same	13	50	36	66	43	83	25		40	100			58	90	52	74	
Not at all/improved	25		34	15	29	17	50	67	30				17		29	16	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Availability of medium term finance																	
Seriously/Deteriorated	44	13	11	5	14		50	33	13				42		24		
Slightly/Remained the same	44	63	49	78	71	67	25	33	50	80	100	67	50	73	48	75	
Not at all/improved	11	25	40	16	14	33	25	33	38	20		33	8	27	29	25	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Land leasing																	
Seriously/Deteriorated	13	14	15	6			25	33					8	9	10	5	
Slightly/Remained the same	38	71	33	72	57	67	25		38	75	33	67	38	73	25	68	
Not at all/improved	50	14	53	22	43	33	50	67	63	25	67	33	54	18	65	26	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Interface with government																	

Q1 = October-December 2004
Q2= July-September 2004

Seriously/Deteriorated	33	17	13	5	14										5	
Slightly/Remained the same	50	50	45	70	29	83	75	33	67	60	100	50	54	80	55	75
Not at all/improved	17	33	43	25	57	17	25	67	33	40		50	46	20	41	25
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Q1 = October-December 2004
Q2= July-September 2004

Table 7.3: Factors constraining investment in subsequent 12 months (% of responding firms)									
Factor\Sector		**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Volume of goods imported									
	Higher	40	44	67	75	70	67	55	47
	Same	60	42	33	25	30	33	36	47
	Lower	0	14	0	0	0	0	9	5
	Total	100	100	100	100	100	100	100	100
Volume of goods exported									
	Higher	67	43	43	50	63	100	63	36
	Same	0	39	29	50	25	0	25	36
	Lower	33	17	29		13	0	13	29
	Total	100	100	100	100	100	100	100	100
Investment in machinery and equipment									
	Higher	38	39	29	60	50	67	73	60
	Same	50	49	57	40	40	33	18	32
	Lower	13	12	14	0	10	0	9	8
	Total	100	100	100	100	100	100	100	100
Investment in land and buildings									
	Higher	25	33	29	20	33	67	55	33
	Same	63	50	57	80	67	33	45	63
	Lower	13	17	14	0	0	0	0	4
	Total	100	100	100	100	100	100	100	100
General business conditions (sales)									
	Higher	60	59	100	40	80	67	62	64
	Same	20	33	0	40	20	33	38	32
	Lower	20	8	0	20	0	0	0	4
	Total	100	100	100	100	100	100	100	100
Investment in new capacity (next 12 months)									
	Higher	57	50	86	75	22	33	67	68
	Same	14	32		25	56	67	33	20
	Lower	29	18	14	0	22	0	0	12
	Total	100	100	100	100	100	100	100	100
Insufficient demand									
	Seriously	43	35	38	50	30	0	21	29
	Slightly	29	27	38	25	50	50	57	38
	Not at all	29	39	25	25	20	50	21	33

	Total	100	100	100	100	100	100	100	100
Cost of credit									
	Seriously	63	32	50	25	30	67	57	56
	Slightly	38	34	50	75	40	33	29	20
	Not at all	0	34	0	0	30	0	14	24
	Total	100	100	100	100	100	100	100	100
Lack of credit									
	Seriously	38	27	50	20	30	67	36	38
	Slightly	38	43	38	60	40	33	36	33
	Not at all	25	31	13	20	30	0	29	29
	Total	100	100	100	100	100	100	100	100
Tax structure									
	Seriously	50	40	38	20	30	33	36	36
	Slightly	38	52	63	40	40	67	36	40
	Not at all	13	8	0	40	30	0	29	24
	Total	100	100	100	100	100	100	100	100
Access to electricity									
	Seriously	78	54	38	60	60	100	46	56
	Slightly	22	32	38	20	30	0	31	24
	Not at all		14	25	20	10	0	23	20
	Total	100	100	100	100	100	100	100	100
Access to water									
	Seriously	50	15	63	25	30	33	7	4
	Slightly	38	46	38	75	30	33	29	48
	Not at all	13	40	0	0	40	33	64	48
	Total	100	100	100	100	100	100	100	100
Access to raw materials									
	Seriously	43	27	75	40	50	33	43	24
	Slightly	43	50	13	60	40	67	29	44
	Not at all	14	23	13	0	10	0	29	32
	Total	100	100	100	100	100	100	100	100
Lack of financial resources (internal)									
	Seriously	50	33	50	60	10	33	36	44
	Slightly	50	45	38	40	60	67	43	32
	Not at all	0	22	13	0	30	0	21	24
	Total	100	100	100	100	100	100	100	100

