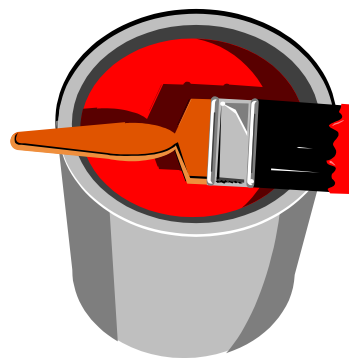




KINGDOM OF TONGA

**Statistical Bulletin:**  
**MANUFACTURING OUTPUT,**  
**EMPLOYMENT AND WAGES/SALARIES**  
**1996-2002**



STATISTICS DEPARTMENT  
GOVERNMENT OF TONGA  
NUKU'ALOFA  
TONGA

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## **Notes and abbreviation**

### **Rounding**

The sums of individual industries may not always come exactly to the totals shown, because of the effects of rounding. Discrepancies of 1 or 2 in the final digit should give no cause for concern.

ISIC International Standard Industrial Classification

## Main results

The quarterly survey of manufacturing output, employment and wages/salaries for year 1996-2002 is carried out by the Statistics Department of Tonga at the end of every quarter. The survey collects information on production, employment and wages/salaries, which include memorandum items. The survey covers all manufacturing establishments regardless of size; level of production or number of persons engaged. Due to funding constraints and the distance from the main island, the Niuaus were excluded from the survey.

**Table 1: Summary of the survey results for year 1996-2002:**

Item	Unit	1996	1997	1998	1999	2000	2001	2002
1. Establishments covered	No.	116	117	115	115	115	115	122
2. Total production	T\$('000)	18,233	19,227	20,990	26,562	25,827	27,631	28,371
3. Persons employed	No.	1,134	1,148	1,148	1,179	1,175	1,188	1,219
4. Wages and salaries	T\$('000)	3,425	3,450	3,673	4,023	4,031	4,604	4,642

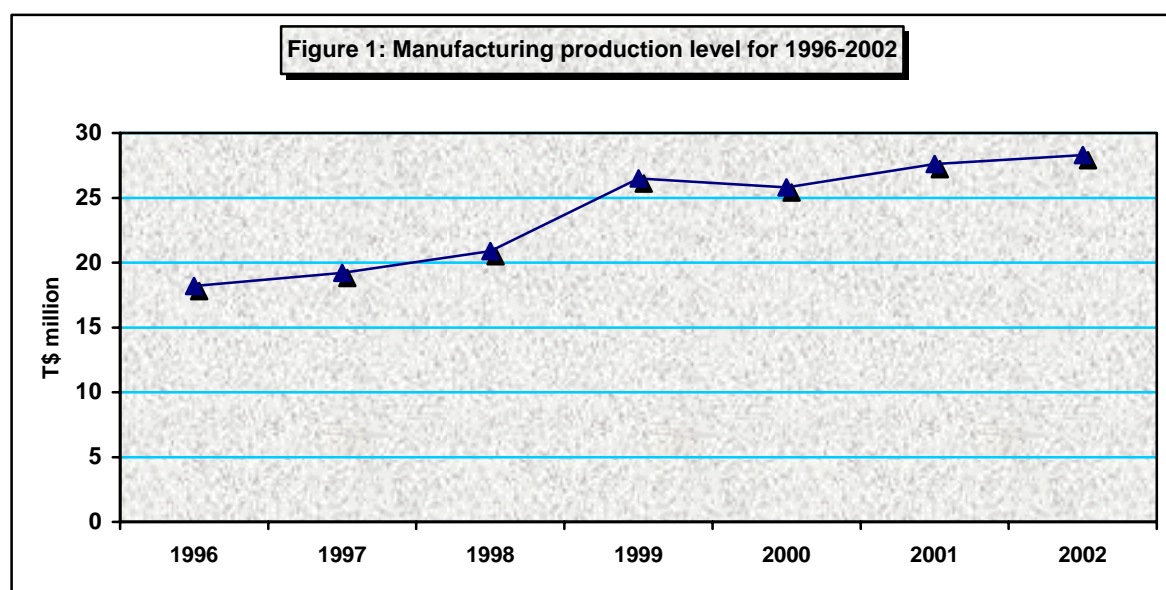
Source: Manufacturing survey, Statistics Dept.

### □ Manufacturing production

In Tonga, total manufacturing production in 2002 stood at 28 million pa'anga, increasing by 3 percent compared with 2001. This increase was mainly the result of growth in production of chemicals and chemical products, which increased by 56 percent. There were also smaller percentage increases in non-metallic mineral products (8 percent), fabricated metal products (2 percent) and other manufacturing industries (3 percent).

Figure 1 below shows that total production has increased tremendously, from 18 million pa'anga in 1996 to more than 28 million in 2002. There was an increase in production of all major industries like; production of food products and beverages increased by 49 percent, publishing and printing by 8 percent, chemicals and chemical products by 27 percent, non-metallic mineral products by 445 percent, fabricated metal products by 83 percent and other manufacturing industries by 33 percent.

The trend in the level of total production is shown in figure 1 below.



Source: Manufacturing survey, Statistics Dept.

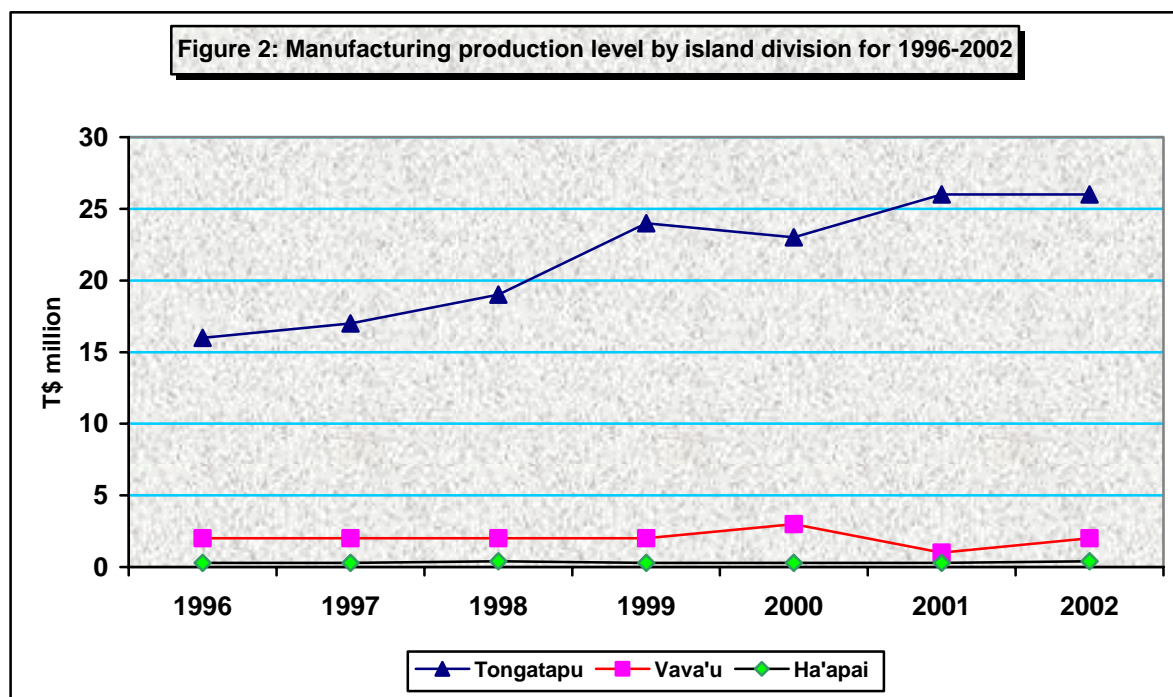
Some of the increase in production was due to the opening of new establishments. This was particularly the case with food products and beverages and with chemicals and chemical industries. In 2002, food products and beverages industries contributed more than 14 million pa'anga (50% of the total), followed by chemicals and chemical products with 5 million (18%), non-metallic mineral products with 3 million (11%), fabricated metal products with 2 million (7%) and publishing and printing with the remaining 1 million (3%). Other manufacturing industries contributed around 3 million (11%). Table 2 below shows some more detailed information on production by ISIC division.

**Table 2: Manufacturing production by ISIC division for 1996-2002**

T\$('000)							
ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	9,819	10,640	11,325	14,886	14,239	15,795	14,593
<b>22 Publishing and printing</b>	1,054	1,106	1,139	1,166	1,260	1,269	1,141
<b>24 Chemicals and chemical products</b>	3,640	4,187	4,733	5,406	4,263	2,949	4,616
<b>26 Non-metallic mineral products</b>	635	748	1,185	1,702	2,536	3,190	3,462
<b>28 Fabricated metal products</b>	918	471	751	1,505	1,459	1,640	1,682
<b>37 Other manufacturing industries</b>	2,167	2,075	1,858	1,896	2,070	2,787	2,877
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 17,18,19,20,29,30,31,35 and 36

Figure 2 shows that almost all the increase in production is accounted for by Tongatapu. Production in Tongatapu went up from 16 million pa'anga in 1996 to 26 million pa'anga in 2002.



Source: Manufacturing survey, Statistics Dept.

In Tongatapu, there was an improvements on production of major industries like; food products and beverages with an increase of 61 percent, chemicals and chemical products with 27 percent, non-metallic mineral products by 512 percent, fabricated metal products with 83 percent and other manufacturing industries by 33 percent plus, new establishments with significant contribution were adding on.

