

# An exploration of the manufacturing sector

## SAINT LUCIA



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# Outline

- Site Overview
- Stylized Facts on Sample
- Manufacturing Sector Overview
  - Age/Labour and Capital usage/Employment/Capacity Utilization/Exports
- Key trends based on sub-sectors
- Notable Observations
- Conclusion



# Site visit Overview

Interviewed 34  
manufacturing firms  
across the island

Administered a  
structured  
questionnaire which  
was standard across all  
firms

Subsequently, data was  
collated into a database  
and key trends were  
extrapolated

Follow-up interviews  
with  
TEPA  
SLBS  
LUCCELEC

# Motivations

## Why?

- The manufacturing sector account for 6.5 per cent of the total number employed in the economy.
- In addition to creating productive employment, manufacturing is an export driver and a key foreign exchange earner.
- Contributes 4.8% to GDP and has been volatile for the past 5 years.

## Goals

- To build a stronger relationship between the various Ministerial Departments of Government of St. Lucia and the manufacturing sector.
- To gain a better understanding of this sector ( the structure of manufacturing operations, concerns and challenges )

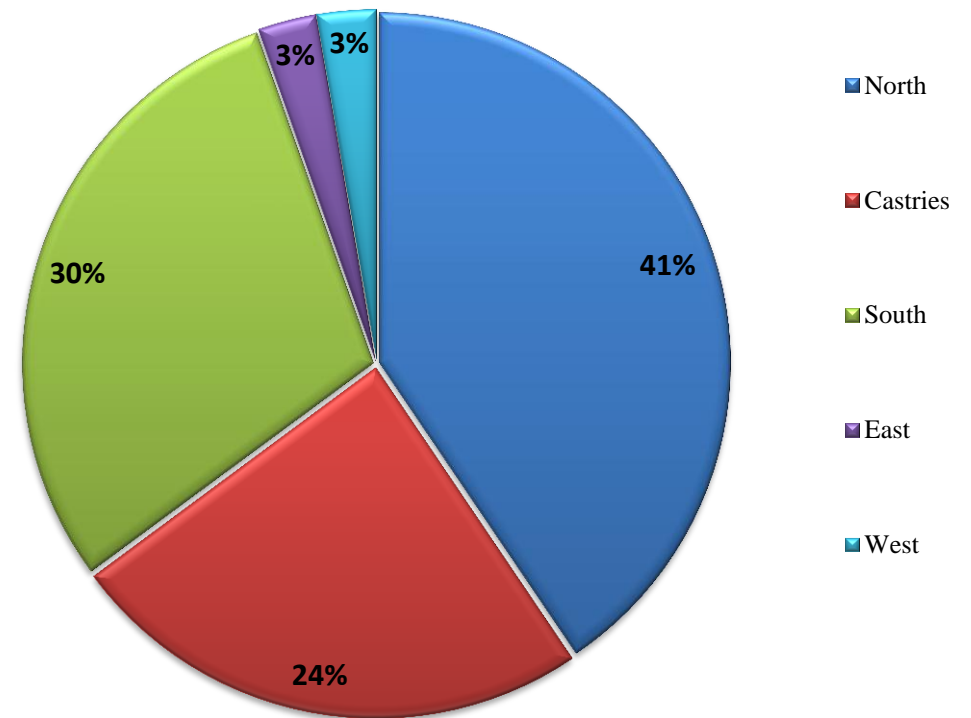
## Vision?

- Understanding this sector will assist in crafting more targeted and effective policy.
- Acquiring and analyzing information about each manufacturing establishment will serve in the effort to gain insights that will help sustain the goals of improved sector performance.

# Who Did We Meet?

<i>Sub-Sector</i>	<i>No. of Organisations</i>
Food	Eight
Beverages	Seven
Wood & Wood products/ Furniture/Rubber	Four
Soap and Soap Products	One
Chemicals & other Chemical Products	Five
Commercial & Banana Boxes	One
Plastic Products	One
Metal Products	Three
Printed Material	Four