Cost of leasing land									
	Seriously	14	16	50	0	10	50	15	14
	Slightly	57	29	25	20	20	0	23	18
	Not at all	29	56	25	80	70	50	62	68
	Total	100	100	100	100	100	100	100	100
Lack of managerial skills and investment support									
	Seriously	57	6	38	40	20	33	54	17
	Slightly	29	44	25	60	60	67	46	35
	Not at all	14	50	38	0	20	0	0	48
	Total	100	100	100	100	100	100	100	100

Quationnaire B: INDUSTRIAL HUMAN RESOURCE

Table B.1: Number of employees by sector and gender

	2001		2002		2003	
Sector	Male	Female	Male	Female	Male	Female
1	59	58	91	53	48	35
2	2	2	2	1	3	2
30	146	31	162	27	159	31
31	129	18	117	14	72	22
32	653	17	736	8	691	34
33	14	13	23	7	12	8
34	42	18	21	14	25	31
35	34	25	47	27.4	55.5	25
36	2	.	.	1	2	.
38	.	.	.	.	.	.
39	26	4	29	7	25	7
Sectoral average	114	23	140	20	128	23

Table B.3: Training by sector, grade and gender (as of 2003)

sector		No education		Primary	Junior Secondary		Senior Secondary		Technical/Vocational	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	973	782	305	601	139	137	92	37	6	13
2	13	.	7	3	89	4	25	.	.	.
30	16	7	45	140	126	30	23	20	45	19
31	39	13	16	6	10	12	14	10	5	15
32	309	30	1869	21	110	12	241	46	148	62
33	62	49	49	11	12	7	15	7	7	1
34	.	.	18	31	.	.	8	13	5	2
35	48	11	5	.	3	4	16	19	7	6
36							1	1	4	.
39	25	5	23	6	13	5	11	4	7	2
Sectoral average	83	45	115	108	78	23	32	16	28	13

Sector	Graduate (technical Institute)			University graduate			Other University graduates			
	Male	Female		Male	Female		Male	Female		
1	8	1		5	2		12	3		

2	20	.		3	.		2	.		
30	5	2		5	2		9	3		
31	7	1		2	2		28	40		
32	98	17		35	7		14	8		
33	6	2		3	0		2	.		
34	3	1		.	.		1	.		
35	3	1		4	2		37	18		
36	2	1		1	.		.	2		
39	4	2		3	1		5	2		
Sectoral average	10	3		6	2		12	6		

Table B.4: Employment by sector, skill/profession category and gender

sector		**Engineers**			**Scientists**		**Technicians**	
	Male	**Female**		**Male**	**Female**		**Male**	**Female**
1	5	.		2	2		10	13
2	1	.		1	.		30	.
30	3	3		3	1		0	4
31	2	1		.	.		1	4
32	1	.		2	1		9	2
33	1	0		4	1		6	1
34	.	.		.	.		4	2
35	3	1		4	3		1	3
36	1	.		.	.		.	.
38	.	.		2	.		.	.
39	2	1		2	1		0	2
Sectoral average	3	1		3	1		0	3
Sector		**Skilled workers**			**Unskilled workers**			
	Male	**Female**		**Male**	**Female**			
1	98	80		672	715			
2	60	.		106	.			
30	50	1		157	40			
31	27	3		18	11			
32	23	16		84	5			
33	26	8		69	34			
34	8	13		23	45			
35	67	29		36	30			