Production in Vava'u seems to be smooth out from 1996 to year 1999 with a little up and down between 1999 and year 2002 because of changes mainly in production of food products and beverages, non-metallic mineral products and other manufacturing industries.

Production for both Ha'apai and 'Eua level out from 1996 except with a slight improvement in year 2002. Table 3 below shows the share of island division on manufacturing production.

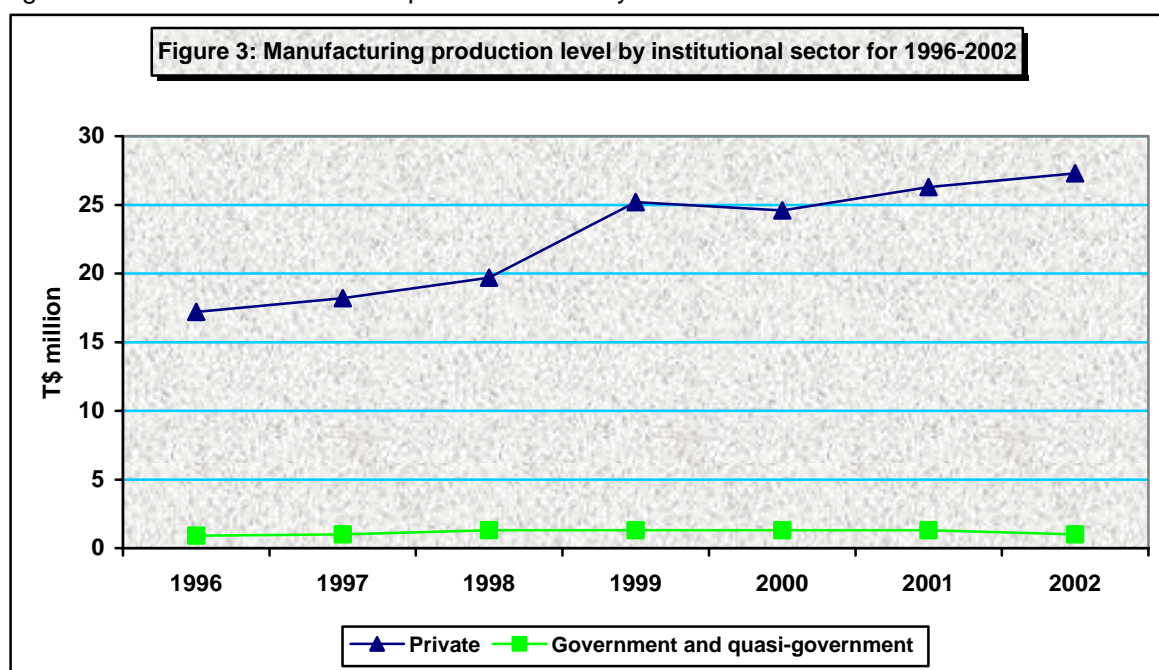
**Table 3: Manufacturing production by Island division for 1996-2002**

T\$('000)							
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	16,065	17,049	18,885	24,386	22,749	26,136	26,104
<b>2 Vava'u</b>	1,902	1,901	1,729	1,857	2,776	1,226	1,841
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	265	277	377	319	302	268	425
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept.

In terms of institutional sector, the private sector showed an increase of 4 percent from 26 million in 2001 to 27 million pa'anga in 2002. This was a result of increased in production of chemicals and chemical products by 56 percent, non-metallic mineral products (13 percent), fabricated metal products (2 percent) and other manufacturing industries (6 percent).

Figure 3 below shows the trend of production level by institutional sector.



Source: Manufacturing survey, Statistics Dept.



It is clear that the private sector dominates in terms of manufacturing production by more than 27 million pa'anga (96%) in 2002, while only about 1 million (4%) was contributed by the government and quasi-government sector. Table 4 below shows the contribution of the institutional sectors to manufacturing production.

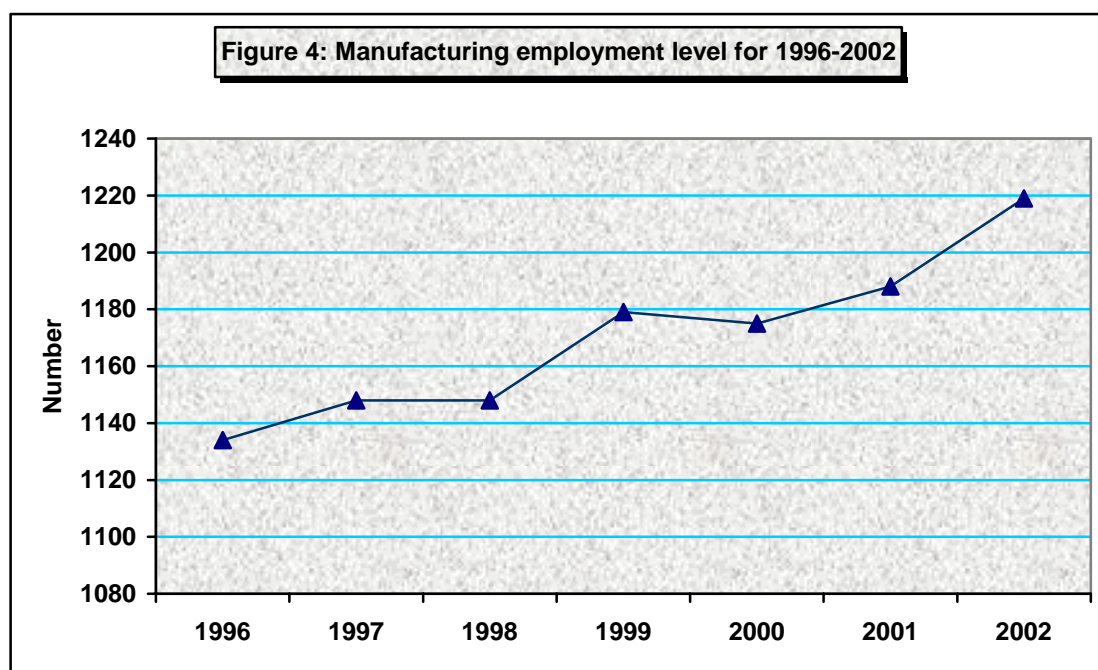
**Table 4: Manufacturing production by Institutional sector for 1996-2002**

<i>T\$('000)</i>							
Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	17,263	18,199	19,725	25,237	24,567	26,342	27,328
<b>2&amp;3 Government and quasi-government</b>	970	1,028	1,265	1,325	1,260	1,289	1,043
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept.

#### □ **Manufacturing employment**

There was a total of 1,220 persons engaged in the manufacturing sector in 2002, representing a 2 percent increase from the 1,190 employed in 2001. The number employed increased by 1 percent on food products and beverages, 8 percent for manufacture of furniture and 10 percent for other manufacturing industries. Figure 4 below shows the trend of manufacturing employment between the years 1996 and 2002.



Source: Manufacturing survey, Statistics Dept.

Table 5 below shows that the number of employment in manufacturing has increased from 1,134 in 1996 to 1,219 in 2002. Over the six years period 1996-2002, the number of employment grew by 10 percent in the food products and beverages, 8 percent for wood and wood products, 49 percent for non-metallic mineral products, 12 percent for manufacture of furniture and 4 percent on other manufacturing industries.

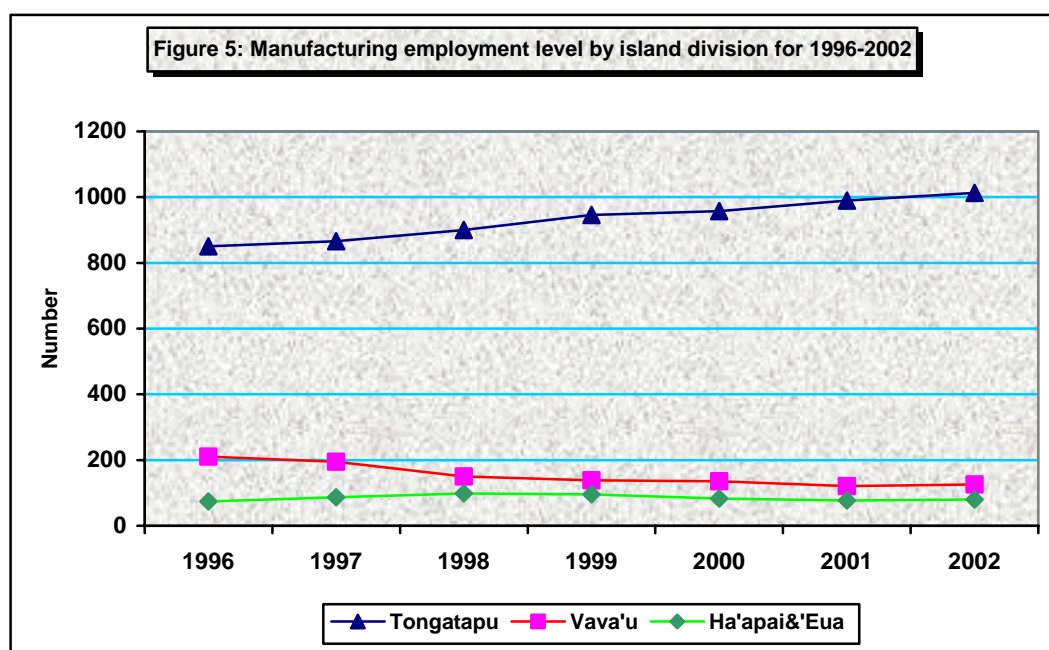
Out of every 100 persons employed in manufacturing in 2002, 54 are employed in the manufacturing of food products and beverages, 9 in publishing and printing, 7 in manufacturing of furniture, 6 with wood and wood products, 5 with non-metallic mineral products and 19 with other manufacturing industries.

