State of the Construction Industry Report

2004

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CHAIRMAN'S MESSAGE

The building industry remains a key pillar to our local industry amid attempts to propel a diversifying economy in tandem with the ride of global trends. According to official statistics, the Contribution to GDP by the construction industry in 2003 marked Lm 48,123 000 compared to the Lm 37, 092 000 in 1997. Despite slower world economic growth, the Maltese building industry continued to witness a positive trend even in the year 2004, with official figures[1] showing that the contribution of the **Mining and Quarrying** sector to gross value in 2004 were increased by a further Lm 0.3 million, meaning that the industry's operating surplus marked an improvement of 6.3 per cent over the year 2003. In gross value added terms, the share of the **Construction** sector to improved from Lm 75.3 million in 2003 to Lm 77.2 million in 2004, representing an increase of 2.5 per cent. Full time employment in the industry stands at 12,249 in 2003 compared to 10,076 in the year 2000.

These figures are encouraging, the more so, since official figures show that construction companies in the UK for example are been hit harder than most other industries with house builders being unable to step up production and future workload being hampered by shortages of skilled engineers and low fee levels. [2]

On behalf of the Building Industry Consultative Council, I am pleased to transmit the first ever State of the Construction Industry Report for the Maltese Islands. This document is considered to be an important document to all those stakeholders who are in some way or another already involved in the construction industry or those who are contemplating moving into this sector.

As already stated, the construction industry represents one of the most important sectors to the local economy. Not only does it contribute to a significant portion of the country's GDP but it is also one of the sectors that carries a significant portion of the labour force.

[1] National Statistics Office, Malta.
[2] http://www.dti.gov.uk/construction/stats/soi/soiwinter0203.htm

The State of the Construction Report aims to capture the state of play in this sector from a number of angles be they from an economic, employment, product or perception standpoint. It is a tool that may be used by all those concerned in order to understand better the mechanics of this sector.

The 2004 report is the first in an intended annual series of such reports. It is therefore the start of a process that will see further improvements and refinements being carried out in subsequent additions.

The BICC is indebted to the authors, Perit Kevin Gatt and Ing. Helga Pizzuto, as well as those stakeholders who in some way or another contributed to the completion of this first report. These included architects, contractors, MEPA, ETC, the Association of Estate Agents, the Housing Authority, the National Statistics Office and other persons who in some way or another supported this initiative.

As much as possible we have tried to obtain the latest statistics available as at end 2004, striving further to include also relevant data released by the National Statistics Office in recent days. However, the data that is reproduced within this report have to reflect the timing of statistics as published by the relevant competent authorities and thus, as with any sectorial analysis, lag behind the publication date of this document.

For the first issue, the report focuses on a key number of objectives that are thought to be the most relevant to the construction industry. These include:

- ***Economic Criteria***
- ***Malta Environment and Planning Authority***
- ***Housing***
- ***Non-residential Building;***
- ***Infrastructure***
- ***Materials and Pricing***
- ***Quarry Industry***
- ***Capacity***
- ***Training***
- ***Surveys and Opinion Polls***

It needs to be pointed out, however, that the strength of this report, and its continued relevance lies in the compilation of the data, which at times, is not an easy task. As a matter of fact, throughout the assignment we have faced a number of difficulties in obtaining all the data we would have liked to have had available.

Thus, we take this opportunity to appeal both to all the stakeholders concerned that this effort is one which is intended to continue to stimulate the well being of a sector which has always reflected the national performance of our economy and that this report would not be possible without the timely compilation and submission of data requested.

In conclusion, BICC hopes that the contents of this report provide a guiding rationale for all relevant Authorities and stakeholders in a bold effort to consolidate our local building industry.

Perit Robert Musumeci
BE&A(Hons) MSc (Conservation Tech.) Eur. Ing. A&CE
BICC Chairman
11-04-05

FORWARD

The construction industry represents one of the most important sectors of the local economy. Not only does it contribute to a significant portion of the country's GDP but it is also one of the sectors that carries a significant portion of the labour force. It is thus not surprising that the State of the Construction Industry Report be deemed as an important document to all those stakeholders who are in some way or another already involved in the construction industry or those who are contemplating moving into this sector.

The State of the Construction Industry Report aims to capture the state of play in this sector from a number of angles be they from an economic, employment, product or perception standpoint. It is a tool that may be used by all those concerned in order to understand better the mechanics of this sector.

This is the first in an intended annual series of such reports. It is therefore the start of a process that will see further improvements and refinements being carried out in subsequent additions. The authors are indeed grateful to all those stakeholders who in some way or another contributed to the completion of this first report. These included architects, contractors, MEPA, ETC, the Association of Estate Agents, the Housing Authority, the National Statistics Office and other persons who in some way or another supported this initiative. Our thanks also goes to the Chairman, Board, Executive Secretary and all the members of staff at the Building Industry Consultative Council (BICC) for their support and understanding during the compilation of this report.

It needs to be pointed out that the strength of this report lies in the compilation and analysis of the data that is relevant to the sector. Throughout the assignment we have faced a number of difficulties in obtaining all the data we would have liked to have had available. May we take this opportunity to appeal both to the BICC as well as to all the stakeholders concerned that this effort is one which is intended to continue to stimulate the well being of a sector which has always reflected the national performance of our economy and that this report would not be possible without the timely compilation and submission of data requested. As much as possible we have tried to obtain the latest statistics available as at end 2004. However, the statistics that are reproduced within this report have to reflect the timing of statistics as published by the relevant competent authorities and thus, as with any sectorial analysis, lag behind the publication date of this document.

The authors sincerely hope that this document will be received well and that it may fulfill the intentions with which it has been prepared, that is, to give all stakeholders having an interest in the construction industry a snapshot of the performance within the sector.

SYNOPSIS

This report, which is being complied for the first time, is intended to provide all stakeholders in this sector with a snapshot of the state of the industry. This report is being based on statistical information and should provide the basis for consultation on, and then consideration of, the economic state of the construction industry. It addresses a key number of areas that are thought to be the most relevant to the construction industry

Economic Criteria

In addressing the industry's economic situation and prospects, the following economic criteria have been considered.

Contribution to Gross Domestic Product (GDP)
The industry suffered a setback in the period 1997 – 1998 and by the year 2000 had recovered to levels similar to those that prevailed during 1997. Over the period 2001 – 2003 the construction industry has contributed over Lm 40 million per year to GDP, peaking during the year 2002. During the year 2002, the construction industry also contributed the largest percentage proportion to GDP registered during the period 1998 - 2003.

The correlation coefficient between the contribution to GDP by the construction industry and the national GDP is established at 0.76. This clearly shows a strong link between the performance of the construction industry and the resultant GDP. In other words, it is likely that a decrease in construction activity during a particular year would have a likely consequential effect on the national GDP. Conversely, a strong performance in this sector is likely to be reflected in annual GDP performance.

Employment
Employment within the construction industry has increased year-on-year in absolute terms as well as a proportion of the total work force employed in the Maltese Islands. However, the growth manifested has been slowing down since 2001.

Capital
Firms operating in the construction sector have decreased their investment in one or more of the following areas - land, building plant, machinery and vehicles. An overall net decline in the employment of working capital over the period under review has been noted, with negative growth in the period 2000 – 2001. 2003 however saw an increase in investment, taking the figures to the highest levels registered throughout the period under review. It is interesting to note that the investment increase has been towards machinery and equipment**.** Private enterprises constitute the main source of increase in capital invested with a *quasi*-constant 70% plus of total Gross Fixed Capital Formation.

Malta Environment and Planning Authority

In establishing the impact of MEPA on the industry it has been thought that the best information on those policies that may warrant a review be obtained from key stakeholders. Whilst limited feedback has been received it is considered that the responses have highlighted significant areas which if addressed can continue to contribute positively towards the well being of the industry.

Housing

The trend in the demand for housing provision has been established from trends in the supply of new housing stock and fluctuations in property prices. In order to provide a detailed representation of these indicators, data has been subdivided by housing typology taking into account the most common housing typologies that are currently available in Malta.

While there has been a substantial rate of growth in the number of housing units issued with a development permit in the period 2001-2002 preliminary figures for 2003 indicate that the rate of growth may be slowing down. This reduction in growth has not been reflected across all the types of dwellings and can be attributed to a substantial reduction in the number of approved detached and semi-detached dwellings. On the other hand there has been a constant increase in the number of approved apartments and maisonettes throughout the period 1999 – 2003.

A number of the approved housing units are a result of redevelopment and conversion with redevelopment being the largest contributor to increase in housing stock of the two. Over the period 2001-2003 there has been a year on year increase in the number of residential units being gained through redevelopment.

Social housing comprises a part of the demand for new housing. During the period 1999 – 2003, nearly 5% of the approved housing units were developed as social housing. The number of social housing units developed in the period 2000 - 2003 has increased with figures ranging between two to three times the figures for 1999 and 2000. The increase has been primarily in the form of finished dwellings.

There has been a continued trend of increasing property prices. During 2003 the largest increase was seen in the price of detached and semi detached dwellings with the maximum rate of increase at over 70% noted on fully detached villas and the lowest increase at 5% was seen in the price of flats. Rental values have also seen a steady growth between 1999 and 2003 with the largest increases being seen in the detached and semi-detached market.

Non-residential Buildings

The number of projects for new commercial buildings such as offices, factories, warehouses, hotels etc. has been established based on MEPA data in respect of development permits issued. Data has been subdivided by typology based on the categorisation of development applications used by MEPA.

During the period 1999 – 2002 there was a positive trend in the number of permits approved indicating possible growth in the sector, however based on 2003 figures this trend may have started to slow down. The highest number of permits during the five year period was registered in 2002 at 607 approved applications, while 2003 registered a considerable drop with a total of 385 applications being approved.

The downward trend in the number of development permits issued during 2003 is a reflection of a drop in the number of applications submitted which has occurred across all the typologies except for the area of community and health services.

Infrastructure

The country's infrastructure provides a considerable impetus to the construction industry. It was therefore attempted to quantify as much as possible the work quantum which infrastructure poses to the industry. Detailed comprehensive data from utilities was not made available and the data that has been captured in this respect relates to investment by Government. Investment in construction related projects in the period 2002-2004 by each Ministry has been quantified. The total Government expenditure over the past three years has seen a yearly increase averaging at 20% per year with the investment for 2004 being estimated at Lm 77.5 million.

Materials and Pricing

Material and products' pricing is indeed one of the areas which often enough varies widely. An exercise was undertaken to establish the indicative price brackets for those core materials that stakeholders involved in the construction industry are most likely to require or provide. The list of items to be surveyed was agreed with BICC and 22 contractors/architects were surveyed. For each item a Minimum, Maximum and Average price was determined in both imperial and metric units. Wide variations in pricing were noted.

Quarry Industry

At present no accurate data of volumes of stone being extracted is available and the salient trends that have occurred in the quarry industry are therefore based on information contained in the Minerals Subject Plan for the years 2000 – 2010 and on MEPA data made available in respect of development permits.

The MEPA adopted strategy presumes against new quarries. In fact over the past 5 years there have been 41 applications for extensions of existing stone block quarries and 33 applications for extensions of the existing sand/gravel quarries. This is an indicative number in view of a total number of just under 100 quarries.

Consultants

Attempts to establish the demands and trends for the various specialities that require consultancy inputs in the various cycles of the construction industry were made. However indications are that no data that would allow for the necessary quantification and stratification of the demand in this sector is currently being collated.

Capacity

The demand on the construction industry will naturally need a response from the human resources that can actually deliver the products and services required. Analysis of a number of relevant factors has been undertaken.

Workforce Availability
If one were to summarise some of the main observations that could be put forward from ETC data, the construction industry is likely to be experiencing a shortage in the managerial and professional classes and a surplus in the trades. However one needs to interpret this data with caution in particular in view of the claims and press releases that have been issued from within the construction industry that continue to indicate that the industry cannot find the human resources that it requires to pursue its current workload. In fact, the construction industry has called upon the authorities to allow them to use foreign labour in order to meet the shortfall that they are experiencing.

Wages
The Labour Force Survey (December 2003) estimates that the average wage in Malta amounts to Lm 5032.60. The average wage in the Mining and Quarrying Sector is equivalent to Lm 5400.88 whilst that within the Construction Sector is established at Lm 4399.21.

Training
There are a number of educational institutions that offer formal and informal courses that are related to the construction industry. The current trend is for contractors to train their employees at the workplace. A need for specific skills training at post-secondary level was felt. Employers complained that it was difficult to find people working within this sector, and it was common to lose their employees, often after they have completed their training and become skilled workers. They envisaged that some sort of apprenticeship within the construction industry is possible and that the Government should support their economic sector through more investment in providing skilled workers.

Contractors also commented on the courses currently provided by the BICC. They felt that the service being provided was good and served the sector well.

Trend Survey

A survey has been carried out during the first quarter of 2004, and addressed among others: employment, turnover and profits in the last 6 months; future employment scenario; future turnover; future profits; future investment in machinery; outlook in the construction sector and issues hindering business expansion.

The outlook that emerges is finely poised between a normal to bad outlook with both responses garnishing 40% each of the total responses. It is thus safe to conclude at this stage that the construction industry needs to be closely monitored in order to address those issues that might be a threat or risk to its well being.

The main three reasons being attributed as causing contractors difficulty in expanding their business are the following (in order of importance):

- delay in the issue of development permits from MEPA;
- lack of skilled workers; and
- delays in payments by clients.

Commencement Notices

An attempt was undertaken to obtain data in respect of actual start-up dates of projects. The available data in respect of commencement notices and compliance certificates was analysed in order to draw some observations with respect to the demand picture as established in earlier sections for housing and non industrial buildings.

1.0 Economic Criteria

The construction industry has always been considered to be one of the major drivers of the Maltese economy. In fact, official statistics often consider the construction industry as a distinct sector that is measured in order to determine its contribution and effect on the local economy. In illustrating the impact of the construction industry on the local economy the following parameters have been chosen:

- growth in contribution of the construction industry to Gross Domestic Product (GDP);
- correlation between contribution to GDP by the construction industry and national GDP;
- persons employed within the construction industry; and
- gross domestic fixed capital formation.

These four parameters should provide a sufficient indication to determine the performance of the construction industry and the economy's sensitivity to the industry's performance. In providing these indicators extensive reliance has been made on the data published by the National Statistics Office.

1.1 Contribution of the Construction Industry to GDP

The gross domestic product (GDP) is a measure of how well the country's economy has been faring over the period. *Gross Domestic Product at factor cost* measures the value of all goods produced including all subsidies, but excluding all indirect taxes. Table 1.1 summarises the contribution to GDP by the construction industry between the period 1998 – 2003 as well as the year-on-year change.

Table 1.1 – Contribution to GDP from the Construction Industry
Source – National Statistics Office, News Release – Gross Domestic Product for 2003, 8 April 2-2004[3]

Year	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Contribution to GDP by Construction Industry (Lm 000)	36073	32880	37106	42004	48441	48123
Growth in Contribution to GDP by Construction Industry (Lm 000)	(1019)	(3193)	4226	4898	6437	(318)

3 Although this report covers data up to an including the year 2003 in terms of Economic criteria, a News Release by the NSO related to Gross Domestic Product for 2004 made the following observations.

The contribution of the **Mining and Quarrying** sector to gross value added remained approximately the same level as in 2003, at 0.4 per cent. However, in 2004, gross value added in this sector increased by Lm 0.3 million. The industry's operating surplus consequently exhibited an improvement of 6.3 per cent over 2003. The increase in the gross value added in this sector can be attributed mainly to an increase of 2.1 per cent in the compensation of employees.

The share of the **Construction** sector to gross value-added remained approximately the same as in 2003 at 4.8 per cent. The gross value added in this sector improved from Lm 75.3 million in 2003 to Lm 77.2 million last year, representing an increase of 2.5 per cent. The industry's compensation to employees increased by 7.1 per cent whereas the operating surplus witnessed a diminution of about 0.7 per cent.

(NSO, News Release – Gross Domestic Product for 2004, 10th March 2005)

From Table1.1 it is evident that the industry suffered a setback between the period 1998 – 1999 and by the year 2000 had recovered to levels similar to those that prevailed during 1997. A drop was also registered in 2003 when compared to the previous year. Over the period 2001 – 2003 the construction industry has contributed over Lm 40 million per year to GDP, peaking during the year 2002. During the year 2002, the construction industry also contributed the largest percentage proportion to GDP.

1.2 Contribution to GDP by Construction Industry & National GDP

It is also important to establish the correlation between the contribution to GDP by the construction industry and the national GDP. Establishing the existence of a correlation between these two parameters would mean that the performance of one is likely to impact the performance of the other. It is in this respect that the impact of the construction industry on the national GDP needs to be determined for it will demonstrate the relationship between the national economy and the construction industry. Table 1.2 summarises the data for these two parameters between 1994 and 2003. This period has been chosen in view of the lack of strict comparability between this period and previous data.

Table 1.2 - Contribution to GDP by the Construction Industry Compared to GDP, 1994 – 2003
Source – National Statistics Office, News Release – Gross Domestic Product for 2003, 8 April 2004

Year	GDP contribution from construction industry (Lm 000)	National GDP (Lm 000)	Growth in GDP contribution from construction industry (Lm 000)	Growth in National GDP (Lm 000)
1994	33717	919342	n/a	n/a
1995	35326	988943	1609	69601
1996	35722	1052919	396	63976
1997	37092	1117459	1370	64540
1998	36073	1197932	(1019)	80473
1999	32880	1259922	(3193)	61990
2000	37106	1337287	4226	77365
2001	42004	1388548	4898	51261
2002	48441	1430052	6437	41504
2003	48123	1450041	(318)	19989

The correlation coefficient between the contribution to GDP by the construction industry and the national GDP is established at 0.76. This clearly demonstrates a strong link between the performance of the construction industry and the resultant GDP. In other words, it is likely that a decrease in construction activity during a particular year would have a likely consequential effect on the national GDP. Conversely, a strong performance in this sector is likely to be reflected in annual GDP performance.

It is also interesting to chart the growth rates that have occurred over the same period between the contribution to GDP from the construction industry and the national GDP. This is illustrated in Figure 1.1

Figure 1.1 – Growth in Contribution from Construction Industry and National GDP

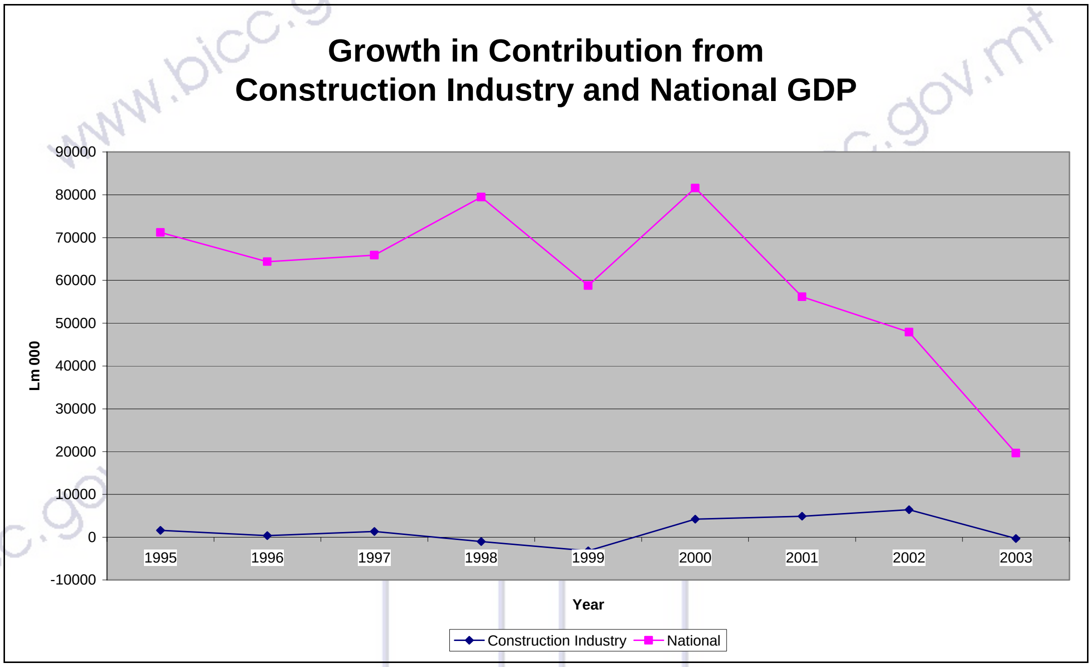

Figure 1.1 clearly shows that most of the crests and troughs of the two lines representing the growth of contribution to GDP by the construction industry and the national GDP occur simultaneously. One must also bear in mind that other sectors may at times contribute to offset the gains or losses made by this industry and which would therefore alter the growth pattern similarities.