**Distribution of Companies**

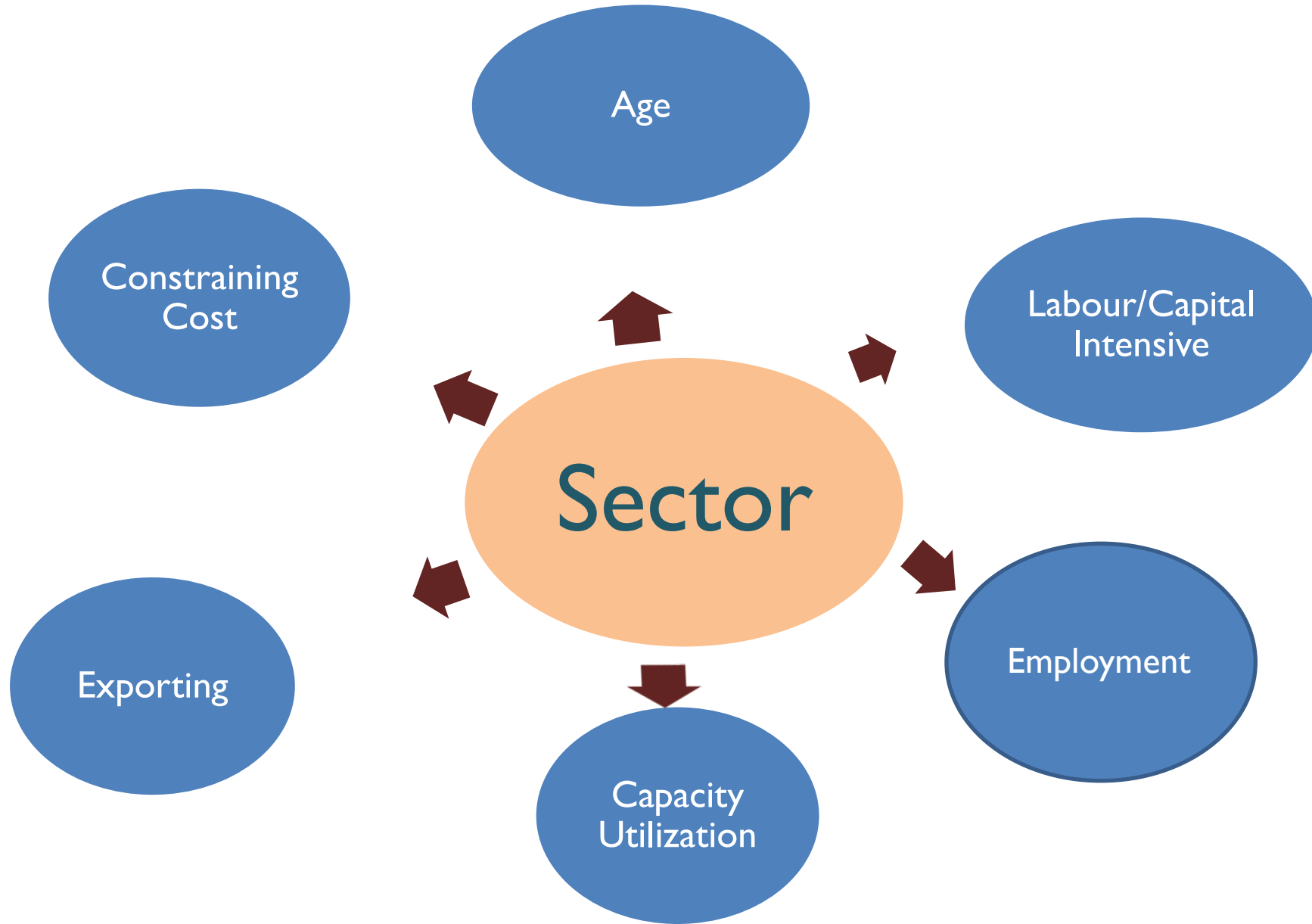


***N.B. There are a few firms that produce across two or more sub-sectors . For ease of analysis a typical firm is counted once and factored under the sub-sector which makes up its largest volume.***





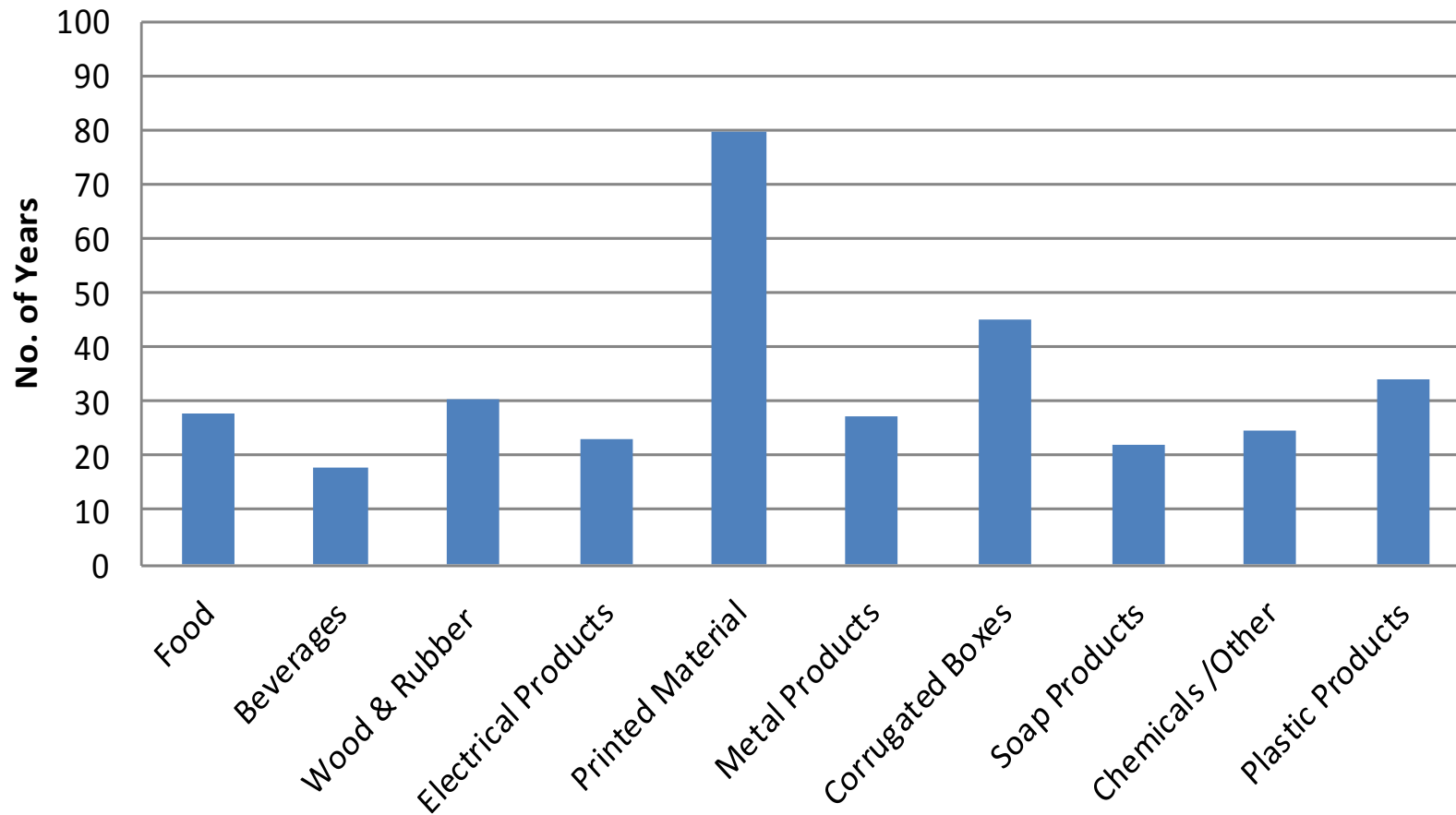
# Manufacturing Sector (Overall)