**Table 5: Manufacturing employment by ISIC division for 1996-2002**

ISIC division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	604	611	627	623	595	656	665
<b>20 Wood and products of wood</b>	71	84	76	77	84	80	77
<b>22 Publishing and printing</b>	133	111	119	116	114	109	109
<b>26 Non-metallic mineral products</b>	47	54	74	72	76	71	70
<b>36 Manufacture of furniture</b>	80	94	87	86	87	83	90
<b>37 Other manufacturing industries</b>	199	194	165	205	219	189	208
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 17,18,19,24,28,29,30,31 and 35

Between 1996 and 2002, employment in manufacturing in Tongatapu increased by almost 20 percent. In contrast, manufacturing employment levels in Ha'apai and 'Eua (taken together) remained fairly constant, while there was a 40 percent drop of employment in Vava'u



Source: Manufacturing survey, Statistics Dept.

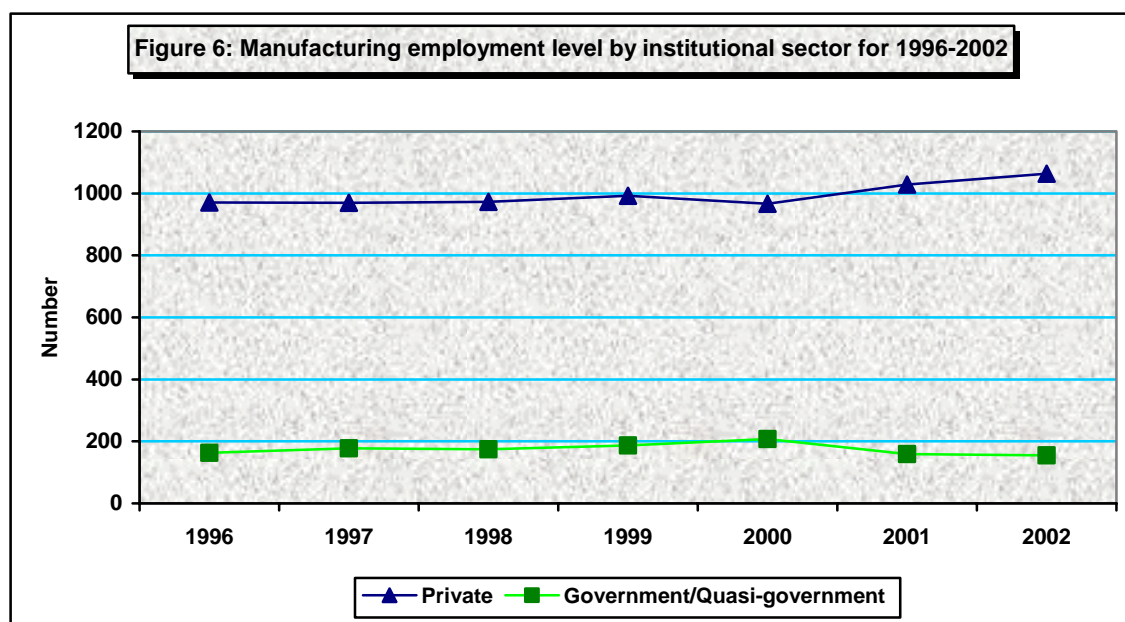
By island division, as shown in table 6 below, Tongatapu had 1,013 (83%) people employed in manufacturing in 2002 while Vava'u had 126 (11%) and Ha'apai and 'Eua between them had 80 (6%). Table 6 below shows more information on employment level by island division.

**Table 6: Manufacturing employment by Island division for 1996-2002**

Island division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	850	866	900	946	957	990	1,013
<b>2 Vava'u</b>	210	195	150	138	135	121	126
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	74	87	98	95	83	77	80
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

Source: Manufacturing survey, Statistics Dept.

Employment in the private sector has increased by 3 percent, from 1,029 in 2001 to 1,064 in 2002. In particular, there were increases in the number employed in publishing and printing, and in the manufacturing of furniture. The number employed in manufacturing in the government and quasi-government sector remained around 200 between 1996 and 2002.



Source: Manufacturing survey, Statistics Dept.

In percentage terms, the private sector looks more steady than the government sector.

**Table 7: Manufacturing employment by Institutional sector for 1996-2002**

Institutional sector	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	971	970	973	992	967	1,029	1,064
<b>2&amp;3 Government and quasi-government</b>	163	178	175	187	208	159	155
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

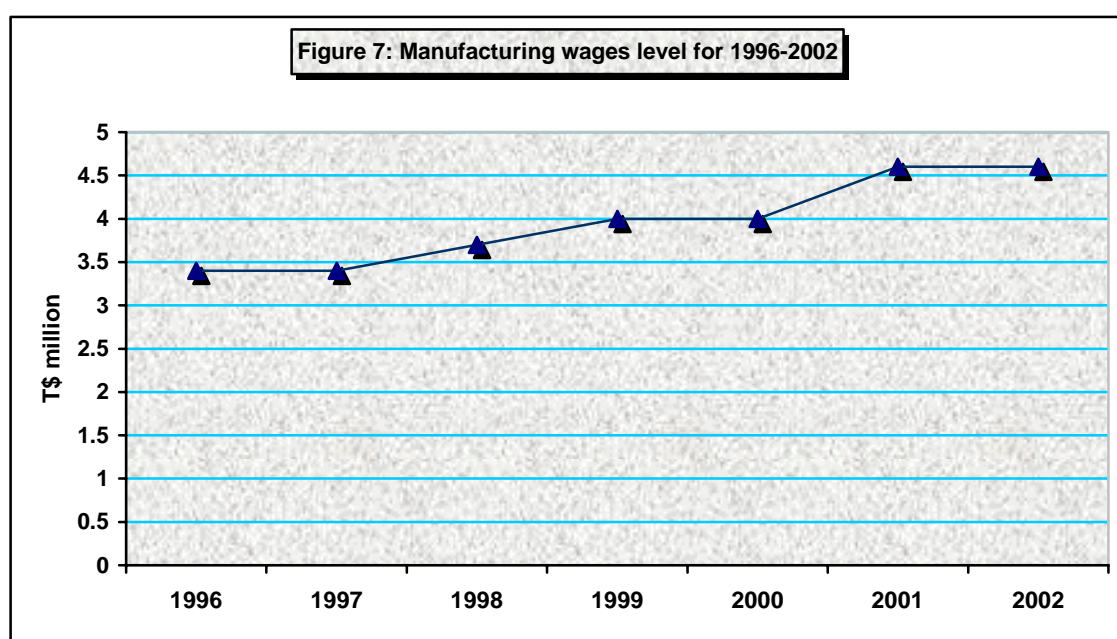
Source: Manufacturing survey, Statistics Dept.

## □ Manufacturing wages/salaries

Total manufacturing wages and salaries increased by 0.8 percent between 2001 and year 2002, with an increase of 2 percent on wages of food products and beverages, 19 percent on wood and products of wood, 1 percent on publishing and printing and 5 percent on other manufacturing industries.

As shown in figure 7 below, total wages and salaries have gradually increased from 3.4 million pa'anga in 1996 to 4.6 million in 2002. Over the six-year period, total wages/salaries increased by 28 percent for the food products and beverages industry, 30 percent for wood and products of wood, 45 percent for publishing and printing, 221 percent for non-metallic mineral products, 62 percent for manufacture of furniture and 11 percent for other manufacturing industries.

Figure 7 below shows the total manufacturing wages and salaries between the years 1996 to 2002.



Source: Manufacturing survey, Statistics Dept.

In 2002, the food products and beverages industry placed at around 2.3 million pa'anga, accounted for almost half of total wages and salaries, followed by publishing and printing with 0.6 million pa'anga (14%), manufacture of furniture with 0.4 million pa'anga (9%).

