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21

# **Statistical Bulletin:**

## MANUFACTURING OUTPUT,

# **EMPLOYMENT AND WAGES/SALARIES**

2003-2007





STATISTICS DEPARTMENT GOVERNMENT OF TONGA NUKU'ALOFA TONGA

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## **Preface**

This is the fourteenth Bulletin in the series on Manufacturing Output, Employment and Wages and Salaries and it presents results of the Quarterly Surveys conducted by the Department for the year 2003-2007. The survey results indicate the performance of the manufacturing industry in the Tongan Economy.

#### The bulletin is spread over four parts:

- **Part I:** Gives the introduction and main results of the comparative position and trend of manufacturing production, employment and wages/salaries.
- **Part II:** Has the complementary analysis on level of production, employment and wages/salaries
- **Part III:** Has all the statistical tables showing growth and trend of manufacturing production, employment and wages/salaries.
- **Part IV:** Gives the questionnaire used in the quarterly survey of manufacturing production, employment and wages/salaries and instructions for completing the questionnaire.

Staff of the Survey division of the Department is commended for their hard work in collecting the information present in this bulletin.

The Department is grateful to all manufacturing establishments that supplied the data and information published in this bulletin. The Department welcomes any comments on how this bulletin could be improved.

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## **Table of contents**

	Page number
List of Tables	iii
List of Graphs	v
Notes and abbreviation	v
Main results	
1. Introduction	1
2. Main Results	3
3. Complementary analysis	
3.1 Production level	16
3.2 Employment Level	20
3.3 Wages/Salaries	21
4. Statistical tables	23
5. Appendices	35

List of Tables	List	of	Tab	les
----------------	------	----	-----	-----

Note: "All tables cover the years 2003-2007"

Tab	le No. Title	Page
1.	Summary of the survey results	3
2.	Manufacturing production by ISIC division	4
3.	Manufacturing production by Island division	5
4.	Manufacturing production by Institutional sector	6
5.	Manufacturing employment by ISIC division	8
6.	Manufacturing employment by Island division	9
7.	Manufacturing employment by Institutional sector	10
8.	Manufacturing wages and salaries by ISIC division	12
9.	Manufacturing wages and salaries by Island division	13
10.	Manufacturing wages and salaries by Institutional sector	14
3.1a	Average production per establishment by ISIC division	17
3.1b	Average production per establishment by Island division	17
3.1c	Average production per establishment by Institutional sector	18
3.1d	Average production per production worker by ISIC division	18
3.1e	Average production per production worker by Island division	19
3.1f	Average production per production worker by Institutional sector	19
3.2a	Number of manufacturing production workers by ISIC division	20
3.2b	Number of manufacturing production workers by Island division	20
3.2c	Number of manufacturing production workers by Institutional sector	21
3.3a	Average weekly wage rate per production worker by ISIC division	21
3.3b	Average weekly wage rate per production worker by Island division	22
3.3c	Average weekly wage rate per production worker by Institutional sector	22

### **Statistical tables**

4.1	Manufacturing production by ISIC division	23
4.2	Manufacturing production by Island division	23
4.3	Manufacturing production by Institutional sector	23
4.4	Percentage distribution of manufacturing production by ISIC division	24
4.5	Percentage distribution of manufacturing production by Island division	24
4.6	Percentage distribution of manufacturing production by Institutional sector	24
4.7	Average production per establishment by ISIC division	25
4.8	Average production per establishment by Island division	25
4.9	Average production per establishment by Institutional sector	25
4.10	Average production per production worker by ISIC division	26
4.11	Average production per production worker by Island division	26

 - 4		The	- 1	es
 Ct.	OT.	12	n	
31		la		63

Note: "All tables covers the years 2003-2007"