1.3 Employment within the Construction Industry

The level of employment within the construction industry is a strong indicator of the activity and performance of the industry. It is likely that an industry that supports a steady growth is an indication of an industry that is thriving. On the other hand, layoffs from within the sector are usually a reflection of a decrease in activity. For this purpose employment figures for the period 2000 - 2003 within the construction industry are being presented. This data, which is presented in Table 1.3, has been lifted from the Labour Force Survey applicable to each calendar year.

It is evident that employment within the construction industry has increased year-on-year in absolute terms as well as a proportion of the total work force employed in the Maltese Islands. However, the growth manifested has been demonstrating signs of a slow down. This may be due either to local conditions that might have created some uncertainty or may be symptomatic of a real slowdown that will continue to manifest itself during the forthcoming years. However, the data set currently presented as part of the Labour Force Survey does not provide an adequate period to make any definitive conclusions and it is therefore of utmost importance to pursue this tracking exercise in order to obtain firmer indications accordingly.

Table 1.3 – Employment within the Construction Industry and Growth trends, 2000 – 2003
Source: Labour Force Survey 2000, National Statistics Office, Malta
Labour Force Survey 2001, National Statistics Office, Malta
Labour Force Survey 2002, National Statistics Office, Malta
Labour Force Survey 2003, National Statistics Office, Malta

	December 2000			December 2001			December 2002		
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total
Males	9491	184	9674	10678	394	11072	11255	305	11560
% Males	9.6	6.2	9.5	10.7	11.7	10.7	11.5	6.8	11.3
Females	288	113	402	210	0	210	380	121	501
% Females	0.8	1.4	0.9	0.6	0.0	0.5	1.0	1.4	1.1
Total	9779	297	10076	10888	394	11282	11635	426	12061
% of Labour Force	7.3	2.7	6.9	8.1	3.7	7.7	8.6	3.2	8.1
				2000 – 2001			**2001 – 2002**		
Males				1187	210	1398	577	-89	488
% Change (Males)				12.5	114.1	14.5	5.4	-22.6	4.4
Females				-78	-113	-192	170	121	291
% Change (Females)				-27.1	-100.0	-47.8	81.0	n/a	138.6
Total				1109	97	1206	747	32	779
% Change (Total)				11.3	32.7	12.0	6.9	8.1	6.9

	December 2002			December 2003		
	Full time	Part time	Total	Full time	Part time	Total
Males	11255	305	11560	11386	396	11782
% Males	11.5	6.8	11.3	11.7	3.0	11.6
Females	380	121	501	405	62	467
% Females	1.0	1.4	1.1	1.1	0.5	1.0
Total	11635	426	12061	11791	458	12249
% of Labour Force	8.6	3.2	8.1	8.8	3.44	8.3
				2002 – 2003		
Males				131	91	222
% Change (Males)				1.2	29.8	1.9
Females				25	-59	-34
% Change (Females)				6.6	-48.8	-6.8
Total				156	32	188
% Change (Total)				1.3	7.5	1.6

Registered part-time workers in the construction industry form but a very small portion of the total registered workers employed within this industry. A marginal increase is also noted in the amount of registered part-time workers over the period under consideration. Similarly, the number of females employed within the construction sector is also very low and, after a reduction of 50% of the total female workforce between the years 2000 and 2001, this amount steadied to just over 501 by December 2002 and dropped to 467 in 2003.

1.4 Gross Fixed Capital Formation

The gross domestic fixed capital formation is a summary of the total amount of additional capital employed by the industry. This parameter gives an indication of how favourable future growth prospects are likely to be because the greater the GFCF the more favourable will be the outlook for the sector.

Table 1.4 summarises these performances over a six-year period ranging from 1998 to 2003.

Investment in the construction industry by way of additions in capital employed (i.e. growth of GFCF) show a decrease over the years 2001 and 2002. This may be an indication of a slowdown in the industry albeit still registering net year-on-year growth. This has been mirrored in other parameters wherein, although a growth has been registered year-on-year, this rate of growth is inferior to that of previous years. The year 2003 saw an increase in investment, taking the figures to the highest levels over the period under review. It is interesting to note that the investment increase has been towards machinery and equipment**.**

Private enterprises constitute the main source of increase in capital invested with a *quasi*-constant 70% plus of total GFCF. This indicates the importance of the private sector to the well being of the construction industry. The major annual increase in the private sector's contribution to GFCF was in the year 2000 where this amount constituted slightly over 80% of total GFCF. On the other hand the year 2002 represents the lowest contribution to GFCF during the period under review and this is also the lowest percentage contribution to total GFCF.

Table 1.4 – Gross Fixed Capital Formation (GFCF) by Type of Purchaser

Gross Fixed Capital Formation by Type of Purchaser	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Private Enterprise	**247916**	**254582**	**328814**	**282222**	**239939**	**308193**
% of total GFCF	**74.3**	**74.9**	**80.2**	**74.3**	**68.4**	**73.5**
Construction	67293	53485	60603	75864	70511	72272
Machinery and Equipment	180623	201097	268211	206358	169428	235921
Government Enterprises	**24147**	**15765**	**14453**	**26500**	**20332**	**15078**
% of total GFCF	**7.2**	**4.6**	**3.5**	**7.0**	**5.8**	**3.6**
Construction	5894	2985	3071	4565	4851	3731
Machinery and Equipment	18253	12780	11382	21935	15481	11347
General Government	**61498**	**69628**	**66752**	**70969**	**90379**	**95970**
% of total GFCF	**18.4**	**20.5**	**16.3**	**18.7**	**25.8**	**22.9**
Construction	38929	51225	49835	54252	72716	78239
Machinery and Equipment	22569	18403	16917	16717	17663	17731
Gross Domestic Fixed Capital Formation	**333561**	**339975**	**410019**	**379690**	**350650**	**419242**
Year on year change		**6414**	**70044**	**(30329)**	**(28994)**	**68592**

1.5 Summary

In conclusion to this section it is worth summarising the key economic indicators that have been identified as yielding an understanding of the current state of the construction industry. These parameters are summarised in Table 1.5.

Table 1.5 – Summary of Main Indicators

	1998	1999	2000	2001	2002	2003
Main Indicator						
Contribution to GDP from the Construction Industry (Lm 000)	36073	32880	37106	42004	48441	48123
Growth in Contribution to GDP from the Construction Industry (Lm 000)	(1019)	(3193)	4226	4898	6437	(318)
Total number of employees in the construction industry (Number)			10076	11282	12061	12249
Percentage of labour force employed within the construction industry (%)	n/a	n/a	6.9	7.7	8.1	8.3
Gross Fixed Capital Formation for the Construction Industry (Lm 000)	333561	339975	410019	379690	350650	419242

2.0 Malta Environment and Planning Authority

The Malta Environment and Planning Authority (MEPA) plays a primary role in shaping the development activity on the islands. Planning and environment related policies have a direct and wide influence on the construction industry in that they impact the level of development activity, they can promote specific development types that may necessitate new construction skills or the use of specific equipment and they can have an impact on materials in use and operations in general.

During 2004 MEPA embarked on two significant policy review activities. The Policy and Design Guidance 2004 was presented for public consultation, and has now been released, and the second phase of the Structure Plan Review comprising of the public consultation on the key issues and strategic growth scenarios was launched.

In order to highlight the significant areas meriting debate a number of key stakeholders have been requested to provide feedback in respect of MEPA operations and active policies where these are thought to merit review. Very few stakeholders have responded and the policy related input has been partly in respect of the Policy and Design Guidance 2004.

The BICC has also, over the past few years, reported on the different policy interpretations being adopted by the various planning decision and consulting bodies and highlighted areas requiring review.

2.1 Improvements Within MEPA

The following changes undertaken by MEPA have been considered positively:

- Appointment of an audit officer;
- The introduction of a procedure whereby applications which are not treated by MEPA by the target date are referred to the PA board which has to treat these by five days; and
- Appointment of multiple DCC boards.

2.2 Aspects of MEPA Modus Operandi Meriting Review

The following are the aspects of the MEPA modus operandi which have been highlighted as meriting review:

- The Board members should not be allowed to listen to the Directorate informally since this is creating an unfair hearing.
- Applications should not take more than three months to be processed. Request for consultations is often done piecemeal rather than comprehensively thus lengthening the process unnecessarily.
- In many cases MEPA is seen as using two weights, two measures approach for similar applications.

- The application of draft local plan policies is not consistent.
- A mechanism is required to cover situations where the site plan submitted is incorrect without the need to have to reapply.
- A mechanism is required for issuing compliance on buildings erected between 1968 and 1992 where permits are not found.
- Applications for sanctioning should not be treated with a fine, particularly in minor cases.
- Definite appointments should be given for attendance at DCC meetings as current system results in substantial wasted time.
- Reconsiderations should not be postponed indefinitely.
- The time taken between approval of application and the actual issuing of permit should be reduced.
- Members of the Authority should not retain the same position for more than ten years.

2.3 MEPA Policies Meriting Review

The following are the areas meriting review that have been highlighted:

- Requirements for parking provisions as applied to medium sized commercial buildings within urban zones and warehousing.
- Ban on offices in Valletta and Floriana.
- Policies related to building heights as applied to development adjoining Urban Conservation Areas.
- Internal Residential Development: policies applied to internal residential units should be such as not to hamper such development.
- Introduction of policies that encourage basement dwellings as against higher buildings and urban sprawl.
- Policies applicable to development in village cores. In particular policies in relation to floor height and criteria for demolition or conservation.
- Policies related to building heights and additional floors as applied to hotels, large developments and to other developments in specific localities/areas.
- Policies in respect of garages for heavy equipment.

  In the 2nd quarter of 2004 MEPA issued a public consultation paper that recommends an interim policy framework to address open storage areas. A number of policies related to the storage of heavy vehicles and equipment, amongst others, have been taken into consideration in this paper. The paper analysis the current demands in relation to plant machinery and heavy commercial vehicles as related to the construction industry.

- Policies that limit showroom and commercial buildings size in specific areas.

In addition it is envisaged that clarity in policy interpretation will lead to a faster determination of applications reducing re-consideration requests and appeals from decisions. This is a particularly relevant aspect in view of the fact that contractors, in the survey carried out as part of this report, have attributed delays in the issuing of development permits as a primary reason for the lack of expansion in their business.

3.0 Housing

The development of housing contributes significantly to the activity in the construction industry and is one of the key sectors that consume significant quantities of quarried stone[4]. The trend in the demand for housing provision therefore provides an indicator of the current and forecasted construction activity in the area.

Demand for new housing provision can be indicatively established from trends in the supply of new housing stock and fluctuations in property prices. In order to provide a detailed representation of these indicators, data has been subdivided by housing typology taking into account the most common housing typologies that are currently available in Malta namely:

- flats/apartments
- maisonettes
- terraced houses
- semi detached villas
- detached villas.

3.1 Demand for New Housing Provision

Trends in the demand for new housing provision and related construction activity can be established from the development permits. However as development applications relative to dwellings may constitute a single, multiple or multi-type aggregate, trends in the number of applications approved while indicative of the activity in the sector need to be supplemented by specific data in respect of the number and type of dwelling units approved. The required data for the period 1999 – 2003 has been extracted by MEPA and is captured in Table 3.1.

Table 3.1: Number of Approved Dwelling Units by Housing Typology
Source: MEPA

Approved Units by Housing Typology					
	1999	**2000**	**2001**	**2002**	**2003**
Apartment	1452	1473	2657	3420	4548
Maisonette	473	583	774	910	1085
Terraced House	271	246	203	135	414
Other (Semi-Detached, Villas, etc)	77	67	546	1016	81
Totals	**2273**	**2369**	**4180**	**5481**	**6128**
Growth		**96**	**1811**	**1301**	**647**

While there has been a substantial rate of growth in the period 2001-2002 preliminary figures for 2003 indicate that the rate of growth may be slowing down. This reduction

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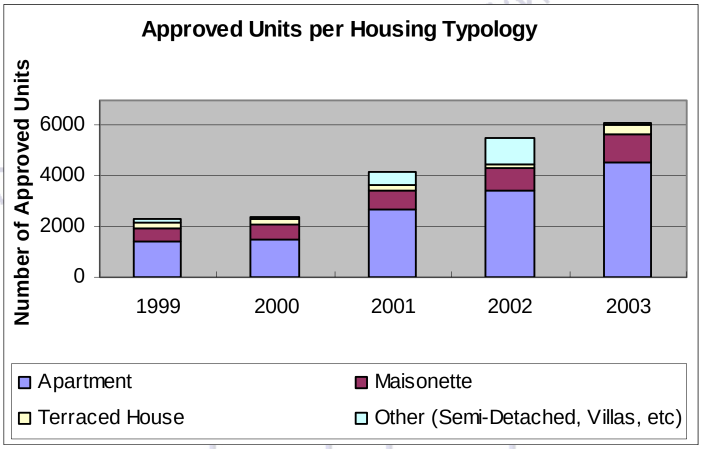
in growth has not been reflected across all the types of dwellings and can be attributed to a substantial reduction in the number of approved detached and semi-detached dwellings. On the other hand there has been a constant increase in the number of approved apartments and maisonettes throughout the period 1999 – 2003. The trends by typology are depicted in Figure 3.1.

Figure 3.1: Approved Units per Housing Typology
Source: MEPA



During 2003 there was a marked increase in the number of apartments approved as a percentage of the total approved housing. This figure rose from just over 60% of total applications in 2002 to over 70% of total applications in 2003. Also the number of approved applications for villas and semidetached villas as a percentage of the total approved housing fell to 1.3%. This percentage is the lowest percentage recorded throughout the period 1999 to 2003.

3.2 Conversion and Redevelopment

A number of the approved housing units are a result of redevelopment and conversions. During the period 1999 – 2003 applications for conversions and redevelopment have resulted in a net gain in housing stock. The number of units gained or lost per year is captured in Table 3.2.

Table 3.2: Changes in number of dwelling units as a result of Conversion or Redevelopment
Source: MEPA

	1999 Gain/ Loss	2000 Gain/ Loss	2001 Gain/ Loss	2002 Gain/ Loss	2003 Gain/ Loss
Conversion	-34	-57	+34	+3	+88
Redevelopment	+215	+694	+611	+1273	+1968
Total	**+181**	**+637**	**+645**	**+1276**	**+2056**

Data for 1990-2000 was gathered using a different methodology to the data for 2000-2003.

The largest contribution to the increase in housing stock comes through redevelopment with a year on year increase in the number of residential units being gained. The unit movements, per type of application for the period 2001-2003, are captured in Table 3.3.

Table 3.3: Changes in number of dwelling units per type of application
Source: MEPA

Conversions and Redevelopment: Unit Movements			
	2001	**2002**	**2003**
Units that had replaced the original number of units (Dwelling to Dwelling on a 1:1 basis)	104	119	139
Total Units gained (one Dwelling to multiple Dwellings)	+728	+1359	+2177
Dwelling Units gained (Other to Dwelling)	+110	+88	+446
Units lost (Dwelling to Other)	-83	-83	-84

The number of conversions or redevelopments where there is a one to one replacement as a percentage of the number of approved applications has seen stable at 2% over the period 2001 to 2003. On the other hand the number of units gained (one dwelling to multiple dwellings) as a percentage of total approved units has been rising from 17% in 2001 to 36% in 2003. This when considered in conjunction with the trends in the typology of the approved units as captured in Figure 3.1 may be indicative of a continued trend towards the replacement of residential units by units with a smaller foot print. This has been the case for redevelopment taking place during the period 1991 - 2000[5].

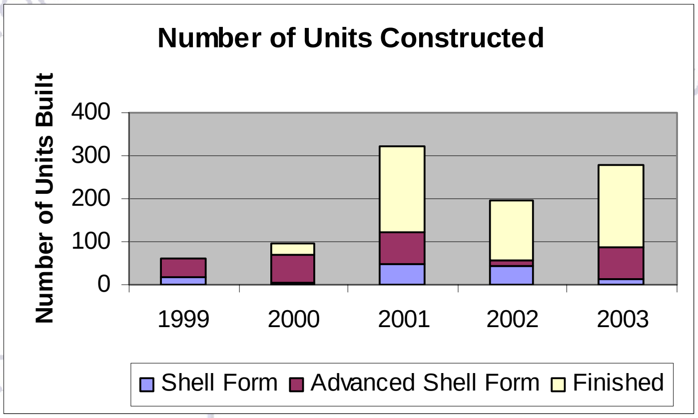
3.3 Social Housing

Social housing comprises a part of the demand for new housing. During the period 1999 – 2003, nearly 5% of the approved housing units were developed as social housing. Figure 3.2 presents the number of units constructed per year during this period.

The number of social housing units developed in the period 2000 - 2003 has increased with figures ranging between two to three times the figures for 1999 and 2000. The increase has been primarily in the form of finished dwellings.

[5] Conversion and Redevelopment study MEPA

Figure 3.2: Number of Units Constructed per Year
Source: Housing Authority



During the period 1999-2003 there has also been a yearly increase in expenditure on social housing construction projects except for 2002 where there was a decrease in total expenditure in relation to the previous year. Annual expenditure on social housing construction projects is captured in Table 3.4 below.

Table 3.4: Annual Expenditure on Social Housing Construction Projects
Source: Housing Authority

Annual Expenditure on Social Housing Construction Projects					
	1999	**2000**	**2001**	**2002**	**2003**
Total cost of projects in Lm	1,421,627	2,878,522	3,485,423	2,433,925	4,076,916
Yearly inc. in expenditure in Lm		1,456,895	606,901	(1,051,498)	1,642,991

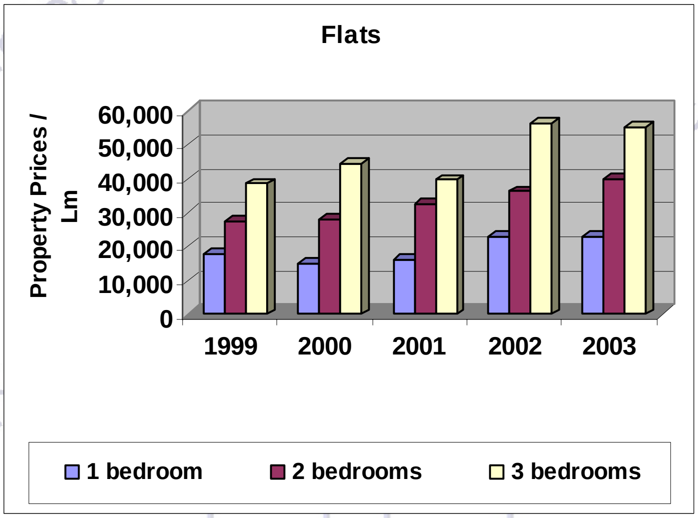
3.4 Property Prices

There has been a continued trend of increasing property prices. During 2003 the largest increase was seen in the price of semi detached dwellings which increased by 75% over the prices of 2002 and the lowest increase at 5% was seen in the price of flats.