## Overall sector Review :

Based on the findings of this research, the average firm in this sector is 29 years; the most recent being Blue waters (St. Lucia) and the oldest being the Voice Publishing Company.

### Average age of each sub-sector





# Labour or Capital Intensive?

The findings from this survey revealed that the manufacturing sector is labour intensive as opposed to capital intensive.

**54 percent**  
Labour

**46 percent**  
Capital



Although firms utilize more labour as oppose to capital, there are noted weaknesses in the pool of human resources in most firms .This adversely affects the performance and efficiency of this sector and by extension their ability to export.

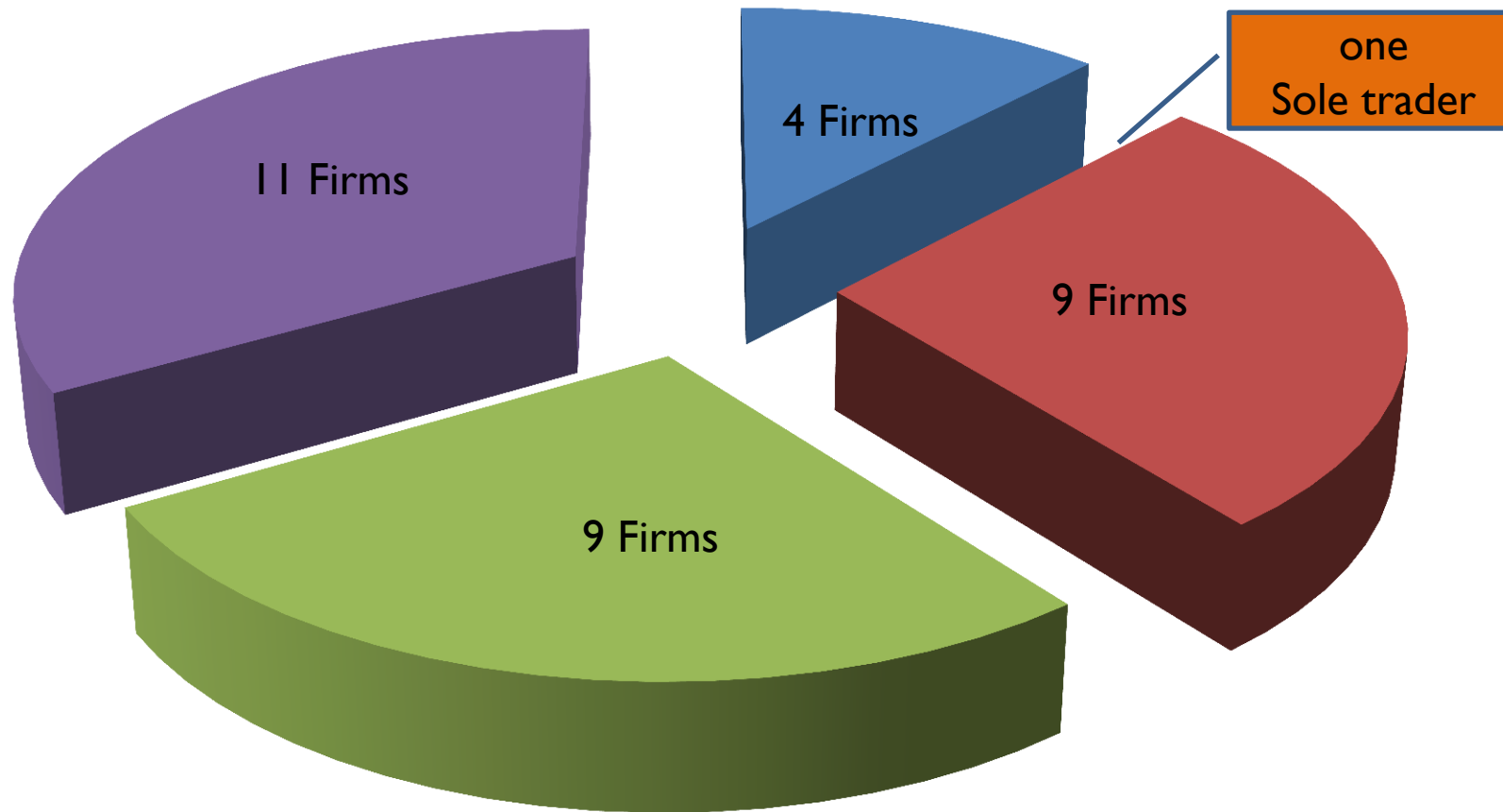


There are also deficiencies in machinery in this sector. Most firms are unable to finance or source affordable financing to purchase modern equipment.