Table No.	Title	Page
4.12 Average	production per production worker by Institutional sector	26
4.13 Manufac	turing employment by ISIC division	27
4.14 Manufac	turing employment by Island division	27
4.15 Manufac	turing employment by Institutional sector	27
4.16 Percenta	ge distribution of manufacturing employment by ISIC division	28
4.17 Percenta	ge distribution of manufacturing employment by Island division	28
4.18 Percenta	ge distribution of manufacturing employment by Institutional sector	28
4.19 Number	of manufacturing production workers by ISIC division	29
4.20 Number	of manufacturing production workers by Island division	29
4.21 Number	of manufacturing production workers by Institutional sector	29
4.22 Manufac	turing wages and salaries by ISIC division	30
4.23 Manufac	turing wages and salaries by Island division	30
4.24 Manufac	turing wages and salaries by Institutional sector	30
4.25 Percenta	ge distribution of manufacturing wages and salaries by ISIC division	31
4.26 Percenta	ge distribution of manufacturing wages and salaries by Island division	31
4,27 Percenta	ge distribution of manufacturing wages and salaries by Institutional sector	31
4.28 Wages a	nd salaries of production workers by ISIC division	32
4.29 Wages a	nd salaries of production workers by Island division	32
4.30 Wages a	nd salaries of production workers by Institutional sector	32
4.31 Average	weekly wage rate for production worker by ISIC division	33
4.32 Average	weekly wage rate for production worker by Island division	33
4.33 Average	weekly wage rate for production worker by Institutional sector	33
4.34 Number	of manufacturing establishments by ISIC division	34
4.35 Number	of manufacturing establishments by Island division	34
4.36 Number	of manufacturing establishments by Institutional sector	34

## **List of Graphs**

Grap	h Title	Page
1.	Manufacturing production level	4
2.	Manufacturing production level by island division	6
3.	Manufacturing production level by institutional sector	7
4.	Manufacturing employment level	9
5.	Manufacturing employment level by island division	10
6.	Manufacturing employment level by institutional sector	11
7.	Manufacturing wages level	12
8.	Manufacturing wages level by island division	13
9.	Manufacturing wages level by institutional sector	15
10.	Average production per establishment	16

### Notes and abbreviation

#### <u>Rounding</u>

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 (Series M No.4, Rev.3)

## 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 2003-2007. 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) 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 1<sup>st</sup> Quarter 2002 and subsequently to the last quarter (October-December) of 2006. This covers establishments on the four main island divisions of Tonga namely Tongatapu, Vava'u, Ha'apai and 'Eua. This 13<sup>th</sup> Bulletin on manufacturing output, employment and wages and salaries contains data for calendar years 2002-2006.

#### **Response rate**

1.7 The reason for delaying the publishing of the survey results is to get all the returns before processing the results. However, some establishments have closed and few were not located where they moved to.

#### 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.)
- 16. Manufacture of Tobacco Products.(Cigarettes)
- 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
- 21. Manufacture of Pulp, paper or corrugated, paperboard and articles of paper
- 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. MAIN RESULTS

The quarterly survey of manufacturing output, employment and wages/salaries for year 2007 was carried out by the Statistics Department of Tonga between 2007 and 2008. 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 Niuas were excluded from the survey.

Item	Unit	2003	2004	2005 (R)	2006	2007
1. Establishments covered	No.	130	127	135	120	123
2. Total production	T\$('000)	36,319	31,849	32,152	27,414	28,970
3. Persons employed	No.	1,375	1,333	1,490	1,267	1,188
4. Wages and salaries	T\$('000)	5,354	5,606	5,756	5,663	5,607

 Table 1: Summary of the survey results for year 2003-2007

Source: Manufacturing survey, Statistics Dept

## Manufacturing Production

Total manufacturing production for Tonga for the year 2007 amounted to \$29.0 million pa'anga compared to a total of \$27.4 million pa'anga in 2006. This is a slight increase of 5.7% as shown in *Table 1*. This rise in total manufacturing production was accounted for by the increases in the production groups of Publishing and printing by 12%, Chemicals and chemical products by 1%, Non-metallic mineral products by 45% and the Fabricated metal products by 411%. This huge increase of Fabricated metal products was due to the overseas market demand. The rest of the production groups show slight decreases in their production such as the Food products and beverages which fell by 8%, the Manufacture of furniture by 1% and the Other manufacturing industries also fell by 4%.

Even though some of the manufacturing establishments ceased to exist in 2007, especially in the Food products and beverage group, but there were also new establishments that started business. Also some of the establishments that were badly affected by the 2006 riots started to recover and got back into business, leading to this increase in total manufacturing production for 2007.

However, the Food and beverage group still dominates the total manufacturing production with a contribution of 52% (\$15 million pa'anga) to the total production compared to 60% last year. The Non-metallic mineral products group stood next to the Food and beverage group with a contribution of 14% which is a sum of \$4 million pa'anga, and the Chemicals and chemical products contributed 12% which is a sum of \$3 million pa'anga.