36	4			3						
38	5			5	2					
39	18	9		53	6					
Sectoral average	41	0		135	69					

Table B5: Average monthly salarly of employees by category in 2003 (Ushs)						
Sector\Employee category	**Engineers**	**Scientists**	**Technician**	**Skilled wor**	**Unskilled workers**	
1	620,200	515,200	291,721	203,600	93,786	
2	450,000	450,000	200,000	100,000	50,000	
30	633,161	487,688	332,671	219,567	93,270	
31	800,000	.	712,500	581,000	*1,568,000*	
32	1,234,590	564,388	308,324	251,315	82,500	
33	*7,800,000*	800,000	507,333	284,769	164,667	
34	.	.	275,000	170,000	64,000	
35	721,084	862,676	366,807	516,667	148,812	
36	400,000	.	.	200,000	150,000	
39	1,707,143	490,000	2,705,313	690,995	*1,891,471*	
Sectoral average	952,242	554,850	842,011	374,572	542,342	

Table B18a: Number of firms with recruitment plans in 2003							
(a) Firms planning to recruit new employees in 2005				(b) Firms with no plans to recruit new employe			
Sector	Firms	Percent		Sector	Firms	Percent	
1	7	10		1	2	4	
30	22	31		30	24	50	
31	5	7		31	3	6	
32	4	6		32	1	2	
33	7	10		33	2	4	
35	8	11		34	2	4	
36	1	1		35	4	8	
38	1	1		39	10	21	
39	17	24					
Total	72	**100**			**48**	**100**	

Total	100	100	100	100	100	100	100	100
Table B15.6: Ability to solve problems (ordinary secondary school graduates) at recruitment time (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very good	29	37	33	50	43	50	30	32
Good	57	44	56	33	43		20	44
Satisfactory	0	14	11	17	14	50	40	20
Unsatisfactory	14	5	0	0	0	0	10	4
Total	100	100	100	100	100	100	100	100
Table B15.7: Commitment to job (ordinary secondary school graduates) at recruitment time (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very good	29	51	44	33	29		60	36
Good	71	35	33	50	71	100	30	44
Satisfactory	0	14	22	17	0	0	0	12
Unsatisfactory	0	0	0	0	0	0	10	8
Total	100	100	100	100	100	100	100	100
Table B16.1: Direct recruitment from training institutions in 2003 (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**35**	**39**	
Yes	25	46	75	67	50	86	38	
No	75	54	25	33	50	14	62	
Total	100	100	100	100	100	100	100	
Table B16.2: Recruitment through labor office in 2003 (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**35**	**39**	
Yes	0	5	50	0	25	33	8	
No	100	95	50	100	75	67	92	
Total	100	100	100	100	100	100	100	
Table B16.3: Recruitment through advertisements in 2003 (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**35**	**39**	
Yes	60	59	67	33	80	86	40	
No	40	41	33	67	20	14	60	
Total	100	100	100	100	100	100	100	
Table B16.4: Recruitment through relatives and friends in 2003 (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**35**	**39**	
Yes	86	82	100	75	88	71	81	
No	14	18	0	25	13	29	19	
Total	100	100	100	100	100	100	100	
Table B16.5: Recruitment through other means in 2003 (%)								

Sector	1	30	31	32	33	35	39	
Yes	100	25	67	50	50	67	25	
No	0	75	33	50	50	33	63	
Total	100	100	100	100	100	100	100	
Table B17a.1: Education with science subjects and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	25	28	44	83	29	50	60	32
Important	63	60	56	17	57	50	20	54
Not important	13	12	0	0	14	0	20	14
Total	100	100	100	100	100	100	100	100
Table B17a.2: Ability to read and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	38	44	30	83	88		91	46
Important	50	51	70	17	13	100	9	46
Not important	13	4	0	0	0	0	0	7
Total	100	100	100	100	100	100	100	100
Table B17a.3: Vocational education and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	63	29	30	33	29	50	42	32
Important	25	67	60	67	43	50	42	61
Not important	13	4	10		29	0	17	7
Total	100	100	100	100	100	100	100	100
Table B17a.4: Employment Experience and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	29	30	20	33	50	100	50	37
Important	71	57	60	50	25	0	40	56
Not important	0	13	20	17	25	0	10	7
Total	100	100	100	100	100	100	100	100
Table B17a.5: Reputation of the training institution and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	25	16	20	33	25	50	45	15
Important	50	56	40	17	50	50	36	41
Not important	25	28	40	50	25	0	18	44
Total	100	100	100	100	100	100	100	100
Table B17a.6: Diploma/Certificate and recruitment (%)								