# Detail Breakdown of Employment

Industry	Less than 10	Less than 25	Less than 50	More than 50
<b>Food</b>	*	3	1	4
<b>Beverages</b>	*	2	2	3
<b>Wood &amp; Wood Products / Furniture/Rubber</b>	2	1	1	*
<b>Electrical Products</b>	*	*	*	1
<b>Printed Material/ Other Paper</b>	2	*	2	*
<b>Metal Products</b>	*	*	2	1
<b>Commercial Boxes/ Banana Boxes</b>	*	*	*	1
<b>Soap &amp; Soap Products</b>	*	*	*	1
<b>Chemicals/Other Chemicals</b>	*	3	*	*
<b>Plastic Products</b>	*	*	1	*

## Breakdown of employment by category

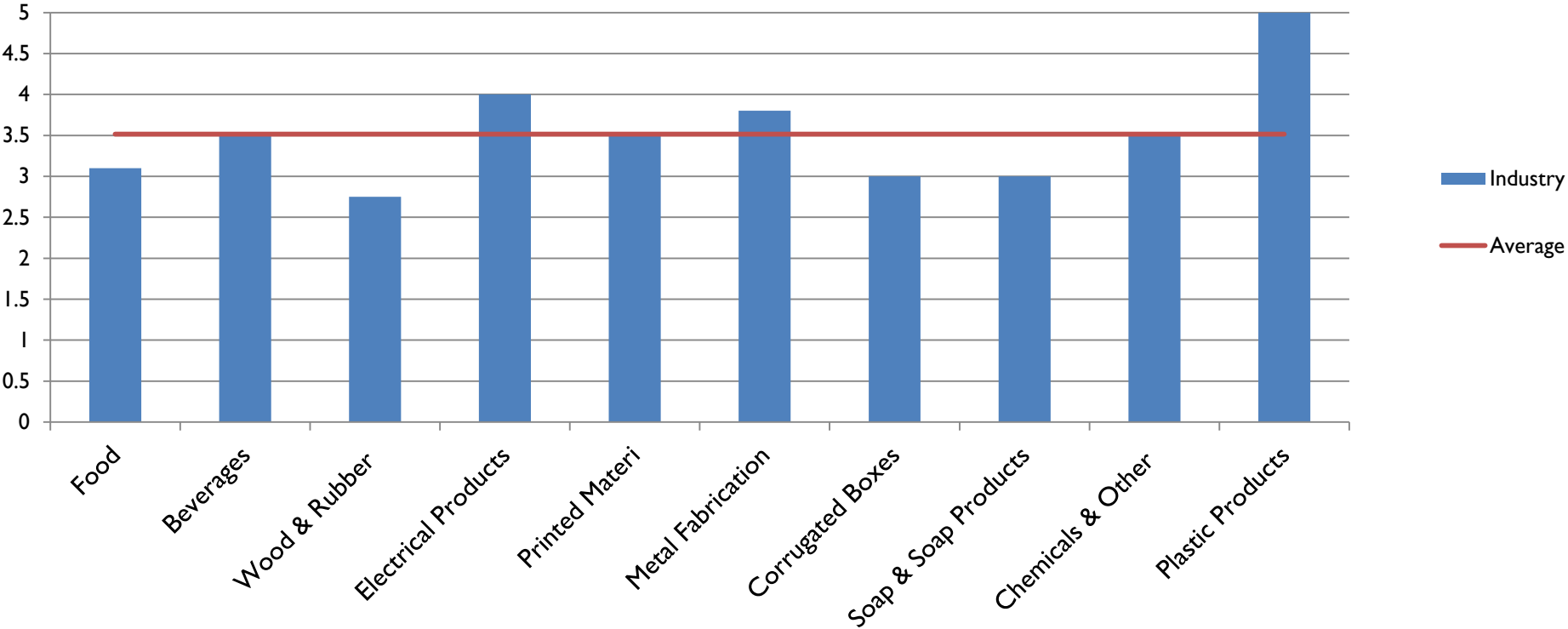


■ <10    ■ >10<25    ■ >25<50    ■ >50



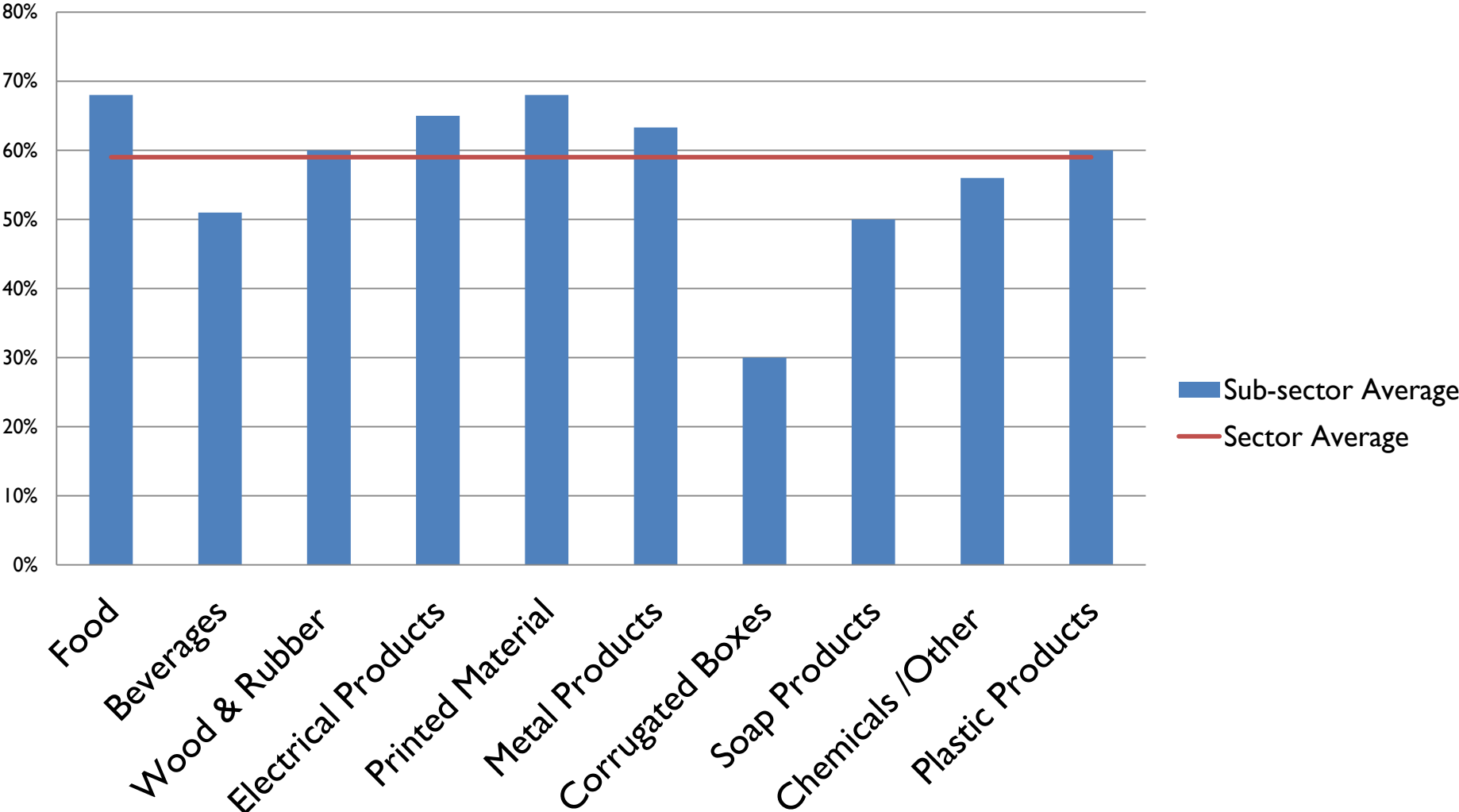
Despite the overall average of 3.5, majority are below the sector average.

**Avg Employee Satisfaction**



Given the current combination of capital and manual labour, firms in the manufacturing sector produce at 59 percent of their potential capacity on average. This implies that there is a 41 percent gap between potential and actual output.

### Capacity Utilization



# Limitations arising from current capacity utilization

- Inefficient use of machinery results in higher per unit cost.
- Current volumes are inadequate to achieve economies of scale and to maximize profits.