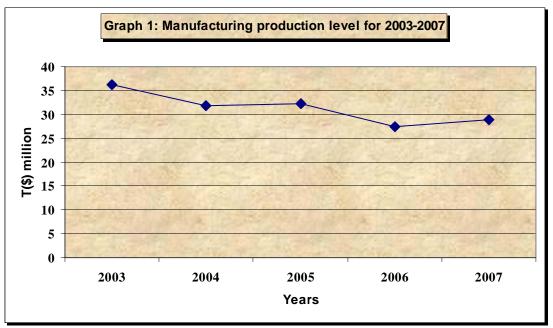
Table 2 shows the Total Manufacturing Production in more detail.

				Т	\$('000)
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	22,249	18,514	20,238	16,404	15,118
22 Publishing and printing	1,311	1,389	1,283	1,273	1,419
24 Chemicals and chemical products	4,113	5,204	2,047	3,143	3,455
26 Non-metallic mineral products	3,520	2,062	3,990	2,761	3,995
28 Fabricated metal products	807	1,052	1,193	<mark>302</mark>	<mark>1,543</mark>
36 Manufactures of Furniture	1,150	1,621	1,272	1,644	1,630
37 Other manufacturing industries	3,169	2,007	2,131	1,887	1,810
Total	36,319	31,849	32,154	27,414	28,970

 Table 2: Manufacturing production by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 17, 18, 19, 20, 21, 29, 30, 31 and 35.

*Graph 1* below gives the trend of total manufacturing production for the years 2003 to 2007. This trend decreases from \$36.3 million pa'anga to \$31.8 million pa'anga in 2003 to 2004. It then increases slightly to \$32.1 million pa'anga in 2005, then falls again to \$27.4 million pa'anga in 2006 before rising to \$29.0 million pa'anga in 2007.



Source: Manufacturing survey, Statistics Dept.

By looking at Manufacturing production by Island Division, the Tongatapu division produced a total of \$26.5 million pa'anga in 2007 which is a 4% increase from 2006 production. Vava'u division also shows a favourable increase in production of 63% in

2007 which totaled up to \$1.9 million pa'anga compared to only \$1.1 million pa'anga in 2006.

These increases reflect the recovery of the existing establishment from the 2006 riots, and the introduction of new manufacturing establishments into the economy. These increases occurred mainly in the Groups of Fabricated metal products and the Non-metallic mineral products.

Ha'apai and 'Eua division on the other hand shows a slight decrease of 14%, from \$0.7 million pa'anga in 2006 to \$0.6 million pa'anga in 2007. This was mainly due to a slight downfall in the Kava producing establishments in the Islands.

*Table 3* below shows the contribution to the Manufacturing production by Island Divisions.

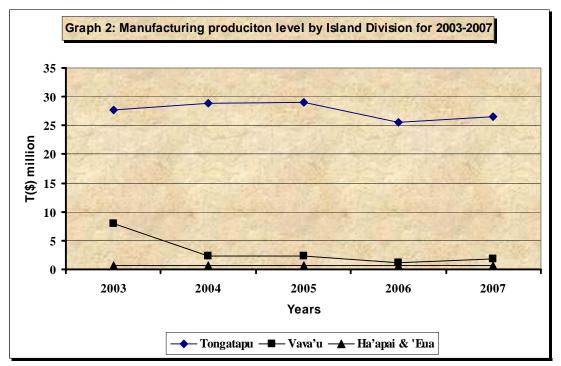
				Т\$(	('000)
Island division	2003	2004	2005 (R)	2006	2007
1 Tongatapu	27,713	28,859	29,076	25,572	26,510
2 Vava'u	7,945	2,287	2,398	1,143	1,857
3&4 Ha'apai & 'Eua	661	703	680	699	602
Total	36,319	31,849	32,154	27,414	28,970

#### Table 3: Manufacturing production by Island division for 2003-2007

Source: Manufacturing survey, Statistics Dept

Tongatapu division again holds the largest portion of manufacturing production in 2007 which takes up 92% of the total production, Vava'u division holds 6% and the remaining 2% was contributed by the Ha'apai and 'Eua division.

*Graph 2* shows the trends of Manufacturing production by Island division from 2003 to 2007.



Source: Manufacturing survey, Stats Dept.

Manufacturing production level by Institutional Sectors, gives a favourable increase in production from both sectors in 2007. The private sector's production level has increased by 5%, from \$26.6 million pa'anga in 2