3.4.1 Flats

Between the period 1999-2003 there has been an overall upward trend in prices. During 2003 the price for single bedroomed flats remained at the same figures of 2002 while the prices for two bedroomed flats rose by 10%. On the other hand prices for three bedroomed flats fell by 2%. Figure 3.3 depicts the pricing fluctuations between the years 1999 - 2003.

Figure 3.3: Prices of Flats
Source: Estate Agents' representative on BICC



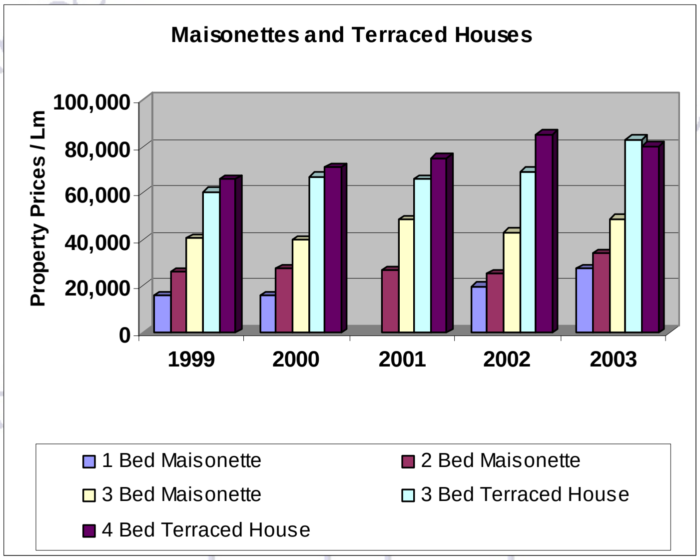
3.4.2 Maisonettes and Terraced Houses

Between the period 1999-2003 there has been an overall upward trend in maisonette and terraced house prices.

During 2003 the largest increases over 2002 prices were seen in the 1 and 2 bedroomed maisonettes with a percentage increase at over 30%. This can be indicative of an increase in demand for smaller property and a possible shortage in supply in this particular type of dwelling.

Prices in 2003 for 3 bedroomed terraced houses increased by 20% over 2002 values, while values for 4 bedroomed terraced houses saw a decline of 6% during this same period. Figure 3.4 depicts the pricing fluctuations for maisonettes and terraced houses between the years 1999 - 2003.

Figure 3.4: Prices of Maisonettes and Terraced Houses
Source: Estate Agents' representative on BICC

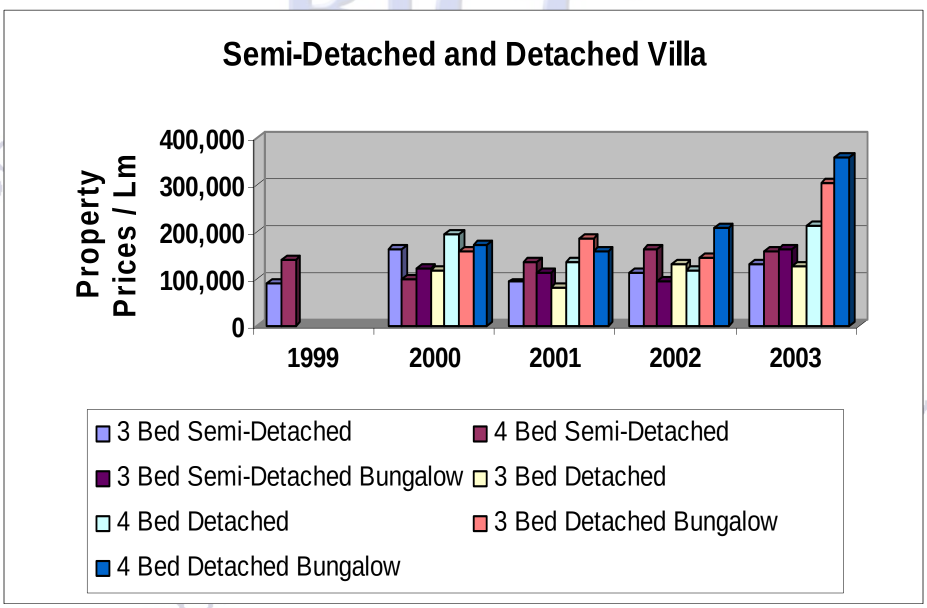


Note: 2001 Data relative to 1 Bedroomed Maisonettes not available

3.4.3 Semi-Detached and Detached Villas

During 2003 the prices for semi-detached bungalows and detached villas increased substantially. The maximum rate of increase at over 70% can be noted on 3 and 4 bedroomed fully detached villas and the lowest rate at just under 20% on 3 bedroomed semi-detached property. Figure 3.5 depicts the pricing fluctuations between the years 1999 – 2003.

Figure 3.5: Prices of Semi-detached and Detached Property
Source: Estate Agents' representative on BICC



Note: 1999 Data relative to semi-detached bungalows and detached property not available

3.4.4 Shell Form Property

The difference between the price of property sold in shell form when compared with the price for finished property can be considered to provide an indicator of the market preference for shell or finished property; the cost of finishing and the quality of the finish of the property on the market. Table 3.5 captures the average shell and finished property prices for flats, maisonettes and terraced houses.

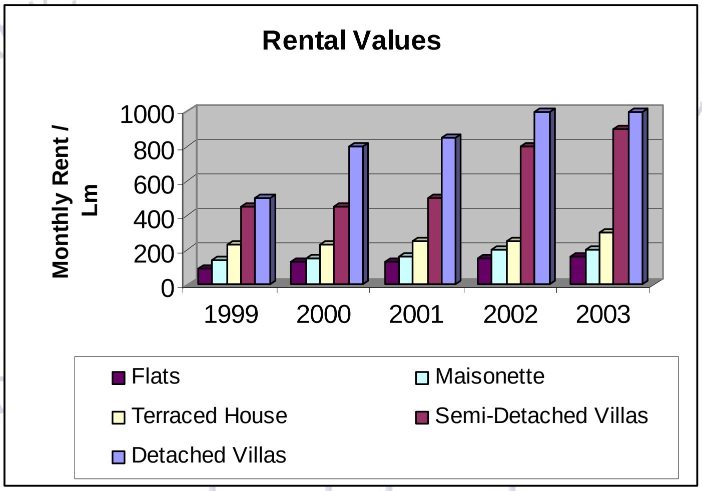
Table 3.5: Average Prices in Lm of Shell and Finished Property by Typology
Source: Estate Agents' representative on BICC

	1999	2000	2001	2002	2003
Flats					
2 Bedroomed Shell	25,000	19,500	14,000	21,250	25,000
2 Bedroomed Finished	27,500	27,870	32,714	36,224	40,000
Percentage Increase	*10*	*43*	*34*	*70*	*60*
Flats					
3 Bedroomed Shell	27,500	36,458	34,000	39,561	40,000
3 Bedroomed Finished	38,500	44,294	39,622	56,402	55,000
Percentage Increase	*40*	*21*	*17*	*43*	*38*
Maisonettes					
3 Bedroomed Shell	31,500	39,666	32,000	33,454	41,500
3 Bedroomed Finished	40,500	39,833	48,625	42,923	49,000
Percentage Increase	*29*	*0*	*52*	*28*	*18*
Terraced Houses					
3 Bedroomed Shell	46,500	36,000	49,000	50,000	46,500
3 Bedroomed Finished	60,500	67,000	65,826	69,375	83,000
Percentage Increase	*30*	*86*	*34*	*38*	*78*

3.5 Rental Prices

Rental values have seen a steady growth between 1999 and 2003 with the largest increases being seen in the detached and semi-detached market. Specifically during 2003 the largest increase was seen in the terraced house market, while rental values for maisonettes were stable at the previous year values. Figure 3.6 captures the rental values for the years 1999 - 2003.

Figure 3.6: Rental Values for the Different Housing Categories
Source: Estate Agents' representative on BICC



4.0 Non-Residential Buildings

Another area of activity for the construction industry is in the development of non-residential buildings. The number of projects for new commercial buildings such as offices, factories, warehouses, hotels etc. is therefore indicative of the current level of activity and the future demand in the sector. In order to provide a detailed representation of these indicators, data has been subdivided by typology based on the categorisation of development applications made by MEPA.

4.1 Demand for Non Residential Buildings

During the period 1999 – 2002 there was a positive trend in the number of permits approved indicating possible growth in the sector. However, based on 2003 figures this trend may have started to slow down. The highest number of permits during the five year period was registered in 2002 at 607 approved applications, while 2003 registered a considerable drop with a total of 385 applications being approved. Data in respect of development permits issued during the period 1999-2003 is captured in Table 4.1.

Table 4.1: Number of Approved Applications by Typology
Source: MEPA data

Approved Applications by Typology					
	1999	**2000**	**2001**	**2002**	**2003**
Manufacturing/Industrial	101	74	41	57	18
Offices	19	41	39	54	19
Shops and retail services	59	89	118	108	44
Restaurant/cafe/bar	29	33	34	49	24
Car parking and vehicle garaging	124	175	162	154	134
Community and Health Services	30	30	16	30	32
Warehousing (Commerce/Industry storage)	33	30	28	37	28
Recreational	24	22	21	56	31
Mixed Office and Retail	17	13	12	16	12
Hotel/tourist accommodation	22	19	26	13	15
Educational	18	22	14	33	28
TOTAL	**476**	**548**	**511**	**607**	**385**
Increase in permits		**72**	**(37)**	**96**	**(222)**

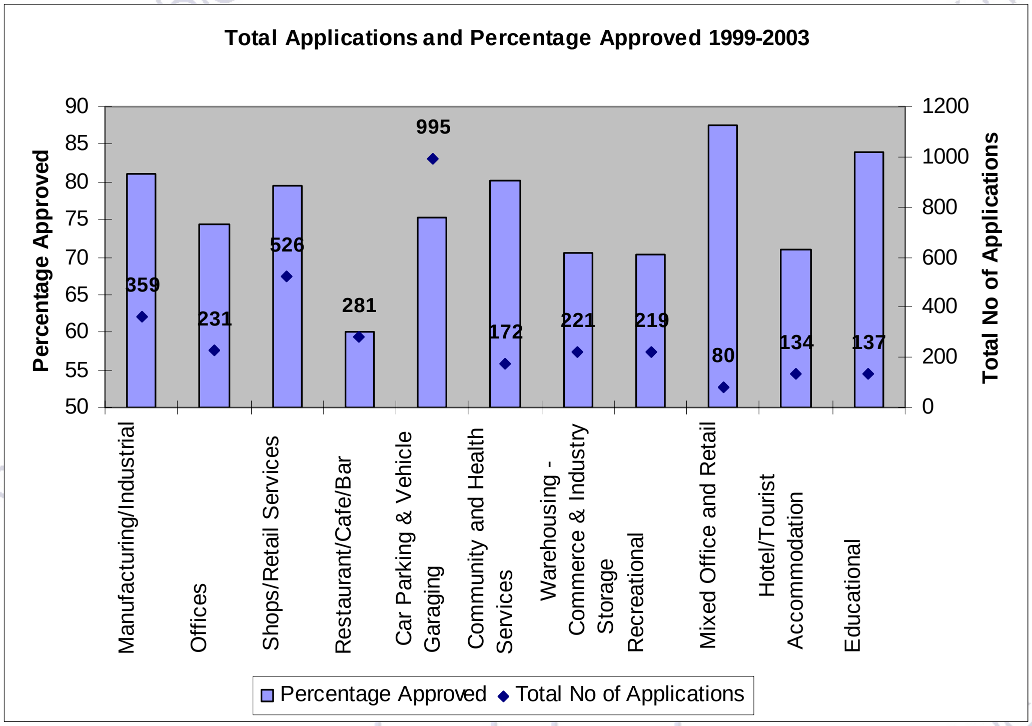
The downward trend in the number of development permits issued during 2003 is a reflection of a drop in the number of applications submitted which has occurred across all the typologies except for the area of community and health services. The total number of applications per typology per year and the percentage approved is captured in Table 4.2.

Table 4.2: Number of Applications and Percentage of Applications Approved
Source: MEPA

Applications by Typology					
	1999	**2000**	**2001**	**2002**	**2003**
Manufacturing/Industrial	**113**	**94**	**51**	**74**	**27**
Percentage Applications Approved	*89%*	*79%*	*80%*	*77%*	*67%*
Offices	**28**	**61**	**51**	**65**	**26**
Percentage Applications Approved	*68%*	*67%*	*76%*	*83%*	*73%*
Shops and retail services	**68**	**118**	**152**	**133**	**55**
Percentage Applications Approved	*87%*	*75%*	*78%*	*81%*	*80%*
Restaurant/cafe/bar	**54**	**51**	**60**	**76**	**40**
Percentage Applications Approved	*54%*	*65%*	*57%*	*64%*	*60%*
Car parking and vehicle garaging	**188**	**225**	**225**	**196**	**161**
Percentage Applications Approved	*66%*	*78%*	*72%*	*79%*	*83%*
Community and Health Services	**33**	**37**	**19**	**37**	**46**
Percentage Applications Approved	*91%*	*81%*	*84%*	*81%*	*70%*
Warehousing (Commerce/Industry storage)	**40**	**54**	**44**	**45**	**38**
Percentage Applications Approved	*83%*	*56%*	*64%*	*82%*	*74%*
Recreational	**34**	**35**	**27**	**85**	**38**
Percentage Applications Approved	*71%*	*63%*	*78%*	*66%*	*82%*
Mixed Office and Retail	**18**	**16**	**13**	**18**	**15**
Percentage Applications Approved	*94%*	*81%*	*92%*	*89%*	*80%*
Hotel/tourist accommodation	**31**	**31**	**32**	**21**	**19**
Percentage Applications Approved	*71%*	*61%*	*81%*	*62%*	*79%*
Educational	**18**	**24**	**17**	**41**	**37**
Percentage Applications Approved	*100%*	*92%*	*82%*	*80%*	*76%*
TOTAL Applications	**650**	**746**	**691**	**791**	**502**

Throughout the five year period the largest number of applications was received for the development of car parking and vehicle garaging constructions whilst the smallest number of applications received was for the development of mixed office and retail buildings. The total number of applications and the percentage of applications approved per typology is captured in Figure 4.1.

Figure 4.1: Total Number of Applications and Percentage of Applications Approved 1999 - 2003
Source: MEPA



4.2 Trends Across the Various Typologies

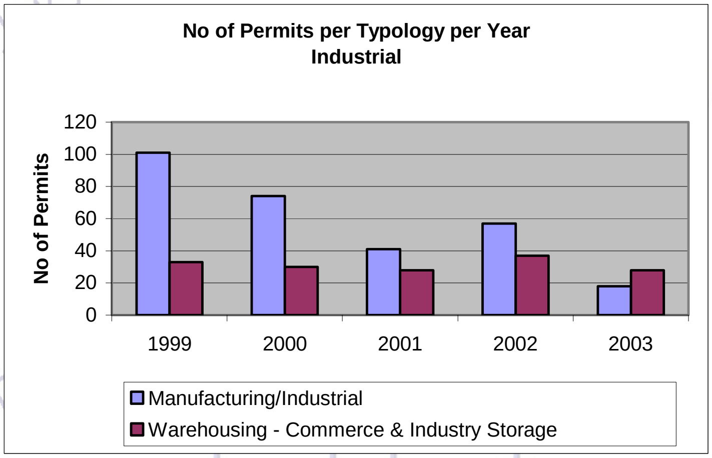
In order to provide a more detail representation of these indicators, data has been grouped by sector:

- Industrial (including warehousing)
- Office and Retail (including car parking and garaging)
- Health and Education (including community services and recreational)
- Tourism and Catering

4.2.1 Industrial and Warehousing

The trend in the industrial and manufacturing sector over the five year period has been negative while the level of activity in the warehousing sector can be considered to be stable as is illustrated in Figure 4.2.

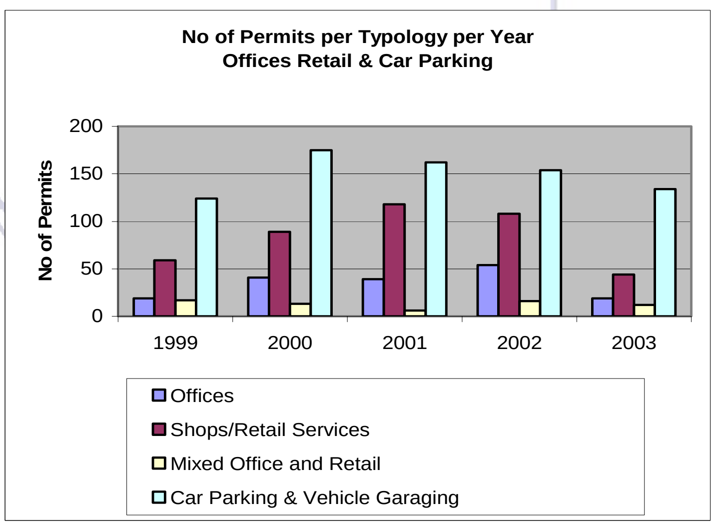
Figure 4.2: Total Number of Permits Industrial Sector 1999 - 2003
Source: MEPA



4.2.2 Office and Retail

During the period 1999 – 2002 there was a positive trend in the development activity relative to the construction of offices and retail outlets. However based on 2003 figures this trend may have started to slow down. On the other hand the number of permits for the development of car parking and vehicle garaging facilities has been slowly declining since 2000. The relative data is illustrated in Figure 4.3.

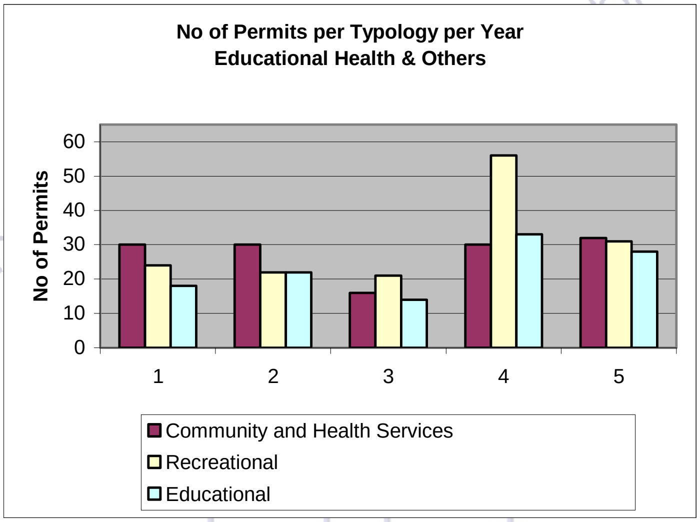
Figure 4.3: Total Number of Permits Office and Retail Sector 1999 - 2003
Source: MEPA



4.2.3 Health and Education

Over the five year period there has been an overall positive trend in the development activity in this sector. Figures for 2003 saw a drop in activity in the education and recreational categories relative to 2002. However the number of permits issued is still higher than the values registered during 1999 to 2001. The relative data is illustrated in Figure 4.4.