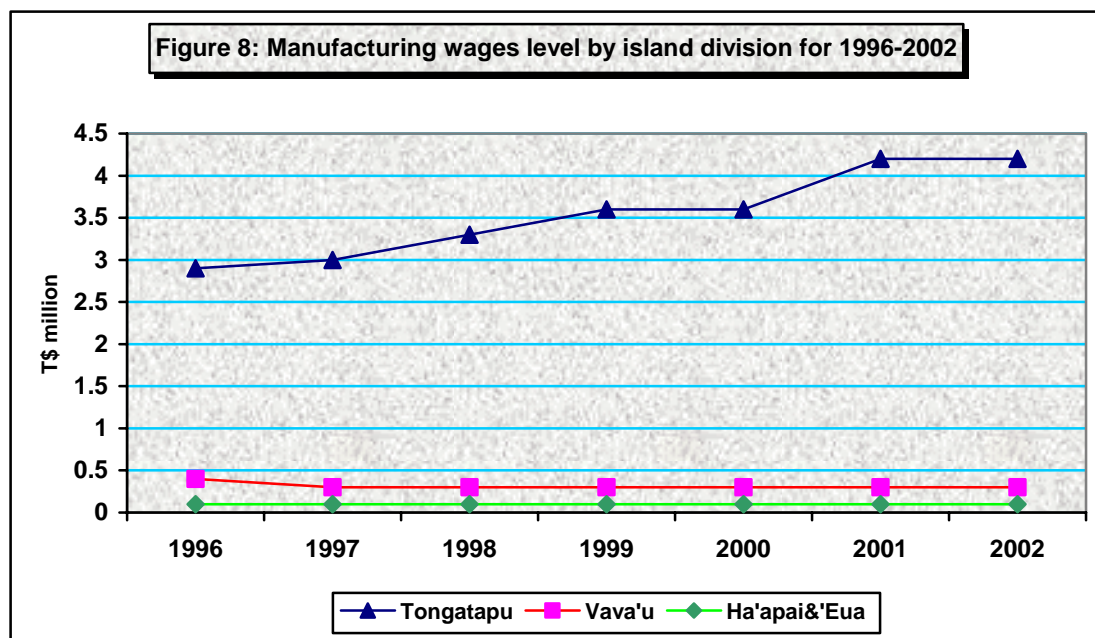
Table 8: Manufacturing wages and salaries by ISIC division for 1996-2002

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	1,797	1,718	1,849	1,996	1,682	2,238	2,296
<b>20 Wood and products of wood</b>	210	208	243	288	279	230	274
<b>22 Publishing and printing</b>	447	496	504	540	609	642	648
<b>26 Non-metallic mineral products</b>	105	124	215	297	381	342	337
<b>36 Manufacture of furniture</b>	240	261	301	272	414	490	390
<b>37 Other manufacturing industries</b>	626	643	560	630	666	662	697
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 17,18,19,24,28,29,30,31 and 35

In year 2002, about 4.2 million pa'anga (91%) of the total manufacturing wages and salaries were earned by those employed in Tongatapu, the main island, followed by Vava'u with around 0.3 million (7%) and only 0.1 million (2%) combined for Ha'apai and 'Eua.

Figure 8 below shows the trend of manufacturing wages/salaries by island division for 1996-2002.



Source: Manufacturing survey, Statistics Dept.

Shown on the graph below, wages and salaries of private sector has slowly increased from 3 million in 1996 to 4 million in 2001 and year 2002 respectively.

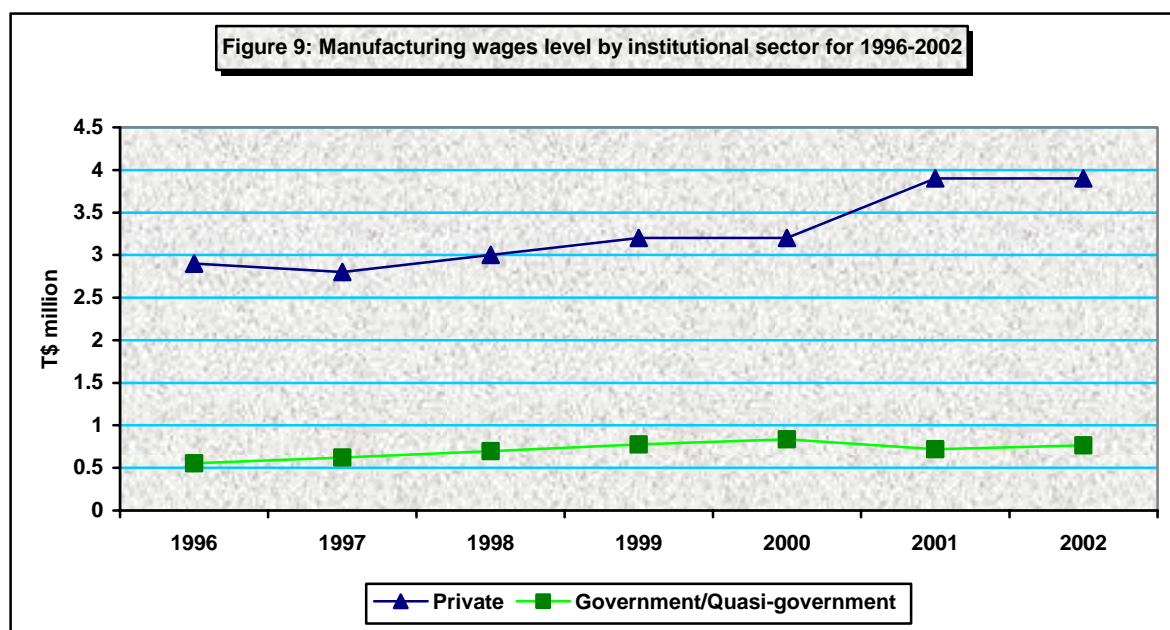
**Table 9: Manufacturing wages and salaries by Island division for 1996-2002**

	T\$('000)						
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	2,915	2,989	3,262	3,569	3,616	4,253	4,225
<b>2 Vava'u</b>	379	320	292	316	283	257	295
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	131	141	119	137	133	95	121
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept.

This increased again caused by improvements of wages on food products and beverages by 28 percent, publishing and printing 42 percent, non-metallic mineral products 244 percent, manufacture of furniture 64 percent and other manufacturing industries 11 percent.

Total wages and salaries paid by the government and quasi-government sector moved from 0.6 million pa'anga in 1996 to 0.8 million in 2002.



Source: Manufacturing survey, Statistics Dept.

In 2002, manufacturing employees in the private sector received about 4 million pa'anga (80%) in wages and salaries, while those in the government and quasi-government sector received nearly 1 million pa'anga (20%).

**Table 10: Manufacturing wages and salaries by Institutional sector for 1996-2002**

Institutional sector	T\$('000)						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	2,872	2,828	2,978	3,249	3,196	3,886	3,879
<b>2&amp;3 Government and quasi-government</b>	553	622	695	774	835	719	763
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept.



# 1. Introduction

## Survey objective

1.1 This report presents the results of the quarterly survey of manufacturing production, employment and wages/salaries, conducted by the Statistics Department of Tonga over the period 1996-2002. The main objectives of the survey are:

- To provide updated information on levels of production, employment and wages/salaries;
- To provide some data for the components of National accounts; and
- To provide information on the performance of manufacturing industries for planners, policy makers and the general public.

## Coverage

1.2 The Statistics Department launched a regular quarterly survey of manufacturing production, employment and wages and salaries effective from July-September 1983. The survey covered all manufacturing establishments and units, including:

- (i) Those registered under the Companies Act 1912,
- (ii) Those granted Development License for manufacturing under the Industrial Incentives Act 1978 and
- (iii) Those engaged in manufacturing activities with a license issued by the Ministry of Labour, Commerce and Industries.

1.3 The survey did not cover enterprises, establishments and units that were engaged in (a) repair and maintenance of vehicles, machinery and equipment; (b) canning, preserving and processing of fish and fisheries products; and (c) household type of activities related to making handicrafts and the like.

1.4 An establishment was treated as manufacturing if it was engaged in the transformation (mechanical or chemical) of substances into new products whether by machines or by hand in a factory or other business premises. An establishment/unit engaged in the assembly of component parts of manufactured products was treated as engaged in manufacturing except where it undertook construction activity.

1.5 The definitions used for manufacturing businesses for the survey in question were:

**Establishment:** a separate operating unit (factory, store, workshop or other place, etc.) engaged in Tonga in one or predominantly one kind of economic activity at a single physical location.

**Enterprises:** a single business entity, Private, Government, Quasi-government, Co-operative and sole ownership, engaged in manufacturing type of activities is treated as an enterprise.

There are generally two types of enterprises viz.:

- i. "Single Establishment Enterprise" consisting of only one establishment and
- ii. "Multiple Establishments Enterprise" consisting of more than one establishment with or without ancillary unit or one establishment plus one or more ancillary units.

## **Data collection**

**1.6** Information was collected by personal visits of the survey staff of the Statistics Department to the manufacturing enterprises, establishments and units that were operational in the various quarters starting July-September 1983 and subsequent to the last quarter (October-December) of 2002. This covers establishments on the four main island divisions of Tonga namely Tongatapu, Vava'u, Ha'apai and 'Eua. This ninth Bulletin on manufacturing output, employment and wages and salaries contains data for calendar years 1996-2002.

## **Response rate**

**1.7** There is no non-response rate as one of the reason for delaying the published of the survey result by trying to get all the returns before processing the results.

## **Data processing**

**1.8** All data entry, editing checks and queries were done using the Access software package. Preparation of the final tables was done using Excel facility.

**1.9** Manufacturing establishments have been classified into Divisions according to the International Standard Industrial Classification (ISIC) Series M No. 4, Rev.3 for Major Divisions 15-37. The following ISIC divisions have been used.

### **The following ISIC Divisions have been used:**

- 15.** Manufactured of food products and beverages (bread, sausages, soft drinks and ice-cream etc.)
- 17.** Manufacture of textiles (t-shirt, pullovers and quilts etc.)
- 18.** Manufacture of wearing apparel; dressing and drying of fur (dress, trousers, lavalava etc.)
- 19.** Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
- 20.** Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- 22.** Publishing, printing and reproduction of recorded media
- 24.** Manufacture of chemicals and chemical products (tablets, paint and varnish etc.)
- 26.** Manufacture of other non-metallic mineral products (concrete blocks and water tanks etc.)
- 28.** Manufacture of machinery and equipment n.e.c.
- 29.** Manufacture of electrical machinery and apparatus
- 30.** Manufacture of radio, television and communication equipment and apparatus
- 31.** Manufacture of medical, precision and optical instruments, watches and clocks
- 35.** Manufacture of other transport equipment (boat, cart, bicycle etc.)
- 36.** Manufacture of furniture
- 37.** Recycling and other manufacture industries n.e.c.