- Producing low volumes further constrains the firm and limits its ability to expand and export to regional and international markets.
- Due to low volumes, sales are low and as a result revenues which can be reinvested into the business are limited.





# Further implications

- Aged plant and machinery constrains performance and restricts expansion. Since the cost of maintenance is higher, funds that may have been used for development must be allocated otherwise.
- Higher labour usage may be reflective of the age of capital equipment i.e. modern equipment require less supervision or human input; older machines are more inclined to be semi-automated.
- Moreover, existing deficiencies in labour, increases the need for more supervision which is costly.

# How much is exported?

## Overall:

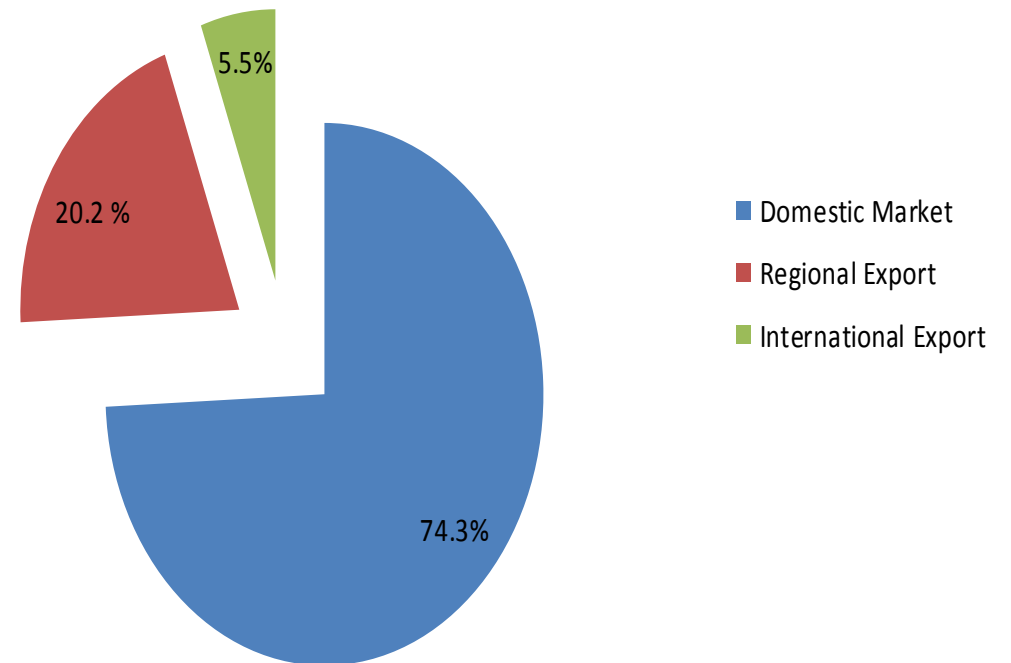
- 81.6 percent of total output in the manufacturing sector remains in the domestic market
- 12 percent is exported regionally
- 6.4 percent to international countries

## In terms of exporting firms:

- 74.3 percent is for domestic consumption.
- 20.2 percent is allocated to regional export.
- 5.5 percent is for international export.