Sector	1	30	31	32	33	34	35	39
Very important	50	17	10	33	38	0	36	25
Important	50	67	90	50	50	100	55	64
Not important	0	15	0	17	13	0	9	11
Total	100	100	100	100	100	100	100	100
Table B17a.7: Personality and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	25	43	40	50	50	50	36	43
Important	75	45	50	33	50	50	55	46
Not Important	0	11	10	17	0	0	9	11
Total	100	100	100	100	100	100	100	100
Table B17a.8: Age and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	22	34	20		25		27	29
Important	67	48	70	67	63	50	45	46
Not Important	11	18	10	33	13	50	27	25
Total	100	100	100	100	100	100	100	100
Table B17a.9: Gender and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	22	14	10	17	0	0	18	32
Important	44	44	40	33	29	50	55	14
Not important	33	42	50	50	71	50	27	54
Total	100	100	100	100	100	100	100	100
Table B17a.10: Other features and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	67	25	33	0	67	0	0	50
Important	33	33	67	0	0	0	25	17
Not important	0	42	0	100	33	100	75	33
Total	100	100	100	100	100	100	100	100
Table B17b.1: Education in science subjects and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	63	54	57	83	57	100	58	46
Important	38	46	43	17	14		42	43
Not important	0	0	0	0	0	0	0	11
Total	100	100	100	100	100	100	100	100
Table B17b.2: Ability to read and recruitment (%)								

Sector	1	30	31	32	33	34	35	39
Very important	63	36	25	60	57		50	46
Important	38	62	75	40	43	100	50	54
Not important	0	2	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100
Table B17b.3: Vocational training and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	50	40	63	50	57		50	52
Important	50	58	38	50	29	100	50	44
Not important	0	3	0	0	14	0	0	4
Total	100	100	100	100	100	100	100	100
Table B17b.4: Previous Experience and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	25	28	25	67	43		18	50
Important	75	65	63	17	43	100	64	32
Not important	0	8	13	17	14	0	18	18
Total	100	100	100	100	100	100	100	100
Table B17b.5: Reputation of the training institution and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	38	23	13	33	43	0	36	14
Important	50	51	38	17	29	100	45	50
Not Important	13	26	50	50	29	0	18	36
Total	100	100	100	100	100	100	100	100
Table B17b.6: Diploma/Certificate and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	50	29	50	50	57		18	43
Important	50	67	50	50	43	100	82	54
Not important	0	3	0	0	0	0	0	4
Total	100	100	100	100	100	100	100	100
Table B17b.7: Personality and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	25	36	25	50	43	50	45	50
Important	75	56	63	33	57	50	55	43
Not Important	0	8	13	17	0	0	0	7
Total	100	100	100	100	100	100	100	100
Table B17b.8: Age and recruitment (%)								

Sector	1	30	31	32	33	34	35	39
Very Important	25	21	13	0	0	0	18	33
Important	63	55	63	67	86	50	73	52
Not important	13	24	25	33	14	50	9	15
Total	100	100	100	100	100	100	100	100
Table B17b.9: Gender and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very Important	0	8	25	0	14	0	27	25
Important	50	50	25	50	43	0	45	29
Not important	50	43	50	50	43	100	27	46
Total	100	100	100	100	100	100	100	100
Table B17b.10: Other features and recruitment (%)								
Sector	**1**	**30**	**31**	**33**	**34**	**35**	**39**	
Very important	33	10	0	25	0	0	33	
Important	67	30	0	50	0	60	33	
Not important	0	60	100	25	100	40	33	
Total	100	100	100	100	100	100	100	
Table B17c.1: Education in science subject and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	57	36	50	60	67		50	38
Important	43	58	33	40	0	100	50	50
Not important	0	6	17		33		0	13
Total	100	100	100	100	100	100	100	100
Table B17c.2: Ability to read and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	71	65	57	100	83	0	70	56
Important	29	32	43	0	0	100	30	44
Not important	0	3	0	0	17	0	0	0
Total	100	100	100	100	100	100	100	100
Table B17c.3: Vocational training and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	71	23	14		33	0	40	13
Important	29	49	71	100	50	100	40	58
Not important		29	14		17	0	20	29
Total	100	100	100	100	100	100	100	100