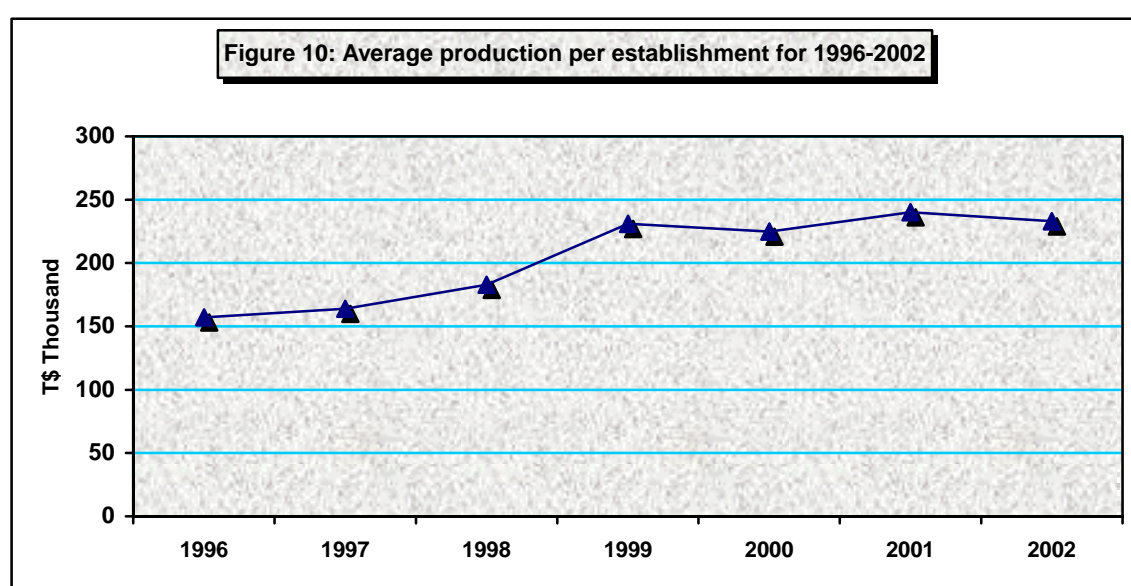
## 2. Complementary analysis

### 2.1 Production level

- **Average production per establishment**

The average annual production per establishment for the whole of Tonga has decreased by 4 percent from 240 thousand in 2001 to 230 thousand pa'anga in 2002. This involved food products and beverages decreased by 19 percent, publishing and printing by 10 percent and those in other manufacturing industries by 5 percent.

Figure 10 below shows the average annual production per establishment went up from 160 thousand pa'anga in 1996 to 230 thousand in 2002. In terms of current value, average production has generally been increasing over the six-year period, with the exception of the chemicals and chemical products industries where production levels have tended to decline.



Source: Manufacturing survey, Statistics Dept.

By looking at industry level in year 2002, some industries produced far more than national average production per establishment level. This led by chemicals and chemical products with 1.2 million pa'anga, followed by non-metallic mineral products with 500 thousand, publishing and printing with a production rate of 380 thousand and food products and beverages together with fabricated metal products produced an average of 250 and 240 thousand pa'anga respectively. Finally, other manufacturing industries production rate was 380 thousand.

More detailed information on average production per establishment is given in Table 3.7, 3.8 and 3.9 of this report.

**Table 2.1a: Average production per establishment by ISIC division for 1996-2002**

T\$('000)							
ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	200	222	231	298	285	310	247
<b>22 Publishing and printing</b>	263	369	380	389	420	423	380
<b>24 Chemicals and chemical products</b>	1,820	1396	1578	1352	853	737	1,154
<b>26 Non-metallic mineral products</b>	91	107	169	243	317	456	495
<b>28 Fabricated metal products</b>	102	52	94	188	208	234	240
<b>37 Other manufacturing industries</b>	352	323	370	356	362	396	351
<b>Total</b>	<b>157</b>	<b>164</b>	<b>163</b>	<b>231</b>	<b>225</b>	<b>240</b>	<b>233</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 17,18,19,20,29,30,31,35 and 36

In terms of annual production by island division, Tongatapu produced above the national average per establishment, with an average of 320 thousand pa'anga per establishment, Vava'u followed with 60 thousand and Ha'apai and 'Eua combined had an average production of 40 thousand pa'anga.

**Table 2.1b: Average production per establishment by Island division for 1996-2002**

T\$('000)							
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	191	201	222	294	277	319	318
<b>2 Vava'u</b>	76	86	86	88	121	56	63
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	38	28	38	29	30	24	39
<b>Total</b>	<b>157</b>	<b>164</b>	<b>183</b>	<b>231</b>	<b>225</b>	<b>240</b>	<b>233</b>

Source: Manufacturing survey, Statistics Dept.

In terms of institutional sector, average annual production during the period 1996-2002 was consistently higher for manufacturing establishments in the private sector then it was for those in the government and quasi-government sector.

**Table 2.1c: Average production per establishment by Institutional sector for 1996-2002**

T\$('000)							
Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	160	167	183	234	227	242	236
<b>2&amp;3 Government and quasi-government</b>	121	128	181	189	180	215	174
<b>Total</b>	<b>157</b>	<b>164</b>	<b>183</b>	<b>231</b>	<b>225</b>	<b>240</b>	<b>233</b>

Source: Manufacturing survey, Statistics Dept.

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### Average production per production worker

The value of average production per production worker increased from 20 thousand in 1996 to 30 thousand pa'anga in year 1998 and level out to year 2002. By industry level, some industries produced more than the national average production led by chemicals and chemical products with an average of 180 thousand pa'anga, followed by non-metallic mineral products with 60 thousand, fabricated metal products with 50 thousand, food products and beverages with 30 thousand and only 10 thousand pa'anga for other transport equipment finally other manufacturing industries with 70 thousand.

Table 2.1d: Average production per production worker by ISIC division for 1996-2002

	T\$('000)						
ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	23	26	28	35	32	30	27
<b>24 Chemicals and chemical products</b>	455	523	394	98	87	113	178
<b>26 Non-metallic mineral products</b>	15	27	28	34	48	46	57
<b>28 Fabricated metal products</b>	21	11	28	49	46	47	49
<b>35 Other transport equipment</b>	12	24	34	52	17	16	13
<b>37 Other manufacturing industries</b>	88	78	82	67	80	80	71
<b>Total</b>	<b>22</b>	<b>24</b>	<b>29</b>	<b>31</b>	<b>29</b>	<b>28</b>	<b>28</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 17,18,19,20,22,29,30,31 and 36

In terms of island division, the value produced by production workers in Tongatapu was on average about 30 thousand pa'anga, followed by Vava'u with 20 thousand and 10 thousand for Ha'apai and 'Eua.

Table 2.1e: Average production per production worker by Island division for 1996-2002

	T\$('000)						
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	23	27	31	33	30	30	30
<b>2 Vava'u</b>	20	18	24	21	30	15	21
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	7	7	8	7	8	7	10
<b>Total</b>	<b>22</b>	<b>24</b>	<b>29</b>	<b>31</b>	<b>29</b>	<b>28</b>	<b>28</b>

Source: Manufacturing survey, Statistics Dept.

Production worker in private sector produced an average production of 30 thousand pa'anga while government and quasi-government only produced 7 thousand, which is below the national average production.

Table 2.1f: Average production per production worker by Institutional sector for 1996-2002

	T\$('000)						
Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	25	29	32	36	36	31	32
<b>2&amp;3 Government and quasi-government</b>	7	7	11	8	6	8	7
<b>Total</b>	<b>22</b>	<b>24</b>	<b>29</b>	<b>31</b>	<b>29</b>	<b>28</b>	<b>28</b>

Source: Manufacturing survey, Statistics Dept.

## 2.2 Employment level

The total number of production worker involved in manufacturing industries has increased by 1 percent from 1,000 number of production worker in 2001 compared to 1,010 in year 2002 with an increase of 4 percent on employment of food products and beverages plus other manufacturing industries with 13 percent.

In 2002, food products and beverages employed 540 (53%) of production worker, publishing and printing employed 110 (11%), manufacture of furniture employed 70-production worker (7%) and both wood and products of wood together with non-metallic mineral products employed 60 (6%) each and the remaining 17 percent worked for other manufacturing industries.

**Table 2.2a: Number of manufacturing production workers by ISIC division for 1996-2002**

ISIC division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	428	410	410	423	441	519	540
<b>20 Wood and products of wood</b>	66	69	24	75	84	83	60
<b>22 Publishing and printing</b>	114	101	98	112	105	106	106
<b>26 Non-metallic mineral products</b>	41	28	42	50	53	70	61
<b>36 Manufacture of furniture</b>	42	47	51	57	47	68	75
<b>37 Other manufacturing industries</b>	142	130	106	153	163	155	168
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 17,18,19,24,28,29,30,31 and 35

Tongatapu employed more than 880 production worker (87%) of the total production worker, Vava'u got 90 (9%) and only 40 production worker (4%) in Ha'apai and 'Eua.

**Table 2.2b: Number of manufacturing production workers by Island division for 1996-2002**

Island division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	699	640	613	735	762	879	882
<b>2 Vava'u</b>	97	104	72	90	93	81	86
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	37	41	46	45	38	41	42
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

Source: Manufacturing survey, Statistics Dept.