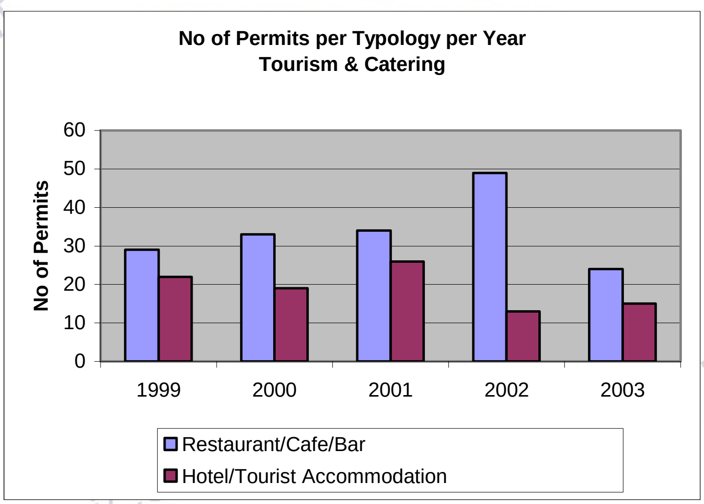
Figure 4.4: Total Number of Permits Education and Health Sector 1999 - 2003
Source: MEPA



4.2.4 *Tourism and Catering*

The activity relative to the catering establishments has seen a positive growth over the period 1999-2002. However based on 2003 figures this trend may have started to slow down. On the other hand, since 2002, the number of permits relative to hotel and tourist accommodation has been on the decline. The relative data is illustrated in Figure 4.5.

Figure 4.5: Total Number of Permits Tourism and Catering Sector 1999 - 2003
Source: MEPA



5.0 Government Investment and Infrastructure

Infrastructure consists of one of the most important elements that contributes to the workload of the construction industry in Malta. Although currently most of these works are still under State control, with the exception of Melita Cable plc, a significant number of entities have migrated from within the public service to the public sector where they have been incorporated in State owned authorities or corporations.

Requests have been made to various authorities, corporations and public companies in order to obtain data on various aspects of the infrastructure that has been provided over the past years. Unfortunately, detailed comprehensive data from utilities was not made available and the data that has been captured in this respect relates to Government expenditure throughout the past years.

It is proposed that, in future, the BICC will enter into discussions with the various utilities in order to implement a system of regular data provision on a bi-annual basis. This would permit this important aspect to the construction industry to be included in subsequent updates of this report.

The total Government expenditure per sector, over the past three years is presented in the Table 5.1 hereunder. A certain element of Government expenditure on infrastructure has also been captured. These figures have been obtained from the Budgetary Estimates.

The total Government expenditure over the past three years has seen a yearly increase averaging at 20% per year with the investment for 2004 being estimated at Lm 77.5 million. The main investment areas representing 94% of the total construction industry related, Government expenditure are:

- Social Housing: a total of Lm 1.6 million were allocated for the upgrading and repairs of housing estates and government tenements and for the Housing Authority.
- Education : a total of Lm 4.8 million were allocated for the construction, adaptation and refurbishment of educational facilities.
- Industrial Zones: a total of Lm 3.6 million were allocated for the improvement, upgrading and development of industrial zones and for the construction of factories.
- Roads: a total of Lm 14.6 million were allocated to road works including the modernization of the road network
- Sewerage: a total of Lm 3.9 million were allocated to extensions and improvements in the sewerage system and the implementation of the Master Plan.
- Waste Management: a total of Lm 2 million were allocated in this area.
- Gozo: a total of Lm 1.1 million were allocated to projects for the island of Gozo.
- Health: a total of Lm 41 million were allocated to the Mater Dei Hospital construction.

Table 5.1: Government Capital Investments - Construction

Ministry	Project	2002	2003	2004
Social Policy		**2129322**	**2100000**	**1630000**
Housing		***2129322***	***2100000***	***1630000***
	Upgrading Works in Housing Estates	391281	380000	310000
	Major repairs to Government Tenements	738041	720000	370000
	Contribution to Housing Authority	1000000	1000000	950000
Education		**4399607**	**5400000**	**4820000**
University of Malta	Construction/adaptation/refurbishment	800000	800000	720000
MCAST	Construction/adaptation/refurbishment	499980	1500000	1000000
Foundation for Tomorrow's Schools	Construction/adaptation/refurbishment	3099627	3100000	3100000
Youth & the Arts				
Sports facilities	Construction/upgrading	874999	550000	400000
	Rehabilitation works and equipment - MCR	196000	50000	85000
Finance		**3401335**	**4525000**	**3705500**
Industrial Areas	Improvements to Buildings	62249	30000	50000
	Upgrading of Infrastructure in non-MDC industrial zones	348943	350000	275500
	Development of industrial zones for SMEs	10469	50000	80000
	Construction of factories & upgrading of industrial areas	2920160	3900000	3150000
	Replacement of roofs & soffits in existing factories	41145	130000	50000
Inland Revenue	Construction		40000	50000
Customs	Construction	18369	25000	50000

Ministry	Project	2002	2003	2004
Tourism		**169847**	**260000**	**264000**
	Restoration of Auberge d'Italie	49129	50000	10000
	Upgrading at ITS	29999	30000	30000
	Relocation costs icw capital projects	80869	90000	10000
	Cottonera infrastructure upgrading	9850	90000	114000
	St George's Bay project			100000
Transport & Communications		**7365328**	**10750000**	**14571000**
	Modernisation of the road network (5th Italian Protocol)		2400000	7821000
	Improvements to building	14461	50000	
	Sundry road improvements	498899	600000	850000
	Hot and cold asphalt programme	399461	500000	600000
	Levelling and asphalting of private streets	1761715	3000000	1850000
	Road restoration project	2403058	3000000	2350000
	Pedestrian bridges/underpasses		80000	65000
	Upgrading of Fgura Road	192893	60000	95000
	Psaila Street	250000	150000	30000
	Gzira link road		50000	460000
	B'kara bypass San Gwann link road	584113	760000	150000
	Park and ride project		100000	300000
	Tal-Qroqq junction	1260728		
Justice and Home Affairs		**1433389**	**1800000**	**870000**
	Various construction/upgrading works - Judiciary	271579	500000	220000
	Various construction/upgrading works - Police	177444	300000	300000
	Various construction/upgrading works & equipment - CCF	780535	800000	210000
	Various construction/upgrading works & equipment - CPD	85486	75000	40000
	Rehabilitation works - GPD	118345	125000	100000

Ministry	Project	2002	2003	2004
Resources & Infrastructure		**5882190**	**8283000**	**8388000**
Sewerage		***2410010***	***4740000***	***3921000***
	Extensions/Improvements	1557738	1850000	1110000
	Sewage treatment plants	469000	150000	
	Master Plan Implementation	383272	2740000	2811000
	Enhancement of public areas	608106	80000	80000
Improvements to Buildings		***120240***	***100000***	***65000***
	House of Representatives			20000
	Refurbishment of MSD offices and workshops			20000
	Refurbishment of Presidential Palace			25000
	Others	120240	100000	
Projects		***2743834***	***3363000***	***4322000***
	Upgrading of existing storm water systems	8113	33000	50000
	Rehabilitation of St James Cavalier	124495	10000	10000
	Restoration of forts, fortifications and historical places	480804	500000	650000
	Upgrading works at main touristic areas	778174	850000	650000
	Rehabilitaion projects	550000	600000	613000
	Adaptation works at Cottonera Family Resource Centre	21919	50000	10000
	Caravan Site	21919	50000	10000
	Waste management services	407721	1100000	2000000
	Restoration works (Italian Protocol)			140000
	Construction and upgrading works at National Parks	350689	170000	189000

Ministry	Project	2002	2003	2004
Gozo		**1079485**	**1327000**	**1055000**
	Construction of factories	43784	40000	40000
	Farm access roads	11853	30000	15000
	Construction and upgrading of roads	401244	400000	180000
	Hot asphalt programme	95062	100000	150000
	Extension of sewerage system	134408	190000	150000
	Sewerage Master Plan Implementation	44802	200000	160000
	Centralisation of Government Offices	24287	50000	15000
	Improvement to touristic facilities	18430	20000	15000
	Communal centre	0	10000	5000
	Construction and maintenance in schools	206360	150000	150000
	Restoration and improvements to historical sites	22715	20000	30000
	Construction works & equipment at Gozo General Hospital	70701	100000	130000
	Improvement to sports facilities	5839	17000	15000
Health		**26805897**	**27410000**	**41645000**
	Construction works at Mater Dei Hospital	26456766	27000000	41000000
	Upgrading works & equipment - Institutional Health Care - SLH	195838	200000	450000
	Upgrading works & equipment - Institutional Health Care - Boffa Hospital	52764	35000	20000
	Upgrading works & equipment - Institutional Health Care - Mt Carmel	50138	75000	120000
	Improvements to buildings & equipment at Health Care Centres	10364	50000	25000
	Upgrading works & equipment for Public Health Laboratories	11306	20000	15000
	Construction works in Government Cemetries	28721	30000	15000
Foreign Affairs				
	Construction and Restoration Works	61715	200000	85000

6.0 Prices and Costs of Materials and Products

The construction industry in itself offers a range of materials and products that are repeatedly used in new developments or in the rehabilitation of existing properties. The aim of this section is to provide the reader with a cross section of prices and costs of the various main elements that are repeatedly used in the construction industry. This would enable stakeholders to be familiar with current costs not only for information purposes but also for their strategic planning related to their investment.

In order to obtain as broad a cross section as possible a number of contractors and architects have been consulted with a view to obtaining their prices for a selected range of materials. In doing so it has been felt that a true picture would be obtained both from the contractors' end as well as from that of practising professionals.

The results are being presented both in imperial as well as in metric units for it has been established that there are a significant number of players who conform to either one or the other of these measurements. Therefore, by presenting this data in both formats, users would be in a position to avail themselves of either measure. Moreover, this might also help those who are still adopting imperial methods of measurements to familiarise themselves with metric measures.

Three sets of values are being presented, a minimum, maximum and average value. The maximum and minimum values are intended to establish the bracket within which the cost of a particular element is likely to fall whilst the average presents the mean value around which the price of such elements is anticipated to be resolved.

In compiling these figures, 22 different contractors or architects were sampled and the results are summarised hereunder. The prices obtained range from small to large contractors spread across the geographical territory of the Maltese Islands in order to provide a representative sample.

Table 6.1 : Prices and Costs of Materials and Products (Imperial Units)

Item	Measure			
		Max	Min	Avg
		(Lm)	(Lm)	(Lm)
Thaffir ta' pedamenti	il-jarda kuba	11.50	1.53	4.72
Konkos fil-pedamenti	il-pied kubu	1.32	0.59	1.10
Hitan singlu fil-pedamenti 6"	il-qasba kw	26.00	15.59	20.90
Hitan singlu fil-pedamenti 9"	il-qasba kw	26.00	20.00	22.71
Hitan dobblu fil-pedamenti 7x7	il-qasba kw	52.04	32.19	39.91
Hitan dobblu fil-pedamenti 9x9	il-qasba kw	52.04	39.00	44.76
Hitan singlu l-fuq mill-qatran 6"	il-qasba kw	25.00	19.41	22.19
Hitan singlu l-fuq mill-qatran 9"	il-qasba kw	28.99	19.41	23.77
Hitan dobblu l-fuq mill-qatran 7x7	il-qasba kw	53.14	40.00	44.14
Hitan dobblu l-fuq mill-qatran 9x9	il-qasba kw	57.97	44.00	47.66
Extra fuq il-fil	il-qasba kw	20.64	8.50	11.38
Hitan tal-bricks tad-9" singlu	il-qasba kw	28.00	22.00	24.76
Hitan tal-bricks tad-9" dobblu	il-qasba kw	28.99	23.00	25.92
Hitan tal-bricks mimli	il-qasba kw	61.26	38.00	43.72
Qatran	pied jimxi	1.25	0.15	0.45
Faxxa lixxa	pied jimxi	1.80	0.52	1.07
Tond tal-kantuniera	il-wahda	2.88	1.00	1.90
Skorra falza	il-wahda	1.25	0.50	0.89
Xoghol fit-tond	pied jimxi	2.13	1.50	1.77
Sollijiet lixxi	pied jimxi	5.00	0.30	1.75
Sollijiet bil-lavur	pied jimxi	5.75	3.00	4.55
Saljaturi lixxi	il-wahda	20.00	10.00	15.37
Saljaturi bil-lavur	il-wahda	30.00	25.00	27.35
Ventilaturi lixxi	il-wiehed	10.00	1.00	4.00
Ventilaturi bil-lavur	il-wiehed	12.00	2.00	7.21
Ingaljar	pied jimxi	1.25	0.15	0.67
Konkos ghall-art 4" hxuna (1:3:6)	il-qasba kw	20.70	12.00	16.51
Konkos 4" hxuna (1:2:4) + xibka A98	il-qasba kw	25.25	16.00	20.54
Saqaf tal-konkos 6"]xuna b'xibka BRC no. 503 1:2:4	il-qasba kw	42.91	31.62	34.64
1" hxuna extra fis-saqaf	il-qasba kw	8.00	2.20	4.38
Turgien dritti	pied jimxi	4.42	2.00	3.05
Turgien fit-tond jew bir-ragg	pied jimxi	10.35	5.00	7.31
Travi tal-konkos	pied kubu	10.00	3.82	5.88
Blajjet tal-konkos	pied kubu	6.00	2.80	4.37
Flash beam	pied kubu	8.00	3.50	5.48
Kolonni	pied kubu	7.48	2.55	5.15
Suletti	pied kubu	5.18	1.50	3.08
Vireg tal-1"	kilo	0.45	0.24	0.35
Vireg tal 1/2"	kilo	0.45	0.24	0.35
Vireg tat-3/4"	kilo	0.45	0.24	0.35
Vireg tat-3/8"	kilo	0.45	0.15	0.33
Kontrabejt	il-qasba kw	28.00	13.83	21.19
Samrotti	il-wiehed	10.00	1.50	3.40
Xibka C503	il-qasba kw	7.91	4.92	6.20
Xibka A93	il-qasba kw	5.05	2.20	3.32

Table 6.2 : Prices and Costs of Materials and Products (Metric Units)

Item	Measure			
		Max	**Min**	**Avg**
		(Lm)	(Lm)	(Lm)
Thaffir ta' pedamenti	cub. mtr	15.05	2.00	6.18
Konkos fil-pedamenti	cub mtr	46.70	21.00	38.84
Hitan singlu fil-pedamenti 6"	sq mtr	6.03	3.62	4.85
Hitan singlu fil-pedamenti 9"	sqr mtr	6.03	4.64	5.27
Hitan dobblu fil-pedamenti 7x7	sqr mtr	12.08	7.47	9.26
Hitan dobblu fil-pedamenti 9x9	sqr mtr	12.08	9.05	10.39
Hitan singlu l-fuq mill-qatran 6"	sqr mtr	5.80	4.50	5.15
Hitan singlu l-fuq mill-qatran 9"	sqr mtr	6.73	4.50	5.51
Hitan dobblu l-fuq mill-qatran 7x7	sqr mtr	12.33	9.28	10.24
Hitan dobblu l-fuq mill-qatran 9x9	sqr mtr	13.45	10.21	11.06
Extra fuq il-fil	sqr mtr	4.79	1.97	2.64
Hitan tal-bricks tad-9" singlu	sqr mtr	6.50	5.11	5.75
Hitan tal-bricks tad-9" dobblu	sqr mtr	6.73	5.34	6.02
Hitan tal-bricks mimli	sqr mtr	14.22	8.82	10.14
Qatran	m	4.10	0.49	1.49
Faxxa lixxa	m	5.91	1.70	3.50
Tond tal-kantuniera	each	2.88	1.00	1.90
Skorra falza	each	1.25	0.50	0.89
Xoghol fit-tond	m	7.00	4.92	5.81
Sollijiet lixxi	m	16.41	1.00	5.75
Sollijiet bil-lavur	m	18.87	9.85	14.92
Saljaturi lixxi	each	20.00	10.00	15.37
Saljaturi bil-lavur	each	30.00	25.00	27.35
Ventilaturi lixxi	each	10.00	1.00	4.00
Ventilaturi bil-lavur	each	12.00	2.00	7.21
Ingaljar	m	4.10	0.50	2.21
Konkos ghall-art 4" hxuna (1:3:6)	sqr mtr	4.80	2.78	3.83
Konkos 4” hxuna (1:2:4) + xibka A98	sqr mtr	5.86	3.71	4.77
Saqaf tal-konkos 6”]xuna b’xibka BRC no. 503 1:2:4	sqr mtr	9.96	7.34	8.04
1" hxuna extra fis-saqaf	sqr mtr	1.86	0.51	1.02
Turgien dritti	m	14.50	6.56	10.01
Turgien fit-tond jew bir-ragg	m	33.97	16.41	24.00
Travi tal-konkos	cub mtr	353.11	134.98	207.54
Blajjet tal-konkos	cub mtr	211.86	98.99	154.24
Flash beam	cub mtr	282.49	123.59	193.54
Kolonni	cub mtr	263.95	89.99	181.72
Suletti	cub mtr	182.73	52.97	108.90
Vireg tal-1"	kilo	0.45	0.24	0.35
Vireg tal 1/2"	kilo	0.45	0.24	0.35
Vireg tat-3/4"	kilo	0.45	0.24	0.35
Vireg tat-3/8"	kilo	0.45	0.15	0.33
Kontrabejt	sqr mtr	6.50	3.21	4.92
Samrotti	each	10.00	1.50	3.40
Xibka C503	sqr mtr	1.83	1.14	1.44
Xibka A93	sqr mtr	1.17	0.51	0.77

7.0 Quarry Industry

The quarry industry supplies a primary resource to the construction industry and is considered an integral part of this industry. The developments and trends in this sector are considered indicative of the overall state of the industry. In particular the ability of this industry to meet the demand placed upon it by the construction industry is considered a key indicator in assessing the state of the construction industry.

Demand for hard stone is linked primarily to the manufacture of concrete products, the construction of high rise buildings, civil engineering projects and road building. Demand for soft stone comes primarily from housing construction. Data for soft stone and hard stone quarries, where available, has been kept separate in order to provide a better representation of the activity in the separate areas.

At present no accurate data of volumes of stone being extracted is available[6]. The salient trends that have occurred in the quarry industry are therefore based on information contained in the Minerals Subject Plan for the years 2000 – 2010 and on MEPA data which is limited to development permits.

7.1 Quarry Operation

The Mineral Subject Plan 2002 dated May 2003 states that MEPA has 'concluded that there exists an adequate supply of consented hard stone and soft stone'[7] for the period 2000 - 2010. The report estimates that the annual production between 1994-1998 was as follows[8]:

- Hardstone - 0.74 million m^3
- Softstone - 0.40 million m^3

The MEPA adopted strategy presumes against new quarries until the 1st plan review targeted for around 2005 and at present a framework is in place to guide quarry extensions.

Within this context, in 2002, there were 28 hard stone and 66 soft stone quarries in operation.[9] One permit was issued for a soft stone quarry in 2003 while there has not been any permit for new hard stone quarries during the period 1999 - 2003. The number and type of applications is illustrated in Figure 7.1 and Figure 7.2.

The trend has been towards the extension of existing quarries. In fact over the past 5 years there have been 41 applications for extensions of existing stone block quarries and 33 applications for extensions of the existing sand/gravel quarries. This is an indicative number in view of a total number of just under 100 quarries.