Table B17c.4: Previous experience and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	29	35	14	20	33	0	20	24
Important	71	43	86	60	50	0	60	44
Not important	0	22	0	20	17	100	20	32
Total	100	100	100	100	100	100	100	100
Table B17c.5: Reputation of the training institution and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	43	28	43	20	50	0	30	32
Important	57	53	14	40	33	100	50	44
Not important	0	19	43	40	17	0	20	24
Total	100	100	100	100	100	100	100	100
Table B17c.6: Diploma/Certificate and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	57	35	57	40	67	0	30	39
Important	43	55	43	60	33	0	70	52
Not important	0	10	0	0	0	100	0	9
Total	100	100	100	100	100	100	100	100
Table B17c.7: Personality and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	14	50	57	40	83	0	50	50
Important	86	50	43	40	17	100	50	50
Not important	0	0	0	20	0	0	0	0
Total	100	100	100		100	100	100	100
Table B17c.7: Personality and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	43	30	100	20	67	100	30	40
Important	43	54	0	40	17	0	50	36
Not important	14	16	0	40	17	0	20	24
Total	100	100	100	100	100	100	100	100
Table B17c.7: Age and recruitment (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Very important	14	8	17	40	40	100	11	36
Important	43	47	17	60	60	0	56	20
Not important	43	44	67	0	0	0	33	44
Total	100	100	100	100	100	100	100	100

Sector	1	30	31	32	33	35	39	
Female		5	1		1	1		
Male	2	8	1	1	2	1	1	
Total	3	13	2	1	3	2	1	
Table B20b2: Employees with technical training sourced externally								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Female		3	1		1			
Male	2	6	4	1	2		1	1
Total	2	9	5	1	3		1	1
Table B20b3: Employees with vocational training sourced externally								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Female		3	1				1	1
Male		3	2					
Total								
Table B20b4: Employees with other training sourced externally								
Sector	**1**	**30**	**33**	**34**	**35**	**39**		
Female	1	2		1				
Male	1	2	1	1		1		
Total	1	4	1	2		1		
Table B20c: Sources of funding of the training (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
All fees	100	44	71				67	45
Part of Fee		22			100	100	17	18
No fee		33	29	100			17	36
Total	100	100	100	100	100	100	100	100
Table B20d: Expenditure on Training (Number of Business firms)								
Amount (Ushs)	**1**	**30**	**31**	**32**	**34**	**35**	**39**	
Less than 1,000,000		4	1		1		2	
1,000,000-5,000,000		5	1	1		1		
5,000,001-10,000,000		1	1	1				
10,000,001-15,000,000						1		
15,000,001-20,000,000			2	2			1	
20,000,001-25,000,000								
25,000,001-30,000,000	1							
More than 30,000,000		1		2		1	2	
Table B21a: Informal in-plant training (% of reporting firms)								