There were 860 number of production worker (85%) worked for private sector and 150 (15%) employed by government and quasi-government.

**Table 2.2c: Number of manufacturing production workers by institutional sector for 1996-2002**

Institutional sector	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	690	635	618	700	691	839	855
<b>2&amp;3 Government and quasi-government</b>	143	150	113	170	202	162	155
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

Source: Manufacturing survey, Statistics Dept.

## 2.2 Wages and salaries

The average annual weekly wage rate paid to production worker in manufacturing sector has gone down by 1 percent from 72 pa'anga per week in 2001 to 71 pa'anga in 2002. From table 2.3a below, it shows that weekly wage rate of non-metallic mineral products went down by 6 percent, fabricated metal products down by 10 percent, other transport equipment 20 percent and manufacture of furniture with 24 percent.

In year 2002, publishing and printing paid the highest weekly wage rate of 110 pa'anga, non-metallic mineral products paid 90 pa'anga, fabricated metal products paid 80 pa'anga while furniture paid 70 pa'anga and other transport equipment production worker earned more than 50 pa'anga per week. Other manufacturing industries paid an average weekly wages of 60 pa'anga.

**Table 2.3a: Average weekly wage rate per production worker by ISIC division for 1996-2002**

							T\$
ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>22 Publishing and printing</b>	51.00	77.00	86.00	87.00	99.00	107.00	108.00
<b>26 Non-metallic mineral products</b>	36.00	47.00	71.00	87.00	103.00	93.00	87.00
<b>28 Fabricated metal products</b>	62.00	78.00	84.00	79.00	75.00	85.00	76.00
<b>35 Other transport equipment</b>	84.00	102.00	70.00	92.00	73.00	68.00	54.00
<b>36 Manufacture of furniture</b>	64.00	56.00	64.00	54.00	99.00	98.00	74.00
<b>37 Other manufacturing industries</b>	53.00	54.00	56.00	59.00	54.00	62.00	64.00
<b>Total</b>	<b>54.00</b>	<b>58.00</b>	<b>63.00</b>	<b>65.00</b>	<b>66.00</b>	<b>72.00</b>	<b>71.00</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 17,18,19,24,28,29,30,31 and 35

Production workers stationed in Tongatapu earned an average weekly wage rate of 74 pa'anga, then in Ha'apai and 'Eua 53 pa'anga and those in Vava'u 42 pa'anga.

**Table 2.3b: Average weekly wage rate per production worker by Island division for 1996-2002**

							T\$
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	54.00	61.00	66.00	67.00	68.00	76.00	74.00
<b>2 Vava'u</b>	51.00	43.00	48.00	53.00	48.00	41.00	42.00
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	61.00	57.00	42.00	48.00	63.00	42.00	53.00
<b>Total</b>	<b>54.00</b>	<b>58.00</b>	<b>63.00</b>	<b>65.00</b>	<b>66.00</b>	<b>72.00</b>	<b>71.00</b>

Source: Manufacturing survey, Statistics Dept.

By looking at sector level, government and quasi-government paid 95 pa'anga while private production worker earned only 66 pa'anga per week.

**Table 2.3c: Average weekly wage rate per production worker by Institutional sector for 1996-2002**

							T\$
Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	54.00	57.00	58.00	62.00	63.00	69.00	66.00
<b>2&amp;3 Government and quasi-government</b>	55.00	67.00	91.00	76.00	75.00	85.00	95.00
<b>Total</b>	<b>54.00</b>	<b>58.00</b>	<b>63.00</b>	<b>65.00</b>	<b>66.00</b>	<b>72.00</b>	<b>71.00</b>

Source: Manufacturing survey, Statistics Dept.

### 3. Statistical Tables

Table 3.1: Manufacturing production by ISIC division for 1996-2002

T\$('000)

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	9,819	10,640	11,325	14,886	14,239	15,795	14,593
<b>17 Manufacture of textiles</b>	152	104	135	185	278	346	285
<b>18 Manufacture of wearing apparel</b>	267	383	214	224	250	338	668
<b>19 Manufacture of leather products</b>	343	227	221	106	82	70	0
<b>20 Wood and products of wood</b>	220	165	218	192	146	102	42
<b>22 Publishing and printing</b>	1,054	1,106	1,139	1,166	1,260	1,269	1,141
<b>24 Chemicals and chemical products</b>	3,640	4,187	4,733	5,406	4,263	2,949	4,616
<b>26 Non-metallic mineral products</b>	635	748	1,185	1,702	2,536	3,190	3,462
<b>28 Fabricated metal products</b>	918	471	751	1,505	1,459	1,640	1,682
<b>35 Other transport equipment</b>	197	268	341	354	244	220	236
<b>36 Manufacture of furniture</b>	863	835	594	739	917	1,570	1,530
<b>37 Other manufacturing industries</b>	127	94	133	97	153	142	115
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.2: Manufacturing production by Island division for 1996-2002

T\$('000)

Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	16,065	17,049	18,885	24,386	22,749	26,136	26,104
<b>2 Vava'u</b>	1,902	1,901	1,729	1,857	2,776	1,226	1,841
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	265	277	377	319	302	268	425
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.3: Manufacturing production by Institutional sector for 1996-2002

T\$('000)

Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	17,263	18,199	19,725	25,237	24,567	26,342	27,328
<b>2&amp;3 Government and quasi-government</b>	970	1,028	1,265	1,325	1,260	1,289	1,043
<b>Total</b>	<b>18,233</b>	<b>19,227</b>	<b>20,990</b>	<b>26,562</b>	<b>25,827</b>	<b>27,631</b>	<b>28,371</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.4: Percentage distribution of manufacturing production by ISIC division for 1996-2002

ISIC division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	53.9	55.3	54.0	56.0	55.1	57.2	51.4
<b>17 Manufacture of textiles</b>	0.8	0.5	0.6	0.7	1.1	1.3	1.0
<b>18 Manufacture of wearing apparel</b>	1.5	2.0	1.0	0.8	1.0	1.2	2.4
<b>19 Manufacture of leather products</b>	1.9	1.2	1.1	0.4	0.3	0.3	0.0
<b>20 Wood and products of wood</b>	1.2	0.9	1.0	0.7	0.6	0.4	0.1
<b>22 Publishing and printing</b>	5.8	5.8	5.4	4.4	4.9	4.6	4.0
<b>24 Chemicals and chemical products</b>	20.0	21.8	22.5	20.4	16.5	10.7	16.3
<b>26 Non-metallic mineral products</b>	3.5	3.9	5.6	6.4	9.8	11.5	12.2
<b>28 Fabricated metal products</b>	5.0	2.5	3.6	5.7	5.6	5.9	5.9
<b>35 Other transport equipment</b>	1.1	1.4	1.6	1.3	0.9	0.8	0.8
<b>36 Manufacture of furniture</b>	4.7	4.3	2.8	2.8	3.5	5.7	5.4
<b>37 Other manufacturing industries</b>	0.7	0.5	0.6	0.4	0.6	0.5	0.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.5: Percentage distribution of manufacturing production by Island division for 1996-2002

Island division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	88.1	88.7	90.0	91.8	88.1	94.6	92.0
<b>2 Vava'u</b>	10.4	9.9	8.2	7.0	10.7	4.4	6.5
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	1.5	1.4	1.8	1.2	1.2	1.0	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.6: Percentage distribution of manufacturing production by Institutional sector for 1996-2002

Institutional sector	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	94.7	94.7	94.0	95.0	95.1	95.3	96.3
<b>2&amp;3 Government and quasi-government</b>	5.3	5.3	6.0	5.0	4.9	4.7	3.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.7: Average production per establishment by ISIC division for 1996-2002

T\$('000)

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	200	220	230	300	280	310	250
<b>17 Manufacture of textiles</b>	40	20	30	40	70	90	70
<b>18 Manufacture of wearing apparel</b>	20	30	20	20	20	30	60
<b>19 Manufacture of leather products</b>	90	60	70	40	40	40	0
<b>20 Wood and products of wood</b>	60	40	60	50	40	20	10
<b>22 Publishing and printing</b>	260	370	380	400	420	420	380
<b>24 Chemicals and chemical products</b>	1,820	1,400	1,580	1,350	850	740	1,150
<b>26 Non-metallic mineral products</b>	90	110	170	240	320	460	490
<b>28 Fabricated metal products</b>	100	50	90	190	210	230	240
<b>35 Other transport equipment</b>	50	90	110	120	80	70	80
<b>36 Manufacture of furniture</b>	60	50	40	50	60	100	100
<b>37 Other manufacturing industries</b>	40	30	40	50	50	50	30
<b>Total</b>	160	160	180	230	220	240	230

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.8: Average production per establishment by Island division for 1996-2002

T\$('000)

Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	190	200	220	290	280	320	320
<b>2 Vava'u</b>	80	90	90	90	120	60	60
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	40	30	40	30	30	20	40
<b>Total</b>	160	160	180	230	220	240	230

Source: Manufacturing survey, Statistics Dept.

Table 3.9: Average production per establishment by Institutional sector for 1996-2002

T\$('000)

Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	160	170	180	230	230	240	240
<b>2&amp;3 Government and quasi-government</b>	120	130	180	190	180	220	170
<b>Total</b>	160	160	180	230	220	240	230

Source: Manufacturing survey, Statistics Dept.