6 Mineral Subject Plan for the Maltese Islands 2002 pg22

7 Mineral Subject Plan for the Maltese Islands 2002 pg4

8 Mineral Subject Plan for the Maltese Islands 2002 Supplementary Documentation Annex2 pg5

9 Mineral Subject Plan for the Maltese Islands 2002 pg2

Figure 7.1: Number of Soft Stone Quarry Applications
Source: MEPA data

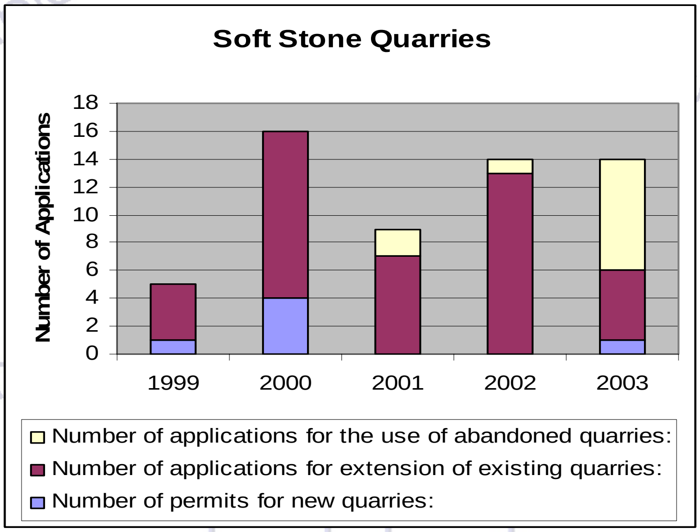
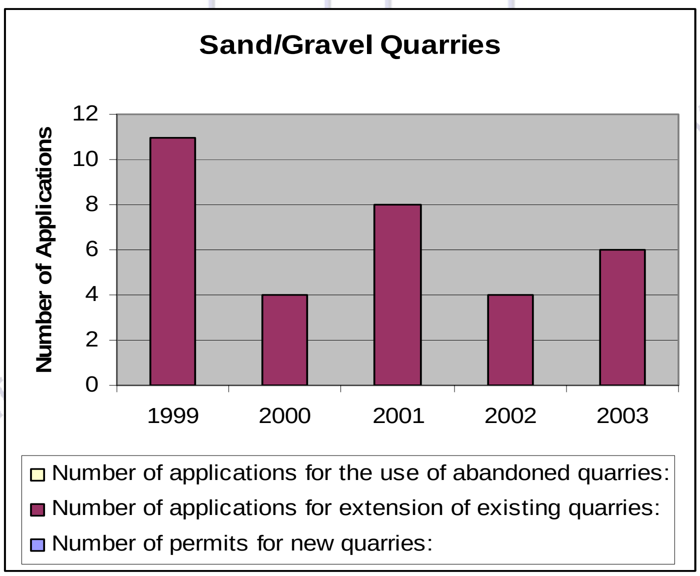


Figure 7.2: Number of Sand/Gravel Quarry Applications
Source: MEPA data



7.2 Demand and Supply

Demand for new housing is not expected to drop and therefore demand for soft stone is expected to remain the stable. Demand for hard stone can be anticipated to rise in view of the road network upgrading projects.

A snapshot of the supply and demand can be obtained from the Supply and Use Tables for 2000 published by the National Statistics Office for the first time in June 2004. The supply table shows the output in terms of specific products from the industry sectors while the use table highlights the industry sector that is making use of the product. Table 7.1 and Table 7.2 capture the 'supply' and 'use' data for products from mining and quarrying.

Table 7.1: Supply Table 2000 extract Products from Mining and Quarrying
Source: National Statistics Office - Malta

Lm'000

Code of Product Classi-fication	Product	Mining and quarrying	Manufacturing	Construction	Real estate, rentibusiness activities	Other community, social and personal service activities	TOTAL OUTPUT	IMPORTS OF GOODS AND SERVICES (CIF)	TRADE AND TRANSPORT MARGINS	TAXES ON PRODUCTS	SUBSIDIES ON PRODUCTS	TOTAL SUPPLY
CPA	**A17 level**											
C	Products from mining and quarrying	5,462	33	13	-	-	**5,508**	3,252	424	135	-	**9,319**

Table 7.2: Use Table 2000 extract Products from Mining and Quarrying
Source: National Statistics Office - Malta

Lm'000

Code of Product Classi-fication	Product	Mining and quarry	Manufacturing	Construction	Real estate, rentibusiness activiti	Other community, socand personal servactivities	TOTAL INTERMEDIATE CONSUMPTION	GROSS CAPITAL FORMATION	EXPORTS OF GOODS AND SERVICES (FOB)	TOTAL FINAL DEMAND
CPA	**A17 level**									
C	Products from mining and quarrying	1,418	2,067	4,702	12	7	**8,206**	**474**	**639**	**9,319**

These figures indicate that in 2000 a total of Lm 9,319,000 worth of product were used out of which Lm 5,462,000 equivalent to 59% were supplied by the mining and quarrying industry, while Lm 4,702,000 worth of product were utilised by the construction industry.

8.0 Consultants

The complexity of today's construction projects necessitate the input of a spectrum of specialised skills which are normally acquired through consultancy services. The consultancy sector therefore constitutes another relevant sector within the construction industry.

Consultancy inputs may be required at various stages of projects typically at the planning, design or execution stages of a project, at an environmental impact assessment stage or in the operations and maintenance of buildings.

In order to be able to establish the demands and trends for consultancy inputs the various specialities that require such inputs in the various cycles of the construction industry need to be established. Another relevant stratification is the quantification of the consultancy work input in the three categories used in this report namely housing, non-residential buildings and infrastructure.

The quantification of the demand for expert input in the various specialisations should also provides a measure for determining whether the current educational system is providing for the development of such expertise or whether the required training is being sought overseas. Such input can determine the existence and need for Continuous Professional Development for those players that are involved in the construction industry.

Requests have been made to a number of corporations and the relevant professional bodies in order to obtain relevant data that would allow for the necessary quantification and stratification of the demand in the sector, however indications are that no data in this respect is currently being collated. It is therefore proposed that in future, the BICC will enter into discussions with the various entities primarily, the Chamber of Architects and the Chamber of Engineers in order to implement a system for the collation of the relevant data on an ongoing basis.

9.0 Capacity

The strength, or otherwise of the construction industry may also be determined from a number of other parameters such as the:

- level of unemployment prevailing in categories of workers within the sector;
- pay packages being offered to employees within the sector; and
- level of educational infrastructure available for the sector and its level of appraisal by employers within the industry.

This section will attempt to establish each of the aforementioned parameters with a view to initiating a mapping of these figures which could form the basis for year on year comparisons to be made where appropriate.

9.1 Employment within the Construction Industry

Employment levels are usually a measure of how the construction industry has expanded or contracted from a previous measurement level. An increase in the number of employed persons in the sector is likely to reflect an industry which is healthy and which is offering a strong stimulus to the employment market and to the economy. At the same time, the level of unemployment measures the negative aspects of the industry's performance. It is also important to analyse the unemployment figures closely for the absence of unemployed persons could well be a signal of a shortage of labour. Such a scenario should lead to the development of alternative strategies such as the importation of foreign labour or the reskilling of other workers to rehabilitate them for employment within the construction industry. The data provided by ETC is attached in Appendix A.

If one were to summarise some of the main observations that could be put forward from the data submitted, the construction industry is likely to be experiencing the following:

- a shortage in personnel in managerial positions;
- a shortage in the professional classes;
- a surplus of administrative and support staff including clerical support, data entry operators, receptionists and information clerks;
- a surplus in storekeepers;
- a surplus of workers in the carpentry trade;
- a surplus of plasterers, tile layers, plumbers, welders, machine operators, drivers, cleaners, messengers, watchmen, handymen;
- a shortage in civil engineering technicians.

However one needs to interpret this data with caution as one needs to determine the level of compliance with existing legislation on the part of employers in informing the competent authorities on their actual staff complements.

Moreover it is also important to try and ascertain whether certain categories of workers that are listed as seeking employment do actually have the skills required for employment within the construction industry. To this effect ETC, BICC and representatives of the construction industry might wish to explore the particulars of this data even further.

One also needs to bear in mind the claims and press releases that have been issued from within the construction industry that continue to indicate that the industry cannot find the human resources that it requires to pursue its current workload. In fact, the construction industry has called upon the authorities to allow them to use foreign labour in order to meet the shortfall that they are experiencing.

9.2 Comparison of Pay Packages

The Labour Force Survey (December 2003) estimates that the average wage in Malta amounts to Lm 5032.60. A sectorial analysis of the various economic activities shows that the average wage in the Mining and Quarrying Sector is equivalent to Lm 5400.88 whilst that within the Construction Sector is established at Lm 4399.21.

Without entering into the merits of potential under-declarations in salaries that could exist it is evident that wages within the Construction Industry are lower than the average national wage. This could be the result of lower wages in the semi skilled and unskilled workers which, due to their higher numbers, could drag down the average for the sector.

The salaries within the Construction Sector must also be seen within the context of the minimum average sectorial wage which is that for Private households with employed persons and which averages Lm 3850.55 and highest paid sectors such as Financial Intermediation where wages average at Lm 6693.26.

9.3 Educational Infrastructure Available

There are a number of educational institutions that offer formal and informal courses that are related to the construction industry. In the main these include:

- the University of Malta;
- MCAST;
- ETC;
- BICC;
- The Malta Centre for Restoration; and
- Malta University Services.

9.3.1 University of Malta

The University of Malta offers a number of degree courses that are related, directly or indirectly, to the Construction Industry. Essentially the Faculties which offer these degree courses are the following:

- Faculty of Architecture and Civil Engineering
  - Bachelor of Engineering and Architecture (Honours)

- Institute for Masonry & Construction Research
  - Postgraduate Diploma and degree of Master of Science (MSc) in Conservation Technology for Masonry Buildings

- International Institute for Baroque Studies
  - Master of Arts in Baroque Studies

- International Environment Institute
  - Diploma in Environmental Science
  - Master of Science in Environmental Planning & Management

- Faculty of Engineering
  - Bachelor of Engineering (Honours)
  - Master of Science in Engineering
  - Master of Philosophy
  - Doctor of Philosophy

The relevant course descriptions may be accessed at http://www.um.edu.mt.

9.3.2 MCAST

MCAST has a number of institutes through which it offers a number of courses namely the:

- Institute of Information and Communication Technology
- Institute of Art and Design
- Institute of Electronics Engineering
- Institute of Building and Construction Engineering
- Maritime Institute
- Institute of Community Services
- Institute of Business and Commerce
- Institute of Agriculture

Of particular relevance, although not strictly the only one, is the Institute of Building and Construction Engineering which offers the following specific courses:

- Foundation Course in Building & Construction (1 year full time)
- Certificate Course in Painting & Decorating or Plastering or Tile Laying or Glazing (1 year part time)
- Certificate Course in Masonry Skills (2 years part time)
- Certificate Course in Stone Heritage Skills (2 years part time)
- Course Leading to Awards in Engineering Skills Fabrication or Pipework/Plumbing or welding or Woodwork (3 years part time)

- Technician Certificate Course in Draughtsmanship (1 year full time & 3 years part time)
- Certificate Course in Heating, Ventilation and Air Conditioning (1 year full time and 3 years part time)

Further information may be obtained from http://www.mcast.edu.mt.

9.3.3 Employment and Training Corporation (ETC)

The ETC offers Apprenticeship Schemes that are effective vocational education and training programmes based on the dual system, whereby the apprentice follows a tuition course at an educational institution and carries out job training at a recognised employer workplace. There are two main schemes:

- Technician Apprenticeship Scheme (TAS); and
- Extended Skill Training Scheme (ESTS).

The apprentice, the training provider and the ETC enter into an agreement laying down the rights and obligations of all parties during the said apprenticeship. Apprentices are obliged to attend an educational institution to acquire the theory related to their calling. Government departments, Parastatal organisations and private firms provide on-the-job training with the latter employing the largest number of apprentices.

The Technician Apprenticeship Scheme courses offered related to the Construction Industry include:

- Draughtsman
- Electrical Engineering Technician
- Mechanical Engineering Technician

The Extended Skills Training Scheme courses offered related to the Construction Industry include:

- Building Trades;
- Maintenance Fitter
- Electrical Installation
- Mechanical Fitter
- Fabrication
- Plumbing/Pipework
- Graphic Design
- Ceramist
- Stone Carver
- Woodcarver

The ETC also offers courses aimed at helping persons seeking employment, or alternative employment, to acquire new, or improve their existing skills. The courses that can be considered to be potentially related to the Construction Industry include;

- Aluminium (90 hours)
- Assistant Electrician and Plumber (120 hours)
- Electrician Licence A (280 hours)
- Landscape Gardening (520 hours)
- Refrigeration and Air Conditioning (160 hours)
- Tile Laying and Plastering (240 hours)
- Welding (240 hours)
- Advanced Welding (200 hours)
- Woodwork and Spray Painting (480 hours)
- Foundation Course in Health and Safety (15 hours)
- Foundation Course in Electrical Engineering (90 hours)
- Foundation Course in Mechanical Engineering (90 hours)
- Project Management (50 hours)
- Purchasing and Materials Management (45 hours)
- Quality Assurance Systems and Control (30 hours)

Further details on the range of schemes and courses offered by ETC may be found on http://www.etc.org.mt.

9.3.4 Building Industry Consultative Council (BICC)

The BICC also offers a number of courses that are specifically aimed at those working within, or wishing to work within, the Construction Industry. These include:

- Safety Card
- Masonry
- Middle Management in Construction
- Concrete Technology
- Rubble Wall Builders

Further information may be obtained from http://www.bicc.gov.mt.

9.3.5 Malta Centre for Restoration

The Institute of Conservation and Restoration Studies makes use of the facilities available at the Malta Centre for Restoration, providing courses, some of which lead to a degree conferred by the University of Malta, in the following areas of study:

- Bachelor in Conservation and Restoration Studies (Honours);
- Bachelor in Documentation Studies (Honours);
- Master of Science in Conservation Science;
- Master of Conservation in Applied Conservation Studies;
- The Masonry Heritage Skills Certificate; and
- Introductory Course to Mediterranean Cultural Heritage/Preparatory Course.

9.3.6 Malta University Services Limited

Malta University Services Limited offers a number of short courses aimed at enhancing the continuous professional development of individuals. Of interest to the Construction Industry are the following:

- Managing for Success
- First-time Managers
- Production and operations Management
- Introductory Course in Autocad 2D
- Autocad 3D Modelling and Static rendering Course
- Health & Safety Management
- Six Sigma
- TQM: Total Quality Management
- ISO 9000 – A Management Briefing
- Water treatment and Quality
- Materials Engineering
- Building services Engineering
- Electrical Installation
- Baroque Conservation

Further details are available on http://www.mus.com.mt

9.4 Utility of Content

During interviews undertaken with Contractors, respondents were asked specifically upon their assessment of the utility of content that courses currently available to the construction industry offer. Contractors felt that there was little training provision available, particularly in basic skills. They stated that although they felt that the school for tradesmen in stonework was doing a good job, it did not satisfy the needs of contractors within the construction industry. The current trend is for them to train their employees at the workplace. The on the job training which they provide ranges from skills needed in using stone and other materials to skills needed to drive the heavy machinery that is usually used on construction sites, road works and other types of work. There was a general consensus that there needs to be some sort of training provision that can be provided at post-secondary level where young persons could be taught the range of skills needed within this sector such that there will be more skilled workers available on the market. Employers complained that it was difficult to find people working within this sector, and it was common to lose their employees, often after they have completed their training and become skilled workers. They envisaged that some sort of apprenticeship within the construction industry is possible and that the government should support their economic sector through more investment in providing skilled workers.

Contractors also commented on the courses currently provided by the BICC. Many of them were aware of the courses offered and in fact they nearly all had some of their employees who had followed one of the courses and obtained the necessary certification. They felt that the service being provided was good and served the sector well and hoped that more courses offering training in other skills related to the construction industry could be developed and offered to workers and prospective workers in order to ensure that contractors be able to find skilled people when needed.

10.0 Trend Survey

A Trend Survey amongst a representative sample of contractors was conducted during the first quarter of 2004 in order to analyse the various trends that are occurring within the industry, particularly in terms of:

- turnover and future outlook;
- employment, existing, past and projected;
- current profit levels and future outlook;
- projected investment;
- outlook for the construction industry;
- reasons for not opting to expand business; and
- training.

The findings of this Trend Survey are based on a sample of 30 contractors derived from as wide a spectrum as possible in order to ensure the representativeness of the sample. At the outset it must be pointed out that the initial surveys were distributed electronically but this method failed to attract the desired response albeit most contractors having an e-mail address. Consequently, telephone interviews had to be resorted to in order to enable the desired number of interviews to be made.

A copy of the survey that has been distributed is attached in Appendix B.

10.1 Nature of Business

Contractors were classified by their activity and three broad catagories were chosen namely:

- general building and civil engineering works;
- road works and infrastructure; and
- quarrying.

These catagories were retained to be the major ones into which stakeholders could be grouped and provide the full coverage required. Of the contractors surveyed the following subdivision was obtained:

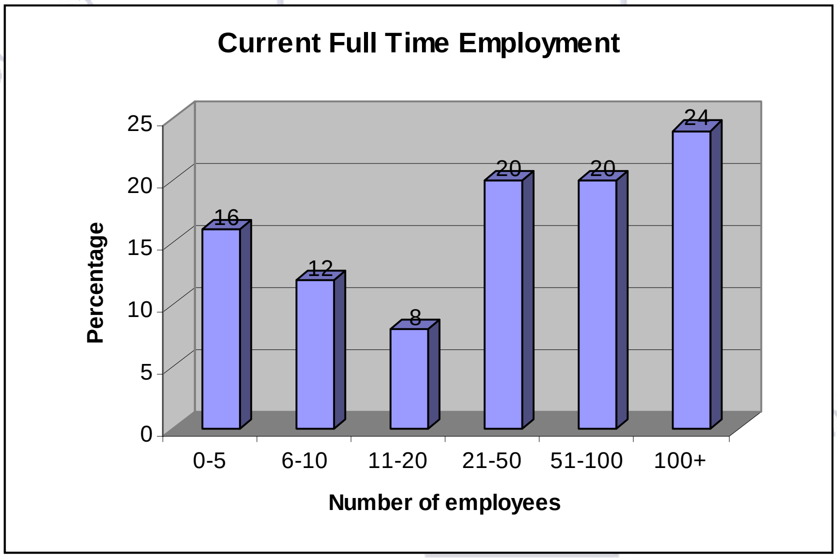
- 72% conducted general building and civil engineering works;
- 8% were involved in the quarrying sector;
- 8% were involved in all three;
- 4% conducted both general building/civil engineering works and road works/infrastructure;
- 4% were engaged in both road works/infrastructure and quarrying; and
- 4% were involved in general building/civil engineering works and quarrying.

Notwithstanding this acceptable distribution, it is again advisable that the BICC publicizes this type of work it is carrying out, seeking to foster better contact between the Council and small to medium sized contractors, possibly subdivided by their business activity. This would enable contractors to be more familiar with the ongoing work of the council whilst at the same time the Council or its Consultants would have a better opportunity to tap into the knowledge of these stakeholders when conducting similar exercises.

10.2 Current Employment

One of the key aspects of this survey was to examine the level of employment currently being engaged in the sector. The results are summarised in Figure 10.1 hereunder.