Sector	1	30	31	32	33	34	35	39
Yes	86	84	67	80	89	100	100	80
No	14	16	33	20	11	0	0	20
Total	100	100	100	100	100	100	100	100
Table B21b.1: Informal training for workers with less than one year in the firm (% of reporting firms)								
Number of Workers\S	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
1		11	14				33	
2	33	19	14	67		100	17	18
3	17	22	43			0	17	18
4	33	19						36
5	17							
More than 5		30	29	33	100		33	27
Total	100	100	100	100	100	100	100	100
Table B21b.2: Informal training for all workers (% of reporting firms)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
1	0	5	0	33	0	0	20	22
2	17	36	67	33		100	40	22
3	33	9	33	0	0	0	20	11
4	17	23	0	0	0	0	0	33
5	17	0	0	0	0	0	0	11
More than 5	17	27		33	100	0	20	0
Total	100	100	100	100	100	100	100	100
Table B22a: Existence of a training plan (% of reporting firms)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Yes	50	46	44	67	50	0	50	23
No	50	54	56	33	50	100	50	77
Total	100	100	100	100	100	100	100	100
Table B22b: Design of the training plan (% of reporting firms)								
Sector	**1**	**30**	**31**	**32**	**33**	**35**	**39**	
Own staff	75	67	50	100	60	86	63	
Consultant	25	33	50	0	40	14	38	
Total	100	100	100	100	100	100	100	
Table B23a: Level of Education of the human manager (% of reporting firms)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
None	13	0	11	0	0	0	0	0
Primary	0	0	0	0	14	0	0	4

Junior Sec.	0	2	0	0	14	0	0	0
Senior Sec.	0	9	0	0	0	0	8	4
College	13	23	11	0	14	100	33	25
University	75	65	78	100	57		58	67
Total	100	100	100	100	100	100	100	100
Table B23b: Business firms having an account with a bank (%)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Yes	88	96	100	100	100	100	92	93
No	13	4	0	0	0	0	8	7
Total	100	100	100	100	100	100	100	100
Table B23c: Ever received loan from the bank (% of respondents)								
Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**
Yes	86	65	89	67	78	100	92	68
No	14	35	11	33	22	0	8	32
Total	100	100	100	100	100	100	100	100

Table B6a: Number of employees recruited by sector, gender and level of education in 2003

Sector	NE		PS		JSS		SSS		VS		TI	
	Male	Female	Male	Female	Male	Female	Male	female	Male	Female	Male	Female
1	22	32	21	17	10	12	2	2	6	4	0	0
2	.	.	.	.	18	6	6	3	1	4	3	2
30	7	10	2	21	6	6	8	11	6	4	7	.
31	15	10	16	15	1	3	310	18	209	4	37	3
32	39	11	2	5	21	5	3	1	1	0	1	2
33	.	.	.	.	.	4	2	3	2	.	2	.
35	5	.	5	.	3	.						
39	59	27	6	1	2	1	12	6	0	2	3	2

Sector	UG		OUG	
	Male	Female	Male	Female
1	1	1	1	0
2	1	.	.	1
30	1	1	1	1
31	3	2	65	40
32	2	2	5	2
33	1	0	.	.
35	1	2	3	2
39	1	1	2	.
Total	1	1	6	0

Table B7.1: Initial monthly salary (Ushs) by sector and level of training

Sector	(a) TI	(b) VS
1	183,333	175,000
2	120,000	85,000
30	170,362	161,100
31	142,500	138,750
32	283,570	259,009
33	199,500	151,000
34	200,000	150,000
35	292,000	204,000
36	.	200,000
39	202,083	156,364
Overall	194,930	166,697

Table B.8: Experience with skill shortages (% of responding firms)													
Sector	**Sector**	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**				
Experience with skill shortages	Yes	17	33	13	50	43		25	36				
Table B13a: Assessment of University graduates at recruting time (% of responding firms)													
Technical Capabilities/Skills	Very good		12		20	33		9	8				
	Good	33	52	56	40		100	27	50				
Non-technical knowledge	Very good		7		40	17		10	25				
	Good	20	41	67	40	50		30	38				
Knowledge in English	Very good	33	20	11	50	33		36	38				
	Good	50	65	67	33	33	100	36	42				
Willingness to learn	Very good	17	29	11	17	50	100	18	36				
	Good	50	37	67	67	17		45	48				
Adaptation to work environmen	Very good	20	22	11	33	50		27	29				
	Good	40	46	33	17	17	100	55	38				
Ability to solve problems	Very good		23		33	50		20	28				
Commitment to the job	Very good		26	22	17	83		9	20				
Table B13b: Assessment of graduates from technical institutes at recruting time (% of responding firms)													
Technical Capabilities/Skills	Very good		33	30	17	29	50	33	40				
	Good	88	54	50	83	57		50	44				
Non-technical knowledge	Very good		2						4				
	Good	57	38	50	17	57	50	36	48				
Willingness to learn	Very good	25	19	30	33	29		45	35				
	Good	38	62	40	33	43	50	36	42				
Adaptation to work environmen	Very good		19	10	67	43		42	32				
	Good	57	51	40	33	29	100	42	52				
Ability to solve problems	Very good	13	17	20	17	29		17	27				
	Good	50	49	20	50	57		42	38				
Commitment to the job	Very good	13	27	20	33	57		42	35				
	Good	50	48	30	33	43	100	17	42				
Table B13c: Assessment of graduates from vocational schools at recruting time (% of responding firms)													
Technical Capabilities/Skills	Very good	14	23	43	20			50	28				
	Good	71	60	43	20	71	100	20	48				
Non-technical knowledge	Very good		30	29	20	29		33	16				
	Good	86	44	29	60	57	50	22	40				
Knowledge in English	Very good	33	24	29	20	17	50	30	24				
	Good	50	45	29	40	83	50	30	36				
Willingness to learn	Very good	29	21	14	20	17		50	21				