Table 3.10: Average production per production worker by ISIC division for 1996-2002

T\$('000)

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	23	26	28	35	32	30	27
<b>17 Manufacture of textiles</b>	12	6	9	10	21	19	8
<b>18 Manufacture of wearing apparel</b>	8	20	13	11	10	11	20
<b>19 Manufacture of leather products</b>	24	15	15	8	7	6	0
<b>20 Wood and products of wood</b>	3	2	9	3	2	1	1
<b>22 Publishing and printing</b>	9	11	12	10	12	12	11
<b>24 Chemicals and chemical products</b>	455	523	394	98	87	113	178
<b>26 Non-metallic mineral products</b>	15	27	28	34	48	42	57
<b>28 Fabricated metal products</b>	21	11	28	49	46	47	49
<b>35 Other transport equipment</b>	12	24	34	52	17	16	13
<b>36 Manufacture of furniture</b>	21	18	12	13	20	23	20
<b>37 Other manufacturing industries</b>	11	6	13	12	8	8	11
<b>Total</b>	22	24	29	31	29	27	28

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.11: Average production per production worker by Island division for 1996-2002

T\$('000)

Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	23	27	31	33	30	29	30
<b>2 Vava'u</b>	20	18	24	21	30	15	21
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	7	7	8	7	8	7	10
<b>Total</b>	22	24	29	31	29	27	28

Source: Manufacturing survey, Statistics Dept.

Table 3.12: Average production per production worker by Institutional sector for 1996-2002

T\$('000)

Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	25	29	32	36	36	31	32
<b>2&amp;3 Government and quasi-government</b>	7	7	11	8	6	8	7
<b>Total</b>	22	24	29	31	29	27	28

Source: Manufacturing survey, Statistics Dept.

Table 3.13: Manufacturing employment by ISIC division for 1996-2002

ISIC division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	604	611	627	623	595	656	665
<b>17 Manufacture of textiles</b>	25	22	28	25	23	23	40
<b>18 Manufacture of wearing apparel</b>	58	48	40	41	49	49	55
<b>19 Manufacture of leather products</b>	22	24	22	18	14	14	14
<b>20 Wood and products of wood</b>	71	84	76	77	84	80	77
<b>22 Publishing and printing</b>	133	111	119	116	114	109	109
<b>24 Chemicals and chemical products</b>	12	15	19	61	58	31	29
<b>26 Non-metallic mineral products</b>	47	54	74	72	76	71	70
<b>28 Fabricated metal products</b>	46	53	32	39	36	37	37
<b>35 Other transport equipment</b>	21	13	11	10	19	15	19
<b>36 Manufacture of furniture</b>	80	94	87	86	87	83	90
<b>37 Other manufacturing industries</b>	16	19	14	11	20	20	14
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.14: Manufacturing employment by Island division for 1996-2002

Island division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	850	866	900	946	957	990	1,013
<b>2 Vava'u</b>	210	195	150	138	135	121	126
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	74	87	98	95	83	77	80
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.15: Manufacturing employment by Institutional sector for 1996-2002

Institutional sector	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	971	970	973	992	967	1,029	1,064
<b>2&amp;3 Government and quasi-government</b>	163	178	175	187	208	159	155
<b>Total</b>	<b>1,134</b>	<b>1,148</b>	<b>1,148</b>	<b>1,179</b>	<b>1,175</b>	<b>1,188</b>	<b>1,219</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.16: Percentage distribution of manufacturing employment by ISIC division for 1996-2002

ISIC division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	53.3	53.2	54.6	52.8	50.6	55.2	54.6
<b>17 Manufacture of textiles</b>	2.2	1.9	2.4	2.1	2.0	1.9	3.3
<b>18 Manufacture of wearing apparel</b>	5.1	4.2	3.5	3.5	4.2	4.1	4.5
<b>19 Manufacture of leather products</b>	1.9	2.1	1.9	1.5	1.2	1.2	1.1
<b>20 Wood and products of wood</b>	6.3	7.3	6.6	6.5	7.1	6.7	6.3
<b>22 Publishing and printing</b>	11.7	9.7	10.4	9.8	9.7	9.2	8.9
<b>24 Chemicals and chemical products</b>	1.1	1.3	1.6	5.2	4.9	2.6	2.4
<b>26 Non-metallic mineral products</b>	4.1	4.7	6.4	6.1	6.5	6.0	5.7
<b>28 Fabricated metal products</b>	4.1	4.6	2.8	3.3	3.1	3.1	3.0
<b>35 Other transport equipment</b>	1.9	1.1	1.0	0.8	1.6	1.3	1.6
<b>36 Manufacture of furniture</b>	7.1	8.2	7.6	7.3	7.4	7.0	7.4
<b>37 Other manufacturing industries</b>	1.4	1.7	1.2	0.9	1.7	1.7	1.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.17: Percentage distribution of manufacturing employment by Island division for 1996-2002

Island division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	75.0	75.4	78.4	80.2	81.4	83.3	83.1
<b>2 Vava'u</b>	18.5	17.0	13.1	11.7	11.5	10.2	10.3
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	6.5	7.6	8.5	8.1	7.1	6.5	6.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.18: Percentage distribution of manufacturing employment by Institutional sector for 1996-2002

Institutional sector	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	85.6	84.5	84.8	84.1	82.3	86.6	87.3
<b>2&amp;3 Government and quasi-government</b>	14.4	15.5	15.2	15.9	17.7	13.4	12.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

**Table 3.19: Number of manufacturing production workers by ISIC division for 1996-2002**

ISIC division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	428	410	410	423	441	519	540
<b>17 Manufacture of textiles</b>	13	17	15	18	13	19	35
<b>18 Manufacture of wearing apparel</b>	34	19	17	21	25	32	34
<b>19 Manufacture of leather products</b>	14	15	15	13	11	11	11
<b>20 Wood and products of wood</b>	66	69	24	75	84	83	60
<b>22 Publishing and printing</b>	114	101	98	112	105	106	106
<b>24 Chemicals and chemical products</b>	8	8	12	55	49	26	26
<b>26 Non-metallic mineral products</b>	41	28	42	50	53	70	61
<b>28 Fabricated metal products</b>	44	44	27	31	32	35	34
<b>35 Other transport equipment</b>	17	11	10	7	14	14	18
<b>36 Manufacture of furniture</b>	42	47	51	57	47	68	75
<b>37 Other manufacturing industries</b>	12	16	10	8	19	18	10
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

**Table 3.20: Number of manufacturing production workers by Island division for 1996-2002**

Island division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	699	640	613	735	762	879	882
<b>2 Vava'u</b>	97	104	72	90	93	81	86
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	37	41	46	45	38	41	42
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

**Table 3.21: Number of manufacturing production workers by Institutional sector for 1996-2002**

Institutional sector	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	690	635	618	700	691	839	855
<b>2&amp;3 Government and quasi-government</b>	143	150	113	170	202	162	155
<b>Total</b>	<b>833</b>	<b>785</b>	<b>731</b>	<b>870</b>	<b>893</b>	<b>1,001</b>	<b>1,010</b>

Table 3.22: Manufacturing wages and salaries by ISIC division for 1996-2002

T\$('000)

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	1,797	1,718	1,849	1,996	1,682	2,238	2,296
<b>17 Manufacture of textiles</b>	70	94	32	45	51	57	114
<b>18 Manufacture of wearing apparel</b>	98	83	81	89	115	109	142
<b>19 Manufacture of leather products</b>	86	86	83	51	42	44	44
<b>20 Wood and products of wood</b>	210	208	243	288	279	230	274
<b>22 Publishing and printing</b>	447	496	504	540	609	642	648
<b>24 Chemicals and chemical products</b>	88	89	144	220	163	128	132
<b>26 Non-metallic mineral products</b>	105	124	215	297	381	342	337
<b>28 Fabricated metal products</b>	143	181	131	145	134	172	144
<b>35 Other transport equipment</b>	76	63	41	37	65	52	54
<b>36 Manufacture of furniture</b>	240	261	301	272	414	490	390
<b>37 Other manufacturing industries</b>	65	47	48	43	96	100	66
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.23: Manufacturing wages and salaries by Island division for 1996-2002

T\$('000)

Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	2,915	2,989	3,262	3,569	3,616	4,253	4,225
<b>2 Vava'u</b>	379	320	292	316	283	257	295
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	131	141	119	137	133	95	121
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.24: Manufacturing wages and salaries by Institutional sector for 1996-2002

T\$('000)

Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	2,872	2,828	2,978	3,249	3,196	3,886	3,879
<b>2&amp;3 Government and quasi-government</b>	553	622	695	774	835	719	763
<b>Total</b>	<b>3,425</b>	<b>3,450</b>	<b>3,673</b>	<b>4,023</b>	<b>4,031</b>	<b>4,604</b>	<b>4,642</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.25: Percentage distribution of manufacturing wages and salaries by ISIC division for 1996-2002