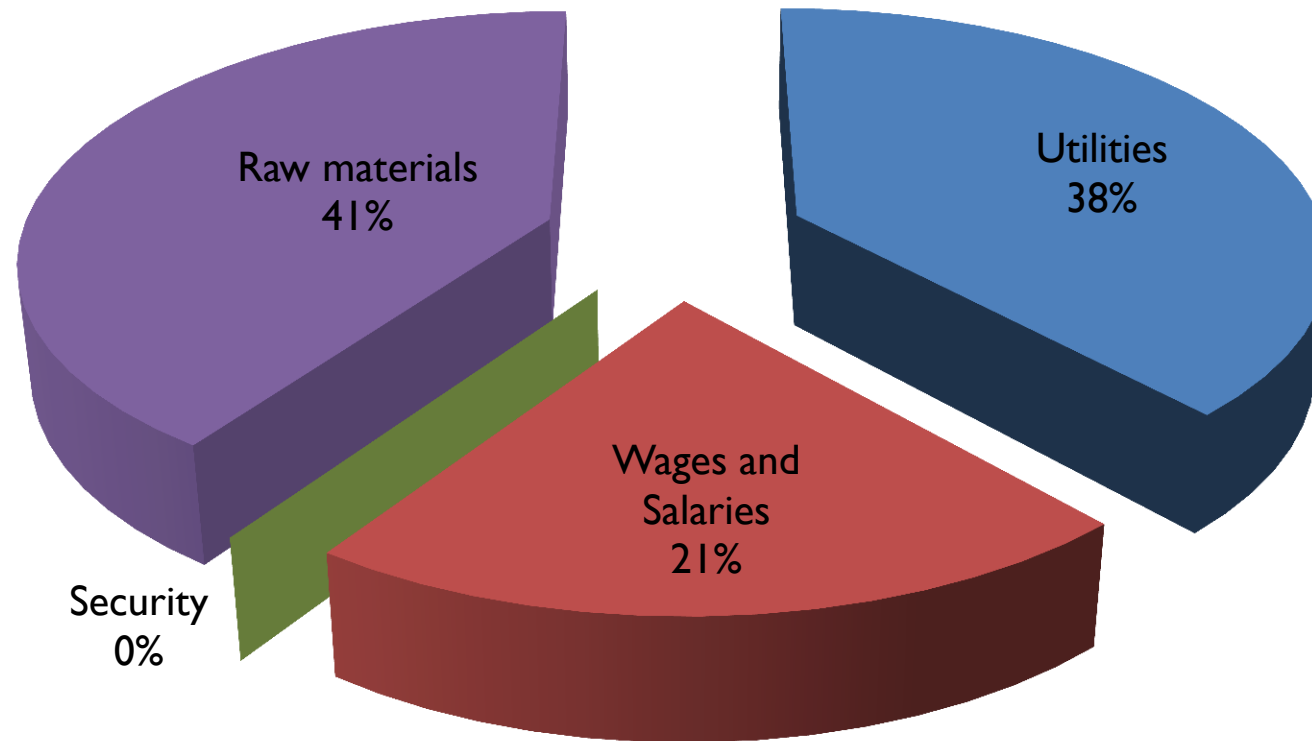
## Distribution of Output

(exporting firms in the manufacturing sector)



# Constraining Cost

Most firms stated that the cost of raw material was the most constraining cost. Following the cost of raw material is the cost of electricity and wages and salaries. The cost of security is minimal.







# Reasons for high cost of raw material

- ❖ **Clearance of raw materials**

VAT is payable upfront as opposed to the previous consumption tax regime which excluded manufactures from paying tax at the port.

- ❖ **Freight Charges**

- ❖ **Shipping Cost**

} High transportation cost

# Recap...

29  
years

Firms in this sector are relatively mature yet are producing at 59% of their potential.

What are the contributing factors to this sector's underperformance?

54%  
Labour

Although this sector relies more on labour, workforce is deficient. To add, most workers have been with company for over 10 years.

Does the current inefficiency stem from poor attitude towards work or difficulty adapting to new technology or equipment?

46%  
Capital

Sector does not make optimal use of machines. Since machines are under-utilized, performance is sub-standard. Also, most comp. require modern equipment.

Is this sector affected by lack of modern equipment. How can this sector gain competitive advantage given its limitations?

59% Capacity  
Utilization

Currently, sector prod. too little relative to investment & structure. This sector finds it difficult to penetrate mkts given its current performance

How can government assist?

Observations

Concerns



Highlighting similarities & trends in various sub-sectors and regions.

# Key Trends

## *How much is purchased by Supermarkets & Hotels*

### Supermarkets

- At present, 32.2 percent of goods produced for domestic consumption are purchased by supermarkets.
- Some of these purchases are ad-hoc; on a needs basis as opposed to a set quota.

### Hotels

- Hotels purchase 14.7 percent.
- None of the manufactures are contracted by these hotels.
- Hotels also purchase goods on a needs basis.

### *However....*

- International brands are very competitive.
- The placement of products at the supermarket is worrisome.
- Limitations are also placed on the size of the products; giving priority to regional and external brands.
- Hotels awarded concessions on products are selling or distributing domestically and compete directly with local firms.

**Let's take a closer look**



# Concerns of three critical sub-sectors in the Industry

## 1) *Food*

- Imported chicken is cheaper than local chicken. As such, domestic companies mainly compete on quality.
- Consequently, firms are unable to meet the set quota of 40% despite having the necessary machinery to produce beyond this quota.
- There are restrictions on the importation of certain input goods or raw materials that would better the quality of products and be a healthier option.