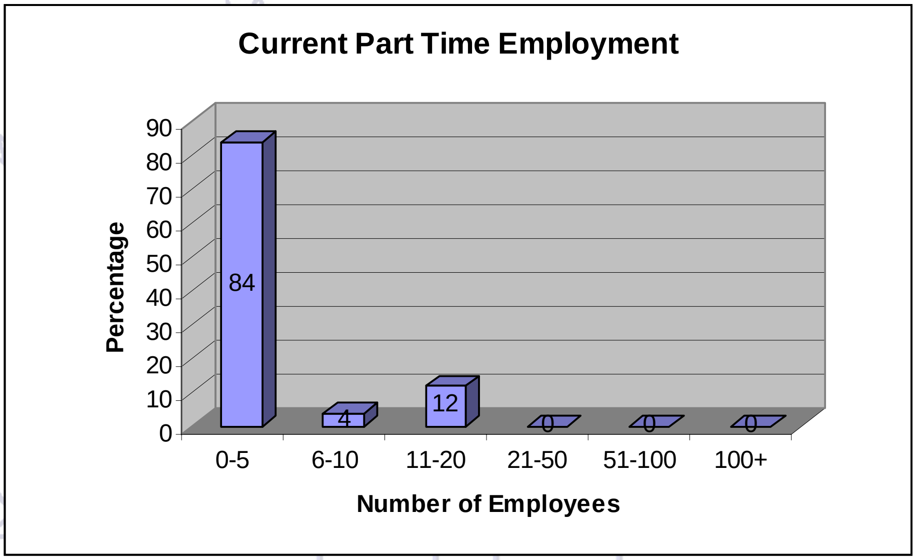
Figure 10.1 : Current Full Time Employment



It is evident that the majority of construction firms (64%) employ over 20 people in their activity. However it is also significant to note that 24% of those interviewed employ over 100 people and are therefore a key employer within the employment market as well as within the construction industry.

On the other hand, part-time employment in the construction industry is very limited. This has also been confirmed from employment statistics released by the National Statistics Office. In fact, as shown in Figure 10.2, 84% of respondents stated that their part-time complement was in the region of 0-5 persons with most of these stating that they did not employ any part-time workers.

Figure 10.2 : Current Part Time Employment

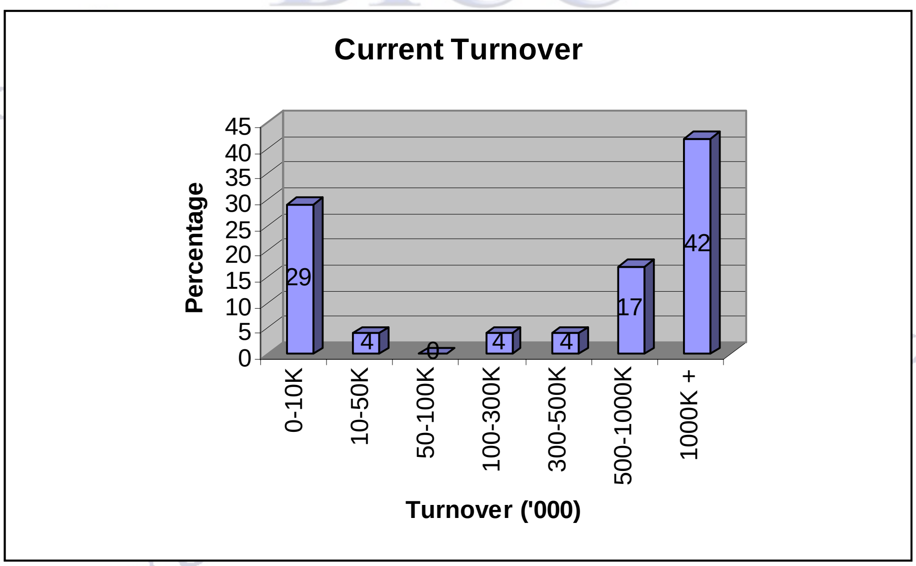


Notwithstanding the fact that there seems to be some appreciable part-time employment in the 11-20 category what is significant is that the large companies, presumably those who employ the major full time complement, do not seem to resort to the employment of persons on a part-time basis.

10.3 Turnover

Turnover is an important indicator to determine the amount of work that is being generated within the industry. This is important not only to establish the liquidity within the sector but also to determine the levels of orders that prevail. Seven (7) turnover bands were selected and the results obtained are summarised in Figure 10.3.

Figure 10.3 : Turnover

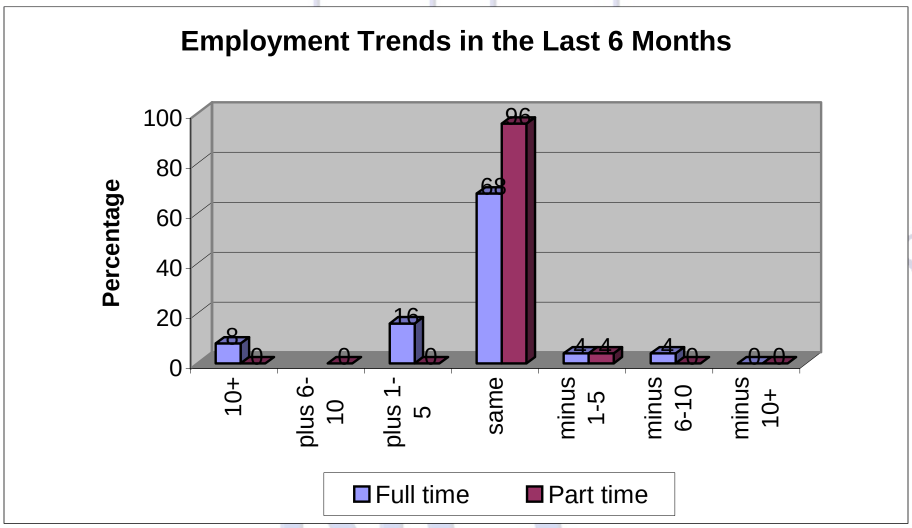


The results highlight two important issues. The first relates to the high percentage of contractors whose turnover exceeds Lm 1,000,000. This is a clear indication of the strength and importance of these entities to the construction industry as well as to the economy as a whole. The second important factor is the relatively high proportion (29%) of those small enterprises whose declared turnover does not exceed Lm 10,000. These may be single entity persons whose livelihood depends on small jobs for which there might not be a significant supply of labour. However this is purely an assumption and the true reason may need to be looked at more closely.

10.4 Employment Trends During the Last 6 Months

Trends in employment figures are also a prime indicator of the well-being of the sector. Consequently, respondents were asked to map out their increase or decrease in employees, both on a full time and part time basis, over the past 6 months.

Figure 10.4 : Employment Trends Over the Past 6 Months

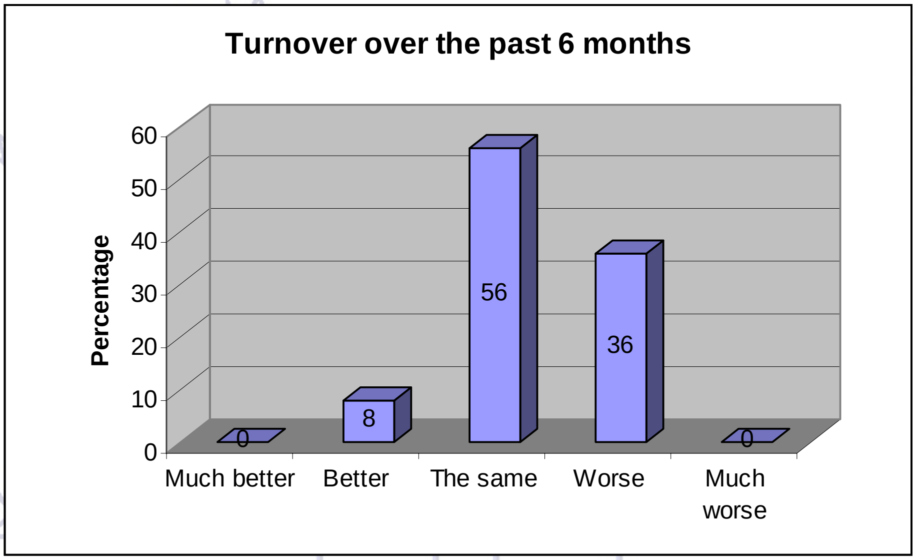


The salient feature that was observed was that most firms have, over the past 6 months, retained the same workforce. This implies a certain stability within the sector but does not offer any indication that these firms have experienced any particular growth in their business. Notwithstanding, it may also be observed that, all in all, the industry might have experienced a slight net increase in the total workforce it employs. However, a marginal decrease in the part time workforce seems to have manifested itself.

10.5 Turnover during the past 6 months

Although the quantification of turnover is an important factor in order to establish the health of the industry, its performance over distinct periods can offer the entrepreneur or investor with a better outlook as to the likelihood of business within the sector. Consequently, respondents were asked to describe whether their turnover had, in general, been better, the same or even deteriorated over this period.

Figure 10.5 : Turnover patterns during the last six months



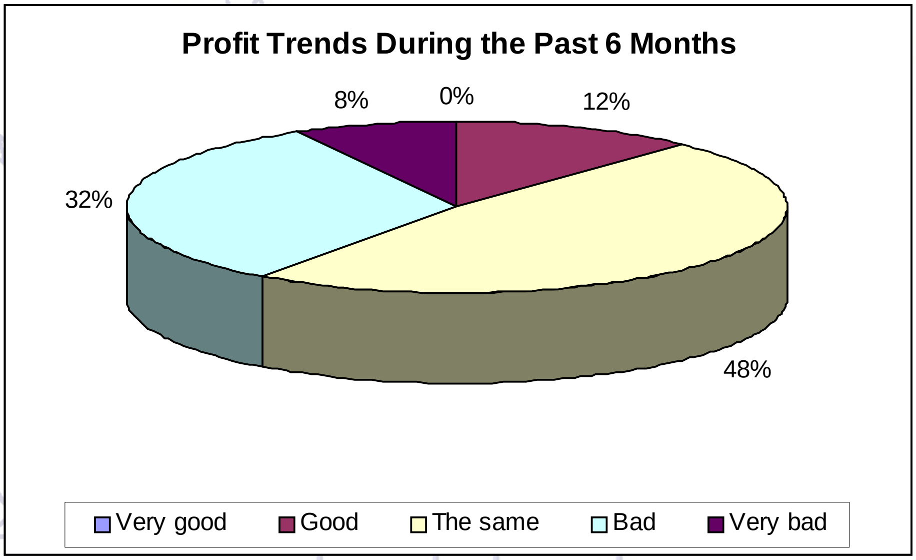
The majority of those surveyed (56%) declared that their turnover had remained constant over the period under review. However, it is significant to note that 36% of respondents actually expressed that they had suffered a decline in turnover. Only a minimal 8% declared that they had improved their overall turnover.

So whilst the figures for turnover seem to reinforce those for employment, the scenario here is more negative as turnover, although in the main being seen as retaining its levels is signalling to a slowdown by a number of companies. This merits a closer look at the difficulties being experienced by the industry with a view to identifying the salient problems that are affecting it and how the necessary stimuli can be provided to improve the situation.

10.6 Profits during the past 6 months

Profits are, to a certain extent, related to turnover. However, whilst turnover usually signals the levels of orders and extent of works carried out, profits reveal the increase in worth of the company to the shareholder, and consequently the potential to further expand the business.

Figure 10.6 : Profit patterns during the past six months

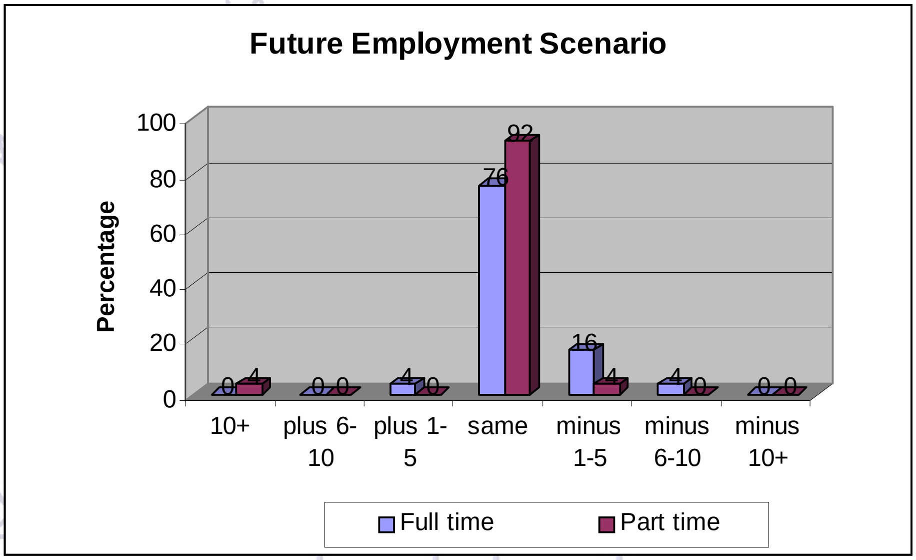


Once again the position of the construction industry is confirmed as being stable yet with a possibility of embarking upon a downtrend. This is because whilst 48% of respondents indicated that their profits had remained at the same level during the past 6 months, a significant 32% declared that they had actually experienced a decline in profits over the same period. These figures are considered to be very significant for if future trend surveys were to confirm this downturn this could seriously imply that the construction industry is set for a significant recession.

10.7 Future Employment Scenario

Another aim of the trend survey is to obtain an indication of how the main players (contractors) in the industry think that their potential employment will be during the next six months. This is indicative for it reflects the potential of an upside or downside within this sector.

Figure 10.7 : Future Employment Scenario

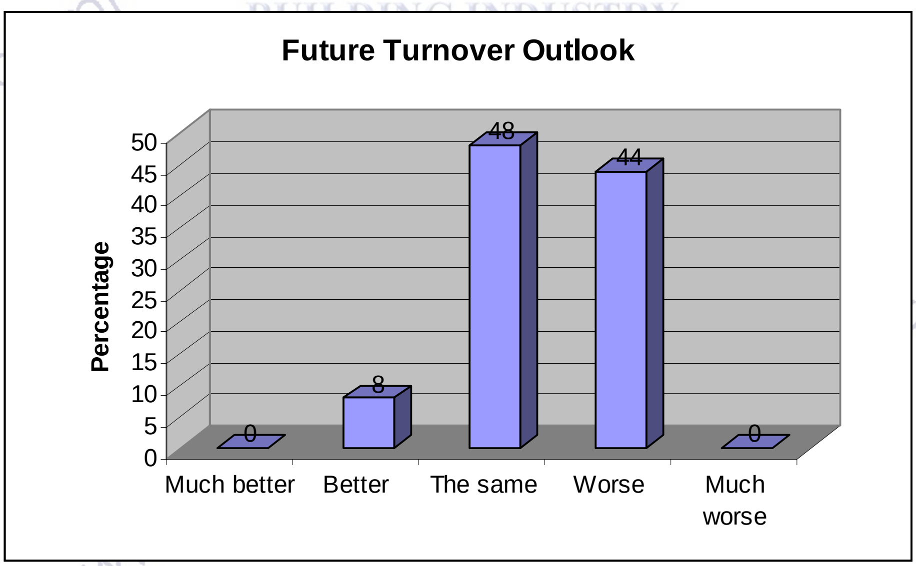


There is strong evidence that respondents do not feel that the forthcoming six months will offer much scope for expansion. In fact 76% of respondents said they envisage that their workforce will remain at the same levels as it is today whilst 92% seem catagoric about not increasing their part time workforce. Thus whilst the indications do not augur well for expansion in this sector, it might also be concluded that the outlook for the forthcoming six months seems to be stable.

10.8 Future Turnover

The outlook for future turnover is in itself an indicator of the orders that are being expected by contractors.

Figure 10.8 : Outlook for Future Turnover

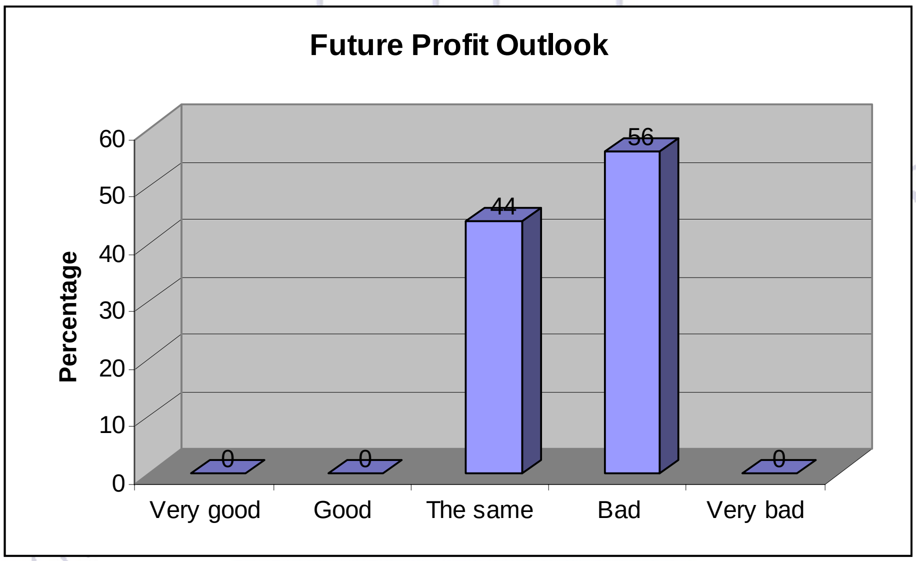


A similar outlook may be noted as 48% of respondents expect the same level of turnover to prevail. However, a significant 44% expect their turnover to be worse than current levels. This reinforces the respondents' previous expression of the fact that their turnover over the last six months had been more or less the same or worse. Although outlook for future turnover may be conditioned by the turnover performance of the past six months it is important to monitor the actual figures as they materialise for a continuation of this downward trend might have significant implications for the industry.

10.9 Future Profits

As stated earlier, profits are a measure of the increase in shareholder wealth and as such are a very important indicator as to the growth that companies in the sector may afford.

Figure 10.9 : Future Profit Outlook

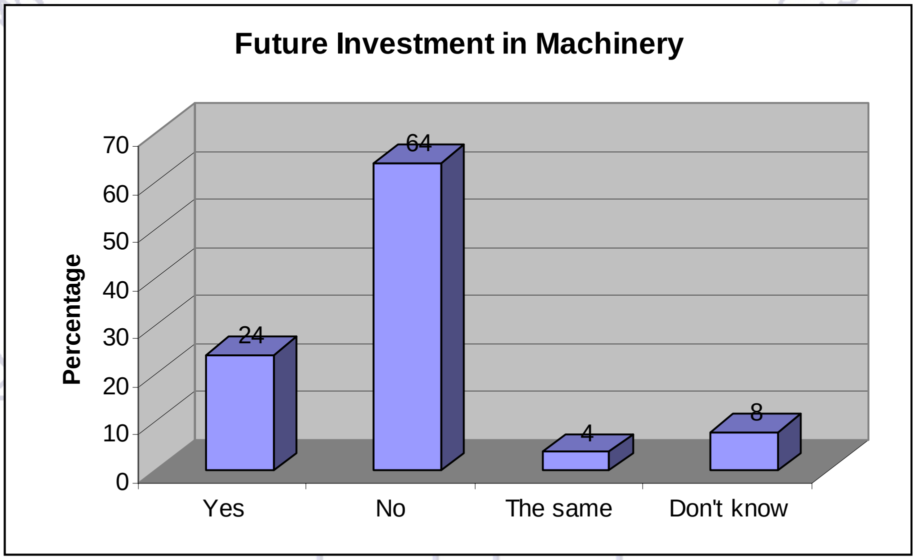


The data collected suggests one of the most negative outlooks emerging from this survey. This results from the fact that the majority of respondents (56%) feel that their profits will decline over the coming six months with the remainder opining that their profits will remain at the same levels. This may be due to many factors such as shortage of work and undercutting of prices and the real reasons for such an outlook need to be focused upon if the situation in the industry is to be addressed properly.