ISIC division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	52.5	49.8	50.3	49.6	41.7	48.6	49.5
<b>17 Manufacture of textiles</b>	2.0	2.7	0.9	1.1	1.3	1.2	2.5
<b>18 Manufacture of wearing apparel</b>	2.9	2.4	2.2	2.2	2.9	2.4	3.1
<b>19 Manufacture of leather products</b>	2.5	2.5	2.3	1.3	1.0	1.0	0.9
<b>20 Wood and products of wood</b>	6.1	6.0	6.6	7.2	6.9	5.0	5.9
<b>22 Publishing and printing</b>	13.0	14.4	13.7	13.4	15.1	14.0	14.0
<b>24 Chemicals and chemical products</b>	2.6	2.6	3.9	5.5	4.0	2.8	2.8
<b>26 Non-metallic mineral products</b>	3.1	3.6	5.9	7.4	9.4	7.4	7.3
<b>28 Fabricated metal products</b>	4.2	5.3	3.6	3.6	3.3	3.7	3.1
<b>35 Other transport equipment</b>	2.2	1.8	1.1	0.9	1.6	1.1	1.2
<b>36 Manufacture of furniture</b>	7.0	7.6	8.2	6.8	10.3	10.6	8.4
<b>37 Other manufacturing industries</b>	1.9	1.4	1.3	1.1	2.4	2.2	1.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.26: Percentage distribution of manufacturing wages and salaries by Island division for 1996-2002

Island division	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	85.1	86.6	88.8	88.7	89.7	92.4	91.0
<b>2 Vava'u</b>	11.1	9.3	7.9	7.9	7.0	5.6	6.4
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	3.8	4.1	3.2	3.4	3.3	2.1	2.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.27: Percentage distribution of manufacturing wages and salaries by Institutional sector for 1996-2002

Institutional sector	Percentages						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	83.8	82.0	81.1	80.8	79.3	84.4	83.6
<b>2&amp;3 Government and quasi-government</b>	16.2	18.0	18.9	19.2	20.7	15.6	16.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.28: Wages and salaries of production workers by ISIC division for 1996-2002

T\$('000)

ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	1,217	1,171	1,200	1,341	1,252	1,739	1,770
<b>17 Manufacture of textiles</b>	46	69	21	37	34	57	114
<b>18 Manufacture of wearing apparel</b>	57	33	44	51	65	79	88
<b>19 Manufacture of leather products</b>	41	30	38	21	16	17	17
<b>20 Wood and products of wood</b>	173	182	106	235	279	230	274
<b>22 Publishing and printing</b>	300	405	438	506	541	588	593
<b>24 Chemicals and chemical products</b>	21	22	31	166	98	68	75
<b>26 Non-metallic mineral products</b>	78	69	156	226	285	339	277
<b>28 Fabricated metal products</b>	141	179	118	127	125	155	134
<b>35 Other transport equipment</b>	74	58	36	33	53	49	51
<b>36 Manufacture of furniture</b>	140	138	171	159	242	347	288
<b>37 Other manufacturing industries</b>	40	35	34	33	69	74	27
<b>Total</b>	<b>2,326</b>	<b>2,390</b>	<b>2,393</b>	<b>2,934</b>	<b>3,059</b>	<b>3,742</b>	<b>3,709</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.29: Wages and salaries of production workers by Island division for 1996-2002

T\$('000)

Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	1,950	2,037	2,113	2,575	2,702	3,478	3,405
<b>2 Vava'u</b>	259	232	178	247	232	175	188
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	117	121	102	112	124	89	116
<b>Total</b>	<b>2,326</b>	<b>2,390</b>	<b>2,393</b>	<b>2,934</b>	<b>3,059</b>	<b>3,742</b>	<b>3,709</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.30: Wages and salaries of production workers by Institutional sector for 1996-2002

T\$('000)

Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	1,920	1,870	1,860	2,259	2,270	3,023	2,946
<b>2&amp;3 Government and quasi-government</b>	407	520	533	675	789	719	763
<b>Total</b>	<b>2,326</b>	<b>2,390</b>	<b>2,393</b>	<b>2,934</b>	<b>3,059</b>	<b>3,742</b>	<b>3,709</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.31: Average weekly wage rate for production worker by ISIC division 1996-2002

	T\$						
ISIC division	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	55	55	56	61	55	64	63
<b>17 Manufacture of textiles</b>	67	78	26	39	51	58	63
<b>18 Manufacture of wearing apparel</b>	32	34	50	47	50	48	50
<b>19 Manufacture of leather products</b>	56	39	49	31	27	29	30
<b>20 Wood and products of wood</b>	50	51	85	60	64	53	88
<b>22 Publishing and printing</b>	51	77	86	87	99	107	108
<b>24 Chemicals and chemical products</b>	50	52	50	58	38	50	55
<b>26 Non-metallic mineral products</b>	36	47	71	87	103	93	87
<b>28 Fabricated metal products</b>	62	78	84	79	75	85	76
<b>35 Other transport equipment</b>	84	102	70	90	73	67	54
<b>36 Manufacture of furniture</b>	64	56	64	54	99	98	74
<b>37 Other manufacturing industries</b>	64	42	65	78	70	79	51
<b>Total</b>	54	58	63	65	66	72	71

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31.

Table 3.32: Average weekly wage rate for production worker by Island division 1996-2002

	T\$						
Island division	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	54	61	66	67	68	76	74
<b>2 Vava'u</b>	51	43	48	53	48	41	42
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	61	57	42	48	63	42	53
<b>Total</b>	54	58	63	65	66	72	71

Source: Manufacturing survey, Statistics Dept.

Table 3.33: Average weekly wage rate for production worker by Institutional sector 1996-2002

	T\$						
Institutional sector	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	54	57	58	62	63	69	66
<b>2&amp;3 Government and quasi-government</b>	55	67	91	76	75	85	95
<b>Total</b>	54	58	63	65	66	72	71

Source: Manufacturing survey, Statistics Dept.



Table 3.34: Number of manufacturing establishments by ISIC division for 1996-2002

ISIC division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>15 Food products and beverages</b>	49	48	49	50	50	51	59
<b>17 Manufacture of textiles</b>	4	5	5	5	4	4	4
<b>18 Manufacture of wearing apparel</b>	11	12	11	11	10	11	12
<b>19 Manufacture of leather products</b>	4	4	3	3	2	2	2
<b>20 Wood and products of wood</b>	4	4	4	4	4	4	4
<b>22 Publishing and printing</b>	4	3	3	3	3	3	3
<b>24 Chemicals and chemical products</b>	2	3	3	4	5	4	4
<b>26 Non-metallic mineral products</b>	7	7	7	7	8	7	7
<b>28 Fabricated metal products</b>	9	9	8	8	7	7	7
<b>35 Other transport equipment</b>	4	3	3	3	3	3	3
<b>36 Manufacture of furniture</b>	15	16	16	15	16	16	15
<b>37 Other manufacturing industries</b>	3	3	3	2	3	3	2
<b>Total</b>	<b>116</b>	<b>117</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>122</b>

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 29,30 and 31

Table 3.35: Number of manufacturing establishments by Island division for 1996-2002

Island division	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Tongatapu</b>	84	85	85	83	82	82	82
<b>2 Vava'u</b>	25	22	20	21	23	22	29
<b>3&amp;4 Ha'apai &amp; 'Eua</b>	7	10	10	11	10	11	11
<b>Total</b>	<b>116</b>	<b>117</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>122</b>

Source: Manufacturing survey, Statistics Dept.

Table 3.36: Number of manufacturing establishments by Institutional sector for 1996-2002

Institutional sector	Number						
	1996	1997	1998	1999	2000	2001	2002
<b>1 Private</b>	108	109	108	108	108	109	116
<b>2&amp;3 Government and quasi-government</b>	8	9	7	7	7	6	6
<b>Total</b>	<b>116</b>	<b>117</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>115</b>	<b>122</b>

Source: Manufacturing survey, Statistics Dept.

# Statistics Department

CONFIDENTIAL

## QUARTERLY SURVEY OF MANUFACTURING PRODUCTION, EMPLOYMENT AND WAGES/SALARIES

"INFORMATION BEING COLLECTED UNDER SECTION 8(3) OF STATISTICS ACT 1978 (ACT No. 31)"

QUARTER: \_\_\_\_\_

Establishment No.

Type of Organisation

ISIC Code

Island division

**1. Name and Address:**

**of Establishment**

\_\_\_\_\_

\_\_\_\_\_

**2. PRODUCTION**

Product Code (Office Use)	QUARTER:						
	Unit Of Measurement	Month:		Month:		Month:	
		Quantity	(T\$) Value	Quantity	(T\$) Value	Quantity	(T\$) Value
2.1 Main Products							
a.							
b.							
c.							
d.							
2.2 Other than main products							
2.3 Receipts for work done for others							
<b>TOTAL</b>							

Comments: \_\_\_\_\_

\_\_\_\_\_

**3. EMPLOYMENT AND WAGES/SALARIES**

QUARTER:								
Month:			Month:			Month:		
Sex	No.	Wages & Salaries Paid (T\$)	Sex	No.	Wages & Salaries Paid (T\$)	Sex	No.	Wages & Salaries Paid (T\$)
1	2	3	4	5	6	7	8	9
a. Working Proprietors and Active Partners	M		M			M		
	F		F			F		
b. Production Workers:	M		M			M		
1. Regular/Full-time	F		F			F		
2. Part-time/Casual/Daily Paid	M		M			M		
	F		F			F		
c. Unpaid Family Workers	M		M			M		
	F		F			F		
d. All Other Employees	M		M			M		
	F		F			F		
Total Male	M		M			M		
Total Female	F		F			F		
<b>GRAND TOTAL</b>	No.		No.			No.		
3.2 Memorandum item: Wages and Salaries Paid in kind; estimated value	(T\$)		(T\$)			(T\$)		

Note: M (Male) F (Female)

**4. DECLARATION:**

"I declare that the information furnished is complete and correct to the best of my knowledge."

**Name:** \_\_\_\_\_

**Position:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_



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