# Cont'd

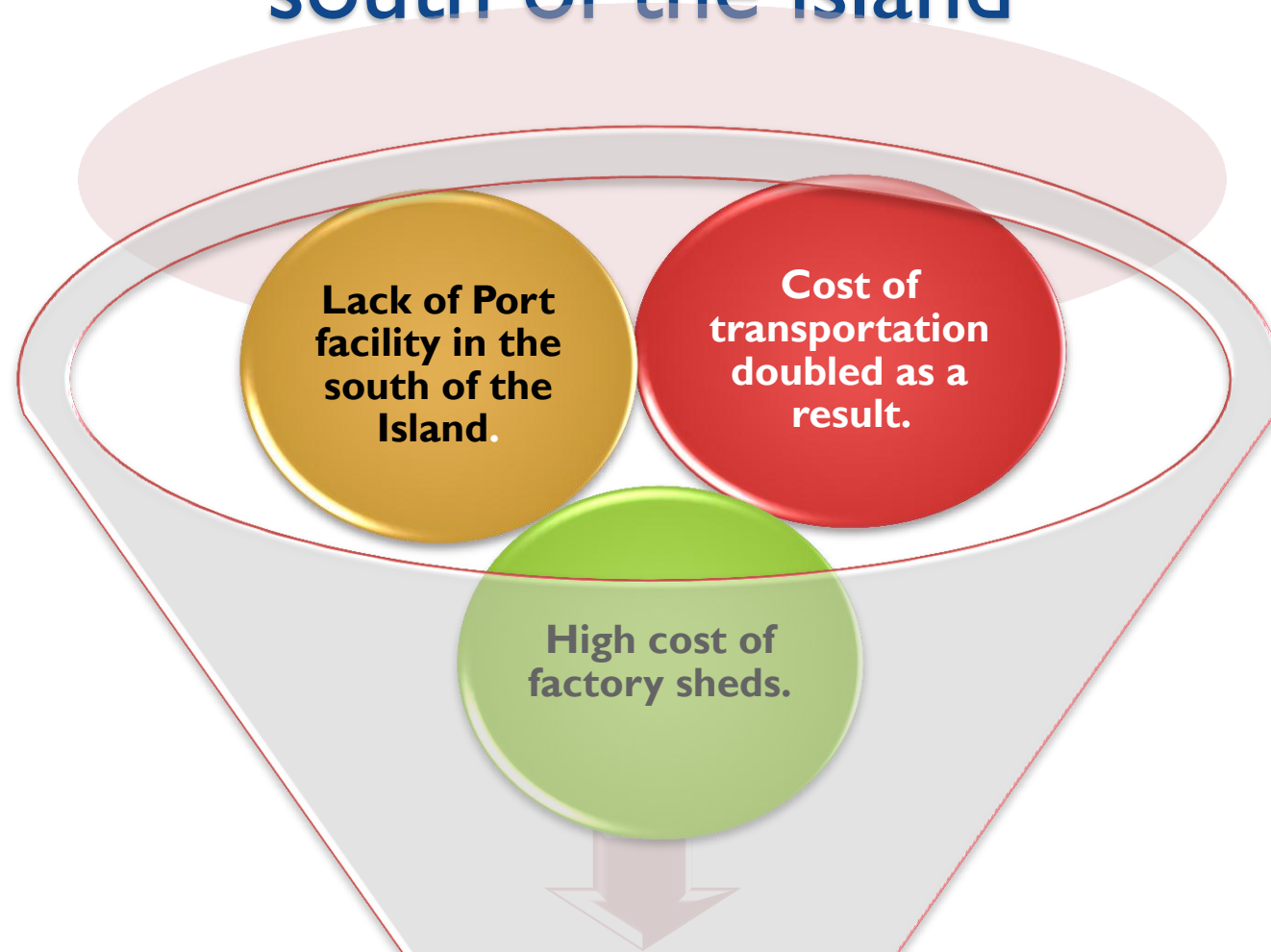
## 2) *Beverages*

- At present, the region does not produce refined sugar; it is very costly to import from international source example the UK.
- Limited restrictions on imports increase competition on the market.
- Also, the classification of specific liquors attracts a lower charge or duty; making it easy for competitors to engage in price wars.

### 3) *Printing*

- Print material is not in demand as it once was; people have deviated to on-line articles and have become self-sufficient in printing their own material.
- It is very difficult to automate production process because of financial constraints and increase competition from the government printery.
- Printing companies experience challenges with the current classification of VAT i.e. a distinction needs to be made between a producer and a publisher.

# Similarities noted from manufacturers in the south of the island



**Contribute to firms being less competitive as operating cost are higher.**



# Comparison between Sub-sectors

## **Which sector exported the most ?**

Windward Island Packaging or Corrugated boxes sub-sector is the largest exporter (in terms of %) exporting 60 percent of its total output to regional markets. But faces the most negative headwinds given issues with its TT subsidiary. This is compounded by its capacity utilization rate being the lowest of all companies

In the international market, North American Assembly is the largest exporter (electrical products). This company receives support from its international parent and received significant shipping discounts due to large volumes. Among the most favorable outlook.

## **Who was most capital intensive ?**

The corrugated boxes sub-sector is the most capital intensive, using 80 percent capital input and 20 percent manual labour.

## **Who was most labour intensive ?**

The electrical products sub-sector is the most labour intensive and utilizes 75 percent labour and 25 percent capital equipment in the production process.