10.10 Future Investment in Machinery

Investment in machinery is a key indicator of a business's intention to pursue its current operations at the same level or its intention to further intensify its activities. A failure to invest in new machinery usually signifies a slowdown in the company's activities and as such contractors' opinions on the future commitments in this respect may also help to shed light on the anticipated volume of work they are expecting.

Figure 10.10 : Future Investment in Machinery

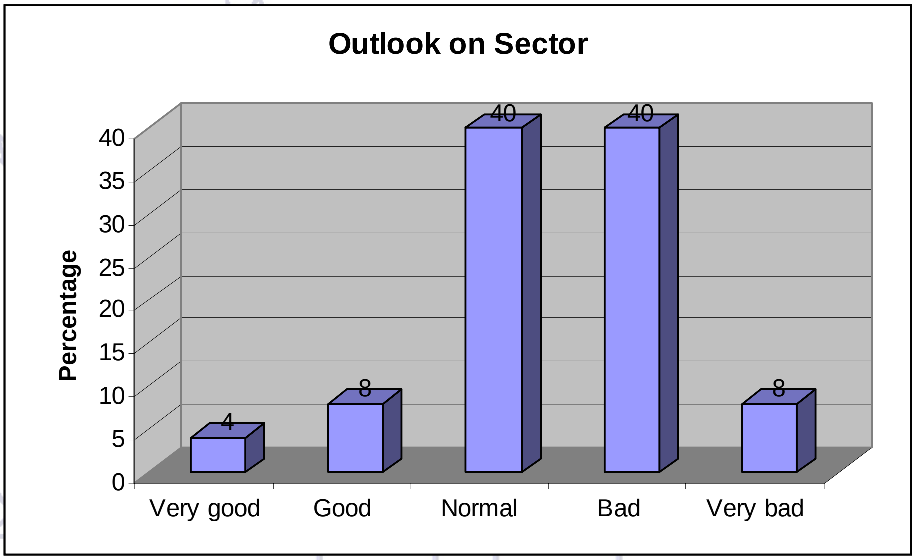


The survey indicates that the absolute majority of contractors (64%) do not seem willing to increase their investment. This might be yet another indication that contractors view their business activity as being stable, if not on the decline. On a positive note, 24% of respondents seem intent upon further investing in machinery indicating that they see an upside to their current business.

10.11 Outlook on the Construction Industry Sector

Having examined specific aspects that are prime indicators of the well being, or otherwise of the construction industry, respondents were asked to comment upon their overall outlook for the construction industry with a view to obtaining a holistic dimension of the sector.

Figure 10.11 : Outlook for the Construction Industry



Responses to this question confirm the trends that have been established through previous indicators. The outlook is finely poised between a normal to bad outlook with both responses garnishing 40% each of the total responses. It is thus safe to conclude at this stage that the construction industry needs to be closely monitored in order to address those issues that might be a threat or risk to its well being.

10.12 Issues Hindering Business Expansion

A healthy construction industry is not only one that registers an increase in turnover and profits but one that uses such funds with a view to expanding the business with a view to increasing productivity and work orders accordingly. Consequently, respondents were given a number of options that could be key factors that mitigate against expanding their business. The factors included in the survey were:

- delays in the issue of building permits;
- lack of skilled workers;
- lack of loan facilities;
- delays in payments made by clients;
- lack of demand;
- unwillingness to expand business;
- any other issues.

Two approaches were adopted in order to obtain a clearer reason for those factors which, in the respondents' opinion, seem to be hindering the expansion of their business. The first approach is a simple count of the first, second and third preferences expressed, whilst the second approach assigns weightings to the various preferences and computes a weighted score for each of the options.

In utilising the first approach, it is evident that the main reason to which contractors attribute the lack of expansion in their business is the delays that are encountered in the issuing of development permits by MEPA. This is followed, at a distance, by the lack of an available skilled workforce and subsequently by delays in payments by clients and a lack of volume of work. No one from the sample thought that availability of bank loans was a hinderance to the expansion of their business and none of them expressed, as a main reason, the lack of a will to expand the business. The issue of delays in issuing development permits by MEPA also features as a strong second preference where it is flanked by the lack of a skilled workforce. Delays in payments by clients also follows closely.

Therefore, simply from an observation of the strongest preferences expressed it is evident that the main three reasons being attributed as causing contractors difficulty in expand their business are the following (in order of importance):

1. delay in the issue of development permits from MEPA;
2. lack of skilled workers; and
3. delays in payments by clients.

The second approach considered all preferences expressed by assigning a weighting for each preference. Thus a score of 10 was assigned for a first preference, eight for the second, six for the third, four for the fourth, three for the fifth, two for the sixth and one for the seventh.

The results confirm and reinforce the aforementioned findings for the options put forward, in order of highest score obtained were as follows:

1. delay in the issue of development permits from MEPA (182);
2. lack of skilled workers (142);
3. delays in payments by clients (132);
4. lack of volume of work (81);
5. lack of loan facilities (25); and
6. unwillingness to expand business (24).

Thus both approaches confirm each others findings and therefore add to the significance of the responses received as well as to the findings of this report.

10.13 Training Issues

Training is a key element in order to secure an efficient and competitive workforce that can adapt to the continually evolving standards within the trade. Moreover, training is also vital for the re/skilling of workers who wish to enter the industry. Training can be specific to the skill in which a worker intends to practice and may also be of a general nature focusing on specific issues such as health and safety.

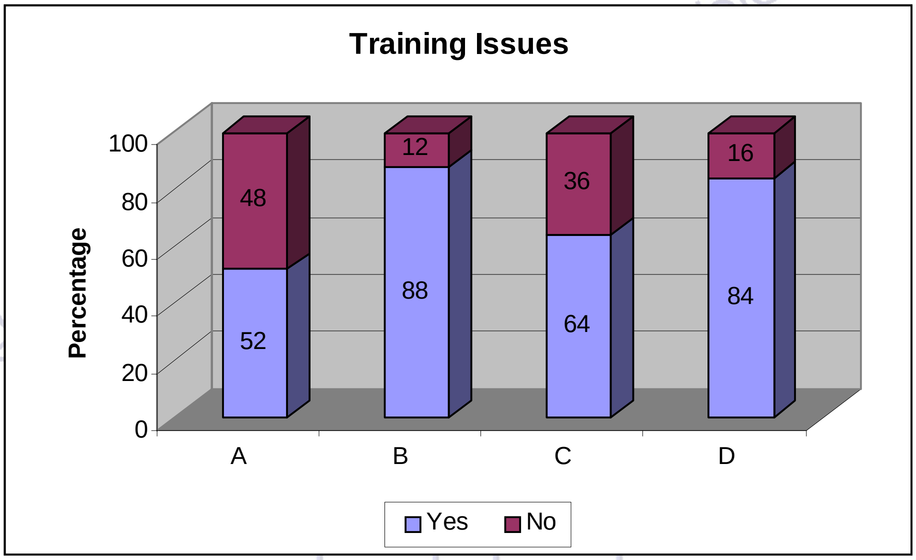
Respondents were in fact asked four main questions in this respect namely whether employers were:

- willing to train their workers during normal working hours;
- aware of courses being organised by ETC and MCAST;

- interested in additional information on this kind of training; and
- aware of the Health and Safety Courses.

The results are presented hereunder.

Figure 10.13 – Training Issues



LEGEND

A. Willing to train workers during normal working hours
B. Aware of courses being organised by ETC and MCAST
C. Interested in additional information on training opportunities
D. Aware of Health and Safety courses

It is evident that a strong majority of employers are aware of the courses being offered by ETC, MCAST as well as in respect of Health and Safety. However awareness needs to be distinguished from commitment. In fact when respondents were asked whether they would be prepared to train their workforce during normal working hours only 52% responded in the affirmative. This may signal towards an attitude where training may be considered as an element of distraction to the work schedule and is therefore seen as a burden to the organisation. However the fact that the majority of respondents, albeit slight, seem ready to accommodate training during working hours is positive.

There is no doubt that the awareness campaign on the material available for training purposes has had its success. However, one needs to move on from awareness towards execution by finding a suitable medium, or set of incentives, to allow employers to favor the continuing professional development of their employees.

11.0 Commencement Notices

Earlier sections of this report have aimed at establishing the demand and trend within the construction industry through an analysis of development permits issued. While this provides a valid indicator cognisance has been taken of the fact that not all development permits issued result in actual development as some may not be followed upon by applicants. In addition there can be delays between the actual issuing of the permit and the commencement of works which create a shift between the picture provided by an analysis of the permits and the actual period of construction activity. Commencement notices provide the ideal source of information that could give a better representation of the ongoing construction activity at a specific period of time, unfortunately while MEPA have made the data available they have clarified that this data is for reference only. A cursory look at the data confirms that this data does not provide a sound basis for analysis.

MEPA has also provided data in respect of compliance certificates issued. This data has been used to draw some observations with respect to the demand picture as established in earlier sections for housing and non industrial buildings.

11.1 Housing

Table 11.1 below presents the total number of approved housing units and the total number of compliance units issued per year for the period 1999 – 2003. Over the period 2000 to 2003 the number of compliance certificates issued annually can be considered to be stable. These figures could indicate, amongst others, that work output from the construction may be stable and may not be able to meet the development demand reflected through an increasing number of approved units. Another possible cause could be an increase in the number or size or both, of multiple unit developments. In such a context the picture provided by Table 11.1 can be justified as a result of a number of large residential developments which are still in construction phase. In order to attempt to further substantiate or otherwise this possible trend a further analysis has been done and is captured in Table 11.2. From this Table it can be concluded that a possible cause in the marked difference between compliance certificates and approved units may be attributable to an increase in large multi-dwelling developments.

Table 11.1 – Dwellings: Units Approved and Compliance Certificates
Source: MEPA

	1999	2000	2001	2002	2003
Total no of units approved	**2273**	**2369**	**4180**	**5481**	**5329**
Growth		**96**	**1811**	**1301**	**(152)**
Compliance Certificates Issued	**1682**	**2735**	**2582**	**2555**	**2719**
Growth		**1053**	**(153)**	**(27)**	**164**

Table 11.2 – Dwellings: Units Approved and Development Permits
Source: MEPA

	1999	2000	2001	2002	2003
Total no of units approved	**2273**	**2369**	**4180**	**5481**	**6128**
No of permits issued	**1257**	**1408**	**1299**	**1422**	**1321**
Factor: Units to Permits	**1.8**	**1.7**	**3.2**	**3.9**	**4.6**

11.2 Non-Residential Development

With respect to non-residential development it is difficult to drawn conclusions from compliance certificates as these tend to be larger projects which have a longer construction duration when compared to housing. The data available is however being presented below as over a longer period of time it can highlight those areas where development permits are not resulting in building projects.

Table 11.3 – Non Residential Development permits and Compliance Certificates
Source: MEPA

	1999	2000	2001	2002	2003	TOTAL
Manufacturing/Industrial						
Permits	101	74	41	57	18	291
Compliance certificates	2	11	21	12	11	57
Offices						
Permits	19	41	39	54	19	172
Compliance certificates	5	9	9	18	7	48
Shops and Retail Services						
Permits	59	89	118	108	44	418
Compliance certificates	8	14	18	22	24	86
Restaurant/Cafe/Bar						
Permits	29	33	34	49	24	169
Compliance certificates	2	5	0	4	3	14
Car parking and Vehicle Garaging						
Permits	124	175	162	154	134	749
Compliance certificates	22	58	68	59	53	260
Community and Health Services						
Permits	30	30	16	30	32	138
Compliance certificates	6	6	6	4	6	28
Warehousing (Commerce/Industry storage)						
Permits	33	30	28	37	28	156
Compliance certificates	20	28	12	25	17	102
Recreational						
Permits	24	22	21	56	31	154
Compliance certificates	2	12	4	6	8	32
Mixed Office and Retail						
Permits	17	13	12	16	12	70
Compliance certificates	4	4	8	5	10	31
Hotel/Tourist Accommodation						
Permits	22	19	26	13	15	95
Compliance certificates	0	0	2	2	4	8
Educational						
Permits	18	22	14	33	28	115
Compliance certificates	0	2	0	2	3	7

Appendix A – ETC Data

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
CONSULTANT GENERAL	21	0	17	0	2	0	3	0	4	0
DIRECTOR, CHIEF EXECUTIVE	298	0	293	0	0	0	2	0	3	0
CHIEF OFFICER	0	0	0	0	0	0	4	0	0	0
CHAIRPERSON	1	0	1	0	3	0	0	0	5	0
MANAGERS IN PRODUCTION/CONSTRUCTION	4	0	4	0	2	0	7	0	4	1
MANAGERS IN FINANCE AND ADMINISTRATION	3	6	4	7	25	3	11	5	0	6
MANAGERS IN SALES AND MARKETING	3	19	2	15	3	29	0	11	1	8
MARKETING ASSISTANT	1	0	1	1	7	0	212	0	0	0
MANAGERS IN ADVERTISING & PUBLIC RELATIO	1	4	1	2	0	4	251	0	16	4
MANAGERS NOT ELSEWHERE CLASSIFIED	2	17	2	15	1	9	2	2	1	4
MANAGERS GENERAL/NOT ELSEWHERE CLASS	38	0	21	0	30	1	1	0	2	0
MANAGERS IN CONSTRUCTION	13	2	11	4	0	3	1	3	0	3
SHOPKEEPER, MANAGER IN WHOLESALE	5	3	6	0	1	0	1	0	68	0
MANAGER OF RESTAURANTS & HOTELS	0	4	0	3	1	1	1	1	49	0
MANAGERS GENERAL	34	12	33	7	3	7	35	9	1	16
MANAGER ASSISTANT	2	0	1	0	11	0	18	0	1	0
GEOLOGISTS AND GEOPHYSICISTS	2	0	2	0	27	0	12	0	2	0
COMPUTER PROGRAMMERS	2	8	2	2	6	2	0	4	26	1
ARCHITECTS, ENGINEERS AND RELATED PROFES	33	0	31	0	3	0	6	0	1	0
ARCHITECTS, TOWN AND TRAFFIC PLANNERS	2	0	5	0	3	0	1	0	0	0
PLANNER (4 COLOUR PLANNER)	2	0	2	0	1	0	8	0	1	0
ARCHITECT JUNIOR	1	1	0	0	0	0	7	0	1	0
CIVIL ENGINEERS	1	1	1	0	1	0	4	1	7	1
ENGINEER ELECTRICAL	17	0	17	1	3	0	4	0	0	0
ENGINEER ELECTRICAL ASSISTANT	3	0	2	0	4	0	4	0	9	0

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
ENGINEER ELECTRONIC & TELECOMMUNICATIONS	2	0	2	1	2	0	3	0	1	0
ENGINEER ELECTRONIC & TELECOMM ASSISTANT	0	0	1	0	12	0	42	0	15	0
ENGINEER MECHANICAL	14	1	13	1	0	2	102	1	3	4
ENGINEER MECHANICAL ASSISTANT	0	0	1	0	1	2	3	0	768	0
SURVEYOR, QUANTITY (ARCH, ENG NOT CLAS)	37	5	34	2	1	2	1	5	276	2
HEALTH PROFESSIONALS	2	0	2	0	6	0	4	0	20	0
MEDICAL DOCTORS	1	0	1	0	4	0	18	0	1	0
DENTISTS	0	0	0	0	135	0	7	0	41	0
PHARMACISTS	2	1	2	0	1	0	18	0	3	0
HEALTH ASSISTANTS/ NOT ELSEWHERE CLASS	1	8	1	4	6	1	21	2	121	2
ACCOUNTANTS	29	0	26	2	1	1	5	2	6	2
OFFICER,PERSONNEL SAFETY	2	0	2	0	168	0	1	0	21	0
OFFICER, PUBLIC RELATIONS OFFICER	10	1	10	0	13	1	0	0	15	3
NOTARY (LEGAL PROFESSIONALS NOT CLASS)	0	1	0	0	0	0	0	0	0	1
TRANSLATORS & INTERPRETERS	0	2	0	1	2	3	6	0	3	2
SCULPTORS, PAINTERS AND RELATED ARTISTS	10	15	9	12	2	11	1	9	1	10
CIVIL ENGINEERING TECHNICIANS	2	0	2	0	59	0	1	0	4	0
TECHNICIAN ELECTRICAL	18	9	18	5	1	4	1	1	11	1
TECHNICIAN ELECTRICAL ASSISTANT	2	1	3	2	0	0	155	0	9	0
TECHNICIAN ELECTRONICS & TELECOM	1	7	1	4	286	8	14	4	146	7
TECHNICIAN COMPUTER	0	2	0	0	6	1	15	1	1	3
TECHNICIAN A/C & REFREGERATION	7	2	6	1	1	3	50	2	100	2
TECHNICIAN MECHANICAL	28	5	36	5	12	10	3	1	54	6
DRAUGHTSPERSONS	25	2	21	3	1	6	0	2	1	3
COMPUTER ASSOCIATE PROFESSIONALS	1	0	1	0	0	0	1	0	29	0
COMPUTER ASSISTANTS	1	14	0	8	64	13	15	17	3	6
COMPUTER EQUIPMENT OPERATORS	1	1	1	0	4	0	0	0	0	0

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
CONTROLLER	5	0	8	0	875	0	1	0	6	0
OPTICAL AND ELECTRONIC EQUIPMENT OPER	0	0	0	0	253	0	2	0	10	0
BUILDING AND FIRE INSPECTORS	1	0	1	0	1	0	2	0	2	0
QUALITY CONTROLLER	5	10	4	5	0	5	1	3	0	5
LABORATORY TECHNICIAN LIFE SCIENCE & REL	2	0	1	0	8	0	3	0	3	0
LABORATORY ASSISTANTS	2	3	3	0	38	0	1	7	16	3
LABORATORY ANALYST	0	0	1	0	1	1	0	0	1	0
NURSE	1	1	1	1	5	0	0	0	1	1
INSTRUCTOR OTHERS ASSOCIATE PROFESSIONAL	2	28	2	22	21	17	0	8	4	17
FINANCE AND SALES ASSOCIATE PROFESSIONAL	2	0	2	0	7	0	1	0	4	0
FINANCE SECURITY	2	0	3	0	1	0	3	0	2	0
ESTATE AGENTS	1	0	1	0	3	1	0	1	1	1
SALES REPRESENTATIVE	6	95	4	84	25	68	33	51	6	79
PURCHASING OFFICER	3	5	3	3	14	2	1	3	0	4
APPRAISERS, VALUERS & AUCTIONEERS	0	0	0	0	1	0	0	0	127	0
FINANCE AND SALES PROF. NOT CLASSIFIED	3	0	4	0	4	0	9	0	5	0
CONTRACTOR	61	0	55	0	17	0	8	0	1	0
REPRESENTATIVE, BUSINESS SERVICE	1	0	2	0	43	0	0	0	0	0
ADMINISTRATIVE ASSOCIATE/SOCIAL WORK	0	0	0	0	5	0	5	0	1	0
ADMINISTRATIVE OFFICER	10	2	6	9	41	7	1	3	1	4
BOOKKEEPERS	3	1	1	1	27	0	6	1	0	1
EXECUTIVE/ADMINISTRATIVE OFFICER	6	55	3	44	1	30	3	17	8	17
INSPECTOR,CIVIL SERVICE	1	0	0	0	46	0	3	0	294	0
DESIGNER,GRAPHIC,FURNITURE,DECORATION	26	18	23	21	1	19	1	22	55	17
DESIGNER INDUSTRIAL	2	2	3	2	6	1	0	0	0	0
ANNOUNCER RADIO/TELEVISION, DISC-JOCKEY	0	0	0	0	5	1	14	2	52	3
MUSICIAN, STREET CLUB , SINGERS , DANCER	0	3	1	6	16	11	2	10	3	10
CLERKS OFFICE	66	0	65	0	6	0	0	0	3	0
TYPIST AND STENOGHRAPHERS	0	0	0	0	33	0	0	0	1	1

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
DATA ENTRY OPERATORS	1	47	0	34	0	28	0	25	21	23
SECRETARIES	49	26	47	24	1	29	4	13	0	22
ACCOUNTING AND BOOKKEEPING CLERKS	15	24	17	19	14	30	0	12	2	20
STORE KEEPER	32	74	34	57	0	57	1	67	2	76
STORE KEEPER ASSISTANT	2	69	2	55	1	76	1	48	9	56
INSPECTORS BUS, TRANSPORT CLERKS	1	4	1	3	2	4	1	3	1	3
CLERKS GENERAL DUTIES	74	311	73	284	5	260	19	185	1	235
CLERKS ASSISTANT	2	91	2	71	2208	83	2	44	1	62
SUMMER WORKER	0	0	0	0	14	0	5	0	1	0
STUDENT WORKER	1	0	1	0	0	0	1	0	159	0
PUPIL WORKER	0	0	0	0	24	0	10	0	20	0
CASHIERS TELLERS AND RELATED CLERKS	1	0	1	0	12	0	877	0	3	0
CASHIERS AND TICKET CLERKS	1	31	1	28	0	33	7	36	1	33
CLIENT INFORMATION CLERKS	1	0	1	0	6	0	2	0	1	0
RECEPTIONISTS AND INFORMATION CLERKS	9	115	9	86	30	81	10	78	19	95
TELEPHONE SWITCHBOARD OPERATORS	0	63	0	57	8	47	4	57	7	84
CHEF	0	22	0	17	4	17	4	8	0	6
WAITERS, WAITRESSES	0	35	0	38	2	55	7	27	9	37
BARMAN	6	65	6	59	2	56	0	49	1	60
CARE WORKER INSTITUTION BASED	1	20	3	20	122	26	0	21	1	19
HAIRDRESSERS, BARBERS, BEAUTICIANS & OTH	1	15	1	13	4	15	4	14	4	14
POLICE OFFICERS	0	0	0	0	1	0	5	0	0	0
SECURITY OFFICER	5	18	4	13	4	9	0	2	2	5
SALESPERSONS	2	0	3	1	30	0	1	0	0	0
SALESMAN/WOMAN SHOP	25	421	23	415	6	398	6	289	1	368
SALESMAN ASSISTANT COUNTER	2	37	1	38	6	52	27	36	79	55
SALESPERSON, STREET STALL	1	3	2	3	7	2	7	1	1	2
FARM HAND SKILLED	1	13	1	8	1	8	0	10	1	10

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
GARDENERS, HORICULTURAL & NURSERY GROWER	1	33	1	33	1	31	0	32	0	59
MARKET-ORIENTED CROP AND ANIMAL PRODUCER	4	0	4	0	3	0	305	0	1	0
DIVER OYSTER, SPONGE	1	2	1	4	1	3	1	5	1	5
FISHERMAN	2	9	2	6	35	5	3	7	1	5
SUPERVISOR/FOREMAN TRADES AND CONSTRUCT	37	20	44	19	1	16	0	15	2	22
MINERS AND QUARRY WORKERS	3	1	3	0	33	1	10	1	18	1
BLASTERERS AND SHOTFIRERES	0	2	1	3	14	3	0	3	2	5
STONE CUTTER & CARVER	165	6	169	2	51	3	1	3	1	10
BUILDING FRAME AND RELATED TRADES WORKER	2	0	1	0	1	0	12	0	0	0
MASON, BUILDER,TRADITIONAL MATERIALS	534	4	494	4	0	9	0	9	9	17
STONEMASONS & BRICKLAYERS	221	1	234	2	2	2	2	4	0	3
STONEMASONS & BRICKLAYERS ASSISTANT	1	0	1	0	3	0	1	1	3	0
CONCRETE WORKERS	23	1	30	0	2	0	0	0	1	0
CONCRETE SHUTTERER	88	5	84	2	102	2	4	2	5	4
SLIP FORM ERECTORS	48	0	52	0	5	0	28	0	5	0
CARPENTERS AND JOINERS	100	40	110	30	1	34	0	37	1	36
CARPENTERS ASSISTANTS AND SANDERS	8	69	7	65	3	71	11	56	2	55
ALUMINIUM WORKER	9	12	6	10	3	10	0	6	0	6
ALUMINIUM WORKER ASSISTANT	1	8	1	11	1	11	0	6	5	8
BUILDING FINISHERS AND RELATED TRADES	9	0	10	0	0	0	1	0	0	0
ROOFERS	10	0	8	0	30	0	1	0	24	0
TILE LAYER FLOOR, WALL	238	25	217	26	60	25	1	43	1	59
TILE LAYER ASSISTANT	2	6	2	5	0	6	16	4	12	5
PLASTERERS	884	84	869	84	5	92	2	95	2	128
PLASTERER GYPSUM	29	6	28	6	25	5	0	4	3	7
SOFFIT LAYER	8	5	9	4	4	2	1	1	6	1

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
PLUMBERS AND PIPE FITTERS	125	24	120	20	2	24	3	19	0	27
PLUMBERS ASSISTANT	5	16	8	12	3	6	4	11	1	17
ELECTRICIAN, BUILDING	237	7	246	2	1	5	1	5	2	7
FITTER ELECTRICIAN ASSISTANT (DOMESTIC)	2	9	2	9	3	9	0	10	10	15
ELECTRICIAN, BUILIDING ASSISTANT	23	31	23	19	2	18	1	23	1	19
PAINTERS, BUILDING STRUCTURE CLEANERS	6	0	6	0	1	0	2	0	21	0
PAINTERS AND RELATED WORKERS	47	62	48	38	6	37	2078	28	45	42
SPRAYER AUTOMOBILE	3	13	3	11	16	8	1	6	3	10
SPRAYER FURNITURE	3	5	3	3	61	1	3	3	1	1
SPRAYER ASSISTANT	4	11	4	10	0	7	238	11	9	7
WELDERS AND FLAMECUTTERS	28	62	30	34	1	21	2	19	1	23
WELDER ASSISTANT	2	15	4	10	1	14	2	21	15	13
SHEET-METAL WORKER/BOILER MAKER	5	8	6	5	1	4	5	1	26	5
PANEL BEATER	5	15	7	13	4	13	1	11	12	16
SHEET METAL ASSISTANT	0	5	0	3	31	2	1	3	19	3
STRUCTURAL-METAL PREPARERS AND ERECTORS	1	5	1	4	1	3	74	2	87	4
STEEL WORKER	11	5	11	3	0	2	0	2	1	2
STEEL FIXER	74	4	94	3	81	4	0	4	0	5
RIGGERS AND CABLE SPLICERS	1	6	1	4	1	9	0	8	3	8
DIVER SALVAGE	2	14	2	21	0	7	127	6	1	9
BLACKSMITHS, HAMMER-SMITHS & FORGINGPRES	3	2	3	4	2	4	89	2	2	1
FITTER TURNER & MACHINE TOOL SETTER	0	21	1	9	10	6	3	12	2	12
DRILLER - METAL	1	0	0	0	1	0	24	0	10	0
MECHANIC & FITTER (MACHINERY)	27	0	28	0	3	0	1	0	2	0
MECHANIC & FITTER MOTOR VEHICLE	17	39	18	43	1	37	157	44	1865	49
FITTER MOTOR VEHICLE ASSISTANT	1	40	1	33	3	38	5	33	139	32
FITTER MECHANIC (LIFTS, REFR ,WHITEGOOD)	2	18	3	10	5	15	17	12	1	23

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
FITTER MECHANICAL(WHITE GOODS) ASSISTANT	0	2	0	1	0	2	6	1	5	0
ELECTRICAL & ELECTRONIC MECHANICS/FITTER	31	0	32	0	0	0	4	0	4	0
FITTER AUTO ELECTRICAL	4	6	5	5	132	5	14	7	19	4
FITTER AUTO ELECT. ASSISTANT	10	6	10	6	0	3	46	0	2	4
FITTER ELECTRONICS	4	2	2	4	1	1	3	3	1	2
FITTER ELECT. WINDER/REPAIRER	13	1	14	1	0	3	1	4	14	3
ELECTRONICS MECHANICS SERVICERS	0	1	1	1	14	1	22	1	16	0
INSTALLER TELEPHONE/TELEGRAPH & SERVICE	1	2	1	3	1	1	8	2	5	3
LINESMAN/CABLE JOINER	1	4	1	7	2	7	149	2	0	6
INSTALLER A/C AND REFREGERATION	4	10	7	12	158	10	1	6	0	10
INSTALLER LIFTS	6	1	2	0	0	1	1	0	6	1
INSTALLER STEREO/ALARMS	1	1	2	1	3	3	16	0	5	0
POTTERS, GLASS-MAKERS AND RELATED	1	0	1	0	1	0	1	0	0	0
PRINTERS & RELATED WORKERS	1	11	2	6	233	8	7	8	5	10
BAKER	2	18	2	24	3	20	0	13	0	16
WOOD TREATERS	1	0	1	0	0	0	1	0	1	0
CABINET-MAKERS AND RELATED WORKERS	4	5	4	5	3	2	19	5	1	4
WOODWORK-MACHINE SETTERS & SETTER OPER.	0	0	0	0	0	1	0	1	1	3
SUPERVISOR, FACTORY SUPERVISOR	23	44	24	38	1	37	62	26	2	38
SUPERVISOR CATERING	0	8	1	10	15	9	6	8	242	8
MINING-PLANT OPERATORS	3	0	3	0	3	0	2	1	1	2
METAL-PROCESSING PLANT OPERATORS	0	0	0	0	66	0	1	0	0	0
CHEMICAL-HEAT-TREATING-PLANT OPERATORS	1	0	1	0	4	0	130	0	1	0
PETROLEUM & NATURAL-GAS-REFINING-PLANT O	0	0	0	0	31	0	0	0	3	0
OPERATOR STEAM PLANT/BOILER	3	1	4	1	1	0	0	0	1	2
INCINERATOR, WATER-TREATMENT & REL PL OP	0	0	0	0	6	0	4	0	193	0
MACHINE OPERATORS AND ASSEMBLERS	19	1	25	2	0	1	1	1	1	1
MACHINE-TOOL OPERATOR	8	4	7	4	20	0	0	1	1	2

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
FOREMAN , GENERAL FOREMAN	61	13	62	7	5	7	4	10	3	18
PLASTIC-PRODUCTS MACHINE OPERATORS	0	0	0	0	1	0	20	0	12	0
MECHANICAL-MACHINERY ASSEMBLERS	4	4	5	0	80	1	0	3	1	1
MECHANICAL MACHINERY ASSEMBLER ASSISTANT	1	0	1	1	30	0	25	0	0	1
ELECTRICAL-EQUIPMENT ASSEMBLERS	3	0	3	0	0	1	8	0	11	0
WOOD AND RELATED PRODUCTS ASSEMBLERS	1	1	1	1	2	0	1	1	0	1
MACHINE OPERATORS OTHERS & ASSEMBLERS	3	379	3	345	2	262	9	216	2	243
DRIVERS AND MOBILE PLANT OPERATORS	129	0	134	0	199	0	30	0	31	0
DELIVERY MAN/DRIVER	88	537	83	533	22	569	1	542	4	659
DRIVER TAXI	0	28	0	29	0	27	1	25	0	27
DELIVERY MAN	5	13	0	0	0	0	0	0	3	0
DRIVER BUS/MINI-BUS	3	48	3	53	179	46	1	44	5	60
DRIVER HEAVY TRUCK	142	97	143	107	1	96	3	90	353	135
DRIVER BULLDOZER/TRACTOR	12	2	14	4	0	2	0	2	1	3
DRIVER/OPERATOR CRANE	32	24	27	23	1	24	107	29	0	40
DRIVER FORK-LIFT	2	60	2	59	1	54	4	59	0	81
SHIPS' DECK CREWS AND RELATED WORKERS	3	81	1	94	21	90	1	79	3	117
HAWKER FIXED	1	0	1	0	4	0	11	0	38	0
DOMESTIC CLEANERS HELPERS , LAUNDRERES	1	0	2	0	0	0	1	0	1	0
DOMESTIC HELPERS AND CLEANERS	2	5	2	3	0	4	19	10	1	8
CLEANER/MAID	15	449	15	397	462	386	0	378	3	468
CHAMBERMAID	2	17	2	15	1	28	0	12	4	12
LAUNDERERS AND PRESSERS	1	14	1	9	2	7	21	5	1	5
BUILDING CARETAKERS, SEXTON	1	0	1	1	1	2	0	3	0	3
MESSENGER	0	242	2	221	1	235	391	239	7	315
WATCHPERSON	25	178	29	172	3	198	1	226	4	313
GARBAGE COLLECTORS	2	20	0	15	1	19	50	22	82	25
FARMERS, FARM-HANDS AND LABOURERS	3	19	3	25	0	23	2	14	0	21

OCCUPATION DESCRIPTION	2003		2002		2001		2000		1999	
	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed	Unemployed
LABOURERS	2213	0	2190	0	1	0	26	0	21	0
LABOURERS IN MINING AND QUARRYING	2	0	2	0	8	1	1	1	2	1
HANDYMAN	151	218	138	217	3	210	6	189	0	260
LABOURERS IN BUILDING CONSTRUCTION	206	36	190	26	1	29	1	16	0	27
ASSEMBLING LABOURERS	3	41	3	35	1	27	2	11	1	11
FACTORY HAND / LABOURER	0	946	2	924	0	982	0	905	1	1106
LABOURER/HELPER UNSKILLED	67	741	68	706	13	643	2	610	0	793
BURDNARA	5	0	5	0	1	2	0	3	5	2
APPRENTICES	11	0	21	0	2	0	64	0	3	0

Appendix B – Survey Questions

1. X'inhi l-attivita' prin'ipali tan-negozju tieg]ek f'dan is-settur tal-bini?
G]a\el l-aktar wa]da li l-aktar tolqot il-parti tax-xog]ol tieg]ek.

☐ General Building and Civil Engineering Works
☐ Road works and infrastructure
☐ Quarrying

2. Kemm t]addem nies inkluz l-amministrazzjoni?

Full Time		**Part Time**	
☐	0 - 5	☐	0 - 5
☐	6 - 10	☐	6 - 10
☐	11 - 20	☐	11 - 20
☐	21 - 50	☐	21 - 50
☐	51 - 100	☐	51 - 100
☐	100+	☐	100+

3. X'inhi t-*Turnover* tieg]ek fis-sena?

☐ Lm 0 - Lm 10,000
☐ Lm 10,001 - Lm 50,000
☐ Lm 50,001 - Lm 100,000
☐ Lm 100,001 - Lm 300,000
☐ Lm 300,001 - Lm 500,000
☐ Lm 500,001 - Lm 1,000,000
☐ Lm 1,000,000+

4. F’dawn l-a]]ar sitt xhur, kellek impiegi [odda jew tnaqqis ta’]addiema?

Full Time

- [ ] |idt aktar minn 10
- [ ] |idt minn 6 sa 10
- [ ] |idt minn 1 sa 5
- [ ] L-istess numru ta’]addiema
- [ ] Naqqast bejn 1 u 5
- [ ] Naqqast bejn 6 u 10
- [ ] Naqqast aktar minn 10

Part Time

- [ ] |idt aktar minn 10
- [ ] |idt minn 6 sa 10
- [ ] |idt minn 1 sa 5
- [ ] L-istess numru ta’]addiema
- [ ] Naqqast bejn 1 u 5
- [ ] Naqqast bejn 6 u 10
- [ ] Naqqast aktar minn 10

5. Kif mar it-Turnover f’dawn l-a]]ar sitt (6) xhur?

- [ ] }afna a]jar mis-soltu
- [ ] A]jar mis-soltu
- [ ] L-istess
- [ ] G]ar mis-soltu
- [ ] }afna g]ar mis-soltu

6. Kif kien il-qlieg] f’dawn l-a]]ar sitt (6) xhur?

- [ ] Tajjeb]afna
- [ ] Tajjeb
- [ ] L-istess
- [ ] }azin
- [ ] }azin]afna

7. Fis-sitt (6) xhur li [ejjin kif ta]seb li ser tkun is-sitwazzjoni tal-]addiema fl-organizzazzjoni tieg]ek?

Full Time

- [ ] I\\id aktar minn 10
- [ ] I\\id minn 6 sa 10
- [ ] I\\id minn 1 sa 5
- [ ] L-istess numru ta’]addiema
- [ ] Tnaqqas bejn 1 u 5
- [ ] Tnaqqas bejn 6 u 10
- [ ] Tnaqqas aktar minn 10

Part Time

- [ ] I\\id aktar minn 10
- [ ] I\\id minn 6 sa 10
- [ ] I\\id minn 1 sa 5
- [ ] L-istess numru ta’]addiema
- [ ] Tnaqqas bejn 1 u 5
- [ ] Tnaqqas bejn 6 u 10
- [ ] Tnaqqas aktar minn 10

8. Kif ta]seb li sejjer ikun it-Turnover fis-sitt (6) xhur li gejjin?

- [ ] }afna a]jar mis-soltu
- [ ] A]jar mis-soltu
- [ ] L-istess
- [ ] G]ar mis-soltu
- [ ] }afna g]ar mis-soltu

9. Kif ta]seb li sejjer ikun il-qlieg] tieg]ek matul is-sitt (6) xhur li [ejjin?

- [ ] Tajjeb]afna
- [ ] Tajjeb
- [ ] L-istess
- [ ] }azin
- [ ] }azin]afna

10. Be]siebek tinvesti aktar fil-makkinarju jew materjali o]ra kapitali fis-sitt (6) xhur li [ejjin?

- [ ] Iva
- [ ] Le
- [ ] L-istess ammont
- [ ] Ma nafx

11. Kif tara li sejra tkun is-sitwazzjoni f'dan is-settur tal-bini fis-sitt (6) xhur li [ejjin?

- [ ] Tajba]afna
- [ ] Tajba
- [ ] Normali
- [ ] }azina
- [ ] }azina]afna

12. Immarka bin-numru 1,2 u 3 l-aktar fatturi li j\ommuk milli tkabbar in-negozju tieg]ek? U\a n-numru 1]dejn dak li tahseb li huwa l-izjed importanti u kompli bin-numri 2 u 3.

- [ ] Dewmien fil-]rug tal-permessi tal-bini
- [ ] Nuqqas ta']addiema bis-seng]a
- [ ] Nuqqas ta' self mill-banek
- [ ] Klijenti li jdumu ma j]allsu
- [ ] Nuqqas ta' domanda g]ax-xog]ol
- [ ] Ma tixtieqx tkabbar in-negozju

☐ Ohrajn (Spjega) ______________________________

13. Tixtieq tag]ti *training* lill-]addiema tieg]ek waqt xi]in mix-xog]ol tag]om?

☐ Iva
☐ Le

14. Kont taf li l-BICC qed torganizza korsijiet ta' ta]ri[b'mod teoretiku u prattiku bl-g]ajnuna ta' l-ETC u l-MCAST?

☐ Iva
☐ Le

15. Tixtieq aktar informazzjoni dwar dan it-ta]ri[?

☐ Iva
☐ Le

Jekk ir-risposta tieg]ek hija IVA tista' I``empel lill-BICC fuq in-numru 21423253 g]al aktar dettalji.

16. Smajt bil-*Health & Safety Courses* li qedha toffri l-BICC b'xejn, fejn kull min jattendi jing]ata *Safety Card*?

☐ Iva
☐ Le

Jekk ir-risposta tieg]ek hija IVA tista' ``empel lill-BICC fuq in-numru 21423253 g]al aktar dettalji.