	Good	57	56	57	80	67	100	40	54			
Adaptation capacity	Very good	57	32	43	40	57		30	33			
	Good	43	57	43	40	43		60	50			
Ability to solve problems	Very good	29	36	14	20	29		44	40			
	Good	57	39	71	60	57	50	33	40			
Commitment to the job	Very good	29	25	43	20	14	50	50	56			
	Good	57	61	29	60	71	50	40	28			
Table 13d: Assessment of ordinary												
Technical Capabilities/Skills	Very good		35		17	29	50	30	24			
	Good	86	40	67	50	71	50	40	48			
Non-technical knowledge	Very good	29	40	11		29		30	36			
	Good	71	43	67	17	57	100	20	44			
Knowledge in English	Very good	29	37	11	17	29		20	33			
	Good	57	47	56	50	71	100	60	54			
Willingness to learn	Very good	14	35	22	67	43	100	70	38			
	Good	71	60	56	17	57		10	58			
Adaptation to work environmen	Very good	57	37	33	50	43		50	40			
	Good	43	51	56	33	57	100	30	36			
Ability to solve problems	Very good	29	37	33	50	43	50	30	32			
	Good	57	44	56	33	43		20	44			
Commitment to job	Very good	29	51	44	33	29		60	36			
	Good	71	35	33	50	71	100	30	44			
Table 14: Method of recruitment in 2003 (% of repsonding firms)												
Sector		1	30	31	32	33		35	39			
Direct recruitment from training	Yes	25	46	75	67	50		86	38			
Recruitment through labor offic	Yes		5	50		25		33	8			
Recruitment through advertisen	Yes	60	59	67	33	80		86	40			
Recruitment through relatives a	Yes	86	82	100	75	88		71	81			
Recruitment through other mea	Yes	100	25	67	50	50		67	25			
Table 15a: Importance of various factors for recruiting a skilled worker (% of repsonding firms)												
Sector		1	30	31	32	33	34	35	39			
Education with science subject	Very important	25	28	44	83	29	50	60	32			
	Important	63	60	56	17	57	50	20	54			
Ability to read	Very important	38	44	30	83	88		91	46			
	Important	50	51	70	17	13	100	9	46			
Vocational education	Very important	63	29	30	33	29	50	42	32			
	Important	25	67	60	67	43	50	42	61			
Employment Experience	Very important	29	30	20	33	50	100	50	37			