Subsector (average)	Age	Labour	Capital	Capacity Utilization
Food	28 years	66	34	68 percent
Beverage	18 years	54.3	45.7	51 percent
Wood products	30 years	47.5	53.5	60 percent
Electrical products	23 years	75	25	65 percent
Printed Material	61 years	40	60	68 percent
Metal Fabrication	28 years	42.5	57.5	63.3 percent
Plastic products	34 years	40	60	60 percent
Corrugated Boxes	45 years	20	80	30 percent

# Potential for growth?

Positive Outlook  
(94.1%)

Build new facilities  
(12 firms)

Joint Venture.  
Aquisition/  
Merger  
(4 firms)

Introduce new  
product line  
( 7 firms)

Negative Outlook  
(5.9%)

No significant  
changes  
( 2 firms)

# Notable Observations





# Specific concerns common to most meetings were:

Value Added Tax

Data Sharing

Standards and Certification

Ability to Access Finance

Linkages with Tourism

Shipping and Transportation of Goods

Utilities

Education

## VAT Issues Raised

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Impeded their cash flow and subsequently financial viability.

While payment of VAT on inputs was immediate receipt of the VAT to offset this payment was a function of first the length of time necessary to transform the raw material into a finished product and secondly whether the good is sold,

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Departure to the modus operandi under the Consumption Tax regime limits their ability to invest and forces firms to seek short term (often expensive) financing

## Proposed Recommendations

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Were not in favour of extending the VAT payment window to 60-90 days from 30 days

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The possible introduction of a deferred VAT payment system on capital inputs was not favorably received

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Removal on raw materials or payment only when sold was the preferred option

# The Value Added Tax

## Industry Standards

A disparate system of either adaptation or compliance to local or international standards

There was also the issue of which certification or compliance mechanism a producer should employ

Many respondents started but had not finished a compliance standard

Ability to conduct timely and low cost scientific analysis of products

## Recommendation to Raise Industry Standards

A clear cut minimum adaptation standard for each sub-sector needs to be articulated

A practical and cost effective way to address the lack of certification by many businesses, particularly small entrepreneurs is to develop a business incubator.

Gov. should support efforts by SLBS to become ISO 17065 compliant

# Industry Standards and Certification

## Shipping and Transportation Issues

## Shipping and Transportation Recommendations

High cost to ship across the islands and the unavailability and limited timing of certain route

Vicious cycle of low volume production which raises production cost

Timing of shipping routes hinders their competitiveness

Scope for an entity to synchronize shipping arrangements across local manufacturers

collating of multiple shipments can result in sharing and subsequent filling of containers

Smaller schooner type vessels were recommended

# Shipping and Transportation



## Financial and Market Issues

9-12% interest rates not amenable to high cost low volume producers



Little financial analysis of unit cost and profitability per product



Limited business analysis or market research hinders growth and potential to access finance

## Financial Recommendations

### Financing

- Govt should work with ECCB for the creation of Credit Bureau.
- Lowering of deposit rates
- Role of the NIC in equity/low cost loans

### Market Research

- TEPA offers firms a wealth of services particularly in the areas of trade facilitation and product development
- Product costing training

# Financial and Business Analyst Concerns

## Tourism Sector Issues



In no case did a manufacturer, have contractual arrangements to supply hotels



This inhibits manufactures from formally planning their business activities around hotel output



Manufactures are unable to approach financial institutions to source funding

## Tourism Recommendations

- In the first instance efforts should be made for at least short term contracts i.e. at least 6 months with a view to increase to longer terms over time.
- This may be able to be tied in with the receipt of fiscal incentives.

# Linkage with Tourism

## Utility Issues Raised

Water

Not much of a concern except some quality and availability issues.

Electricity

High cost of electricity

Fluctuations in the wattage of the power

Solar technologies hindered to partial use of their facilities i.e. 25 (KWp)

## Utility Recommendations

Water

Continue work with the CDB regarding water projects across the island

Electricity

Implementation of the supporting regulatory statues to give “teeth” to the National Utilities Regulatory Commission (NURC) Bill

# Utilities

## Concerns regarding workers

Paucity of workers with skills in the technical vocations such as electrical, plumbing, refrigeration

Lack the intuitive skills necessary to fully master and control heavy machinery

Manfs.View on worker Concerns

Work ethics and soft skills appear lacking with the ability of staff to learn and adapt to new scenarios being somewhat weak

High levels of absenteeism, a lack of “belonginess to the firm” and a general sense of malaise which sapped productivity levels

## Recommendations

The (NCPC) can take the lead in touring and conducting seminars with select manufactures.

The notion that tech-voc should be thrust upon students who are not academically inclined needs to be relooked

The practical subjects done at the secondary and tertiary levels may be insufficient due to limited resources.

The general sense of lack of enthusiasm for work also suggest deeper social issues which need to be explored.

# Education and Staffing

# Conclusion

- The performance of the manufacturing sector is more sensitive to changes in labour and human issues than capital given the high percentage of human capital *vis a vis* capital.
  - Deficiencies with labour therefore are exacerbated across the industry
- The sector under produces. Capacity utilization rates of 59% mean that assets are under utilized. This has issues for the cost of production and efficiency.



# Conclusion

- High cost of production, limited certification of products or processes and weak labour, fundamentally limit the degree to which firms can export and grow.
- Compounding fundamental weaknesses in the sector are
  - VAT charges on importation of raw materials
  - Limited ability to use new technologies like solar power to defray cost
  - Aged plant and equipment



# Conclusion

- The government and government agencies need to:
  - Assist more firms in conducting market research and raise the level of product development. This can be achieved through bolstering TEPA and SLBS. Both agencies need to become ISO certified.
  - Consider the implementation of an incubator for businesses
  - Incorporate the NCPC work program into addressing productivity issues with the labour force.
  - Current tech-vocational training appears inadequate the curriculum and practical aspects should be strengthened.
  - Review VAT on raw materials for manufactures.