	Important	71	57	60	50	25		40	56			
Reputation of the training institu	Very important	25	16	20	33	25	50	45	15			
	Important	50	56	40	17	50	50	36	41			
Diploma/Certificate	Very important	50	17	10	33	38		36	25			
	Important	50	67	90	50	50	100	55	64			
Personality	Very Important	25	43	40	50	50	50	36	43			
	Important	75	45	50	33	50	50	55	46			
Age	Very important	22	34	20		25		27	29			
	Important	67	48	70	67	63	50	45	46			
Gender	Very important	22	14	10	17			18	32			
	Important	44	44	40	33	29	50	55	14			
Other features	Very important	67	25	33		67			50			
	Important	33	33	67				25	17			
Table 15b: Importance of various factors for recruiting a technician (% of repsonding firms)												
Education in science subjects	Very important	63	54	57	83	57	100	58	46			
	Important	38	46	43	17	14		42	43			
Ability to read	Very important	63	36	25	60	57		50	46			
	Important	38	62	75	40	43	100	50	54			
Vocational training	Very Important	50	40	63	50	57		50	52			
	Important	50	58	38	50	29	100	50	44			
Previous Experience	Very Important	25	28	25	67	43		18	50			
	Important	75	65	63	17	43	100	64	32			
Reputation of the training institu	Very Important	38	23	13	33	43		36	14			
	Important	50	51	38	17	29	100	45	50			
Diploma/Certificate	Very Important	50	29	50	50	57		18	43			
	Important	50	67	50	50	43	100	82	54			
Personality	Very Important	25	36	25	50	43	50	45	50			
	Important	75	56	63	33	57	50	55	43			
Age	Very Important	25	21	13				18	33			
	Important	63	55	63	67	86	50	73	52			
Gender	Very Important		8	25		14		27	25			
	Important	50	50	25	50	43		45	29			
Other features	Very important	33	10		25			33				
	Important	67	30		50		60	33				
Table 15c: Importance of various factors for recruiting a university graduate (% of repsonding firms)												
	Sector	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**			
Education in science subject	Very important	57	36	50	60	67		50	38			
	Important	43	58	33	40		100	50	50			

Ability to read	Very important	71	65	57	100	83		70	56			
	Important	29	32	43			100	30	44			
Vocational training	Very important	71	23	14		33		40	13			
	Important	29	49	71	100	50	100	40	58			
Previous experience	Very important	29	35	14	20	33		20	24			
	Important	71	43	86	60	50		60	44			
Reputation of the training institu	Very important	43	28	43	20	50		30	32			
	Important	57	53	14	40	33	100	50	44			
Diploma/Certificate	Very important	57	35	57	40	67		30	39			
	Important	43	55	43	60	33		70	52			
Personality	Very important	14	50	57	40	83		50	50			
	Important	86	50	43	40	17	100	50	50			
Personality	Very important	43	30	100	20	67	100	30	40			
	Important	43	54		40	17		50	36			
Age	Very important	14	8	17	40	40	100	11	36			
	Important	43	47	17	60	60		56	20			
Gender	Very important	33	20		67		33					
	Important	33	20			50	33					
Table 16: In-house instructions and training by various trainers (% of repsonding firms)												
Sector	**Sector**	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**			
In-house training for workers	Yes	63	73	90	100	60	100	100	61			
In-house training program	Yes	50	36	50	67	50	100	82	21			
Use of external institution to tra	Yes	67	23	44	67	14	50	50	11			
Formal training outside enterpri	Yes	50	42	44	50	29	50	58	21			
Existence of a training plan	Yes	50	46	44	67	50		50	23			
people who designed the trainir	Own staff	75	67	50	100	60	86	63				
	Consultant	25	33	50	0	40	14	38				
Table 17: Level of Education of the human manager (% of reporting firms)												
Sector	**Sector**	**1**	**30**	**31**	**32**	**33**	**34**	**35**	**39**			
None	None	13	0	11	0	0	0	0	0			
Primary	Primary	0	0	0	0	14	0	0	4			
Junior Sec.	Junior Sec.	0	2	0	0	14	0	0	0			
Senior Sec.	Senior Sec.	0	9	0	0	0	0	8	4			
College	College	13	23	11	0	14	100	33	25			
University	University	75	65	78	100	57	0	58	67			
Total		100	100	100	100	100	100	100	100			
Table B18: Links between manufacturing firms and banks (% of responding firms)												

Sector	Sector	1	30	31	32	33	34	35	39			
Firms having an account with a	Yes	88	96	100	100	100	100	92	93			
Fimrs that ever received loan fr	Yes	86	65	89	67	78	100	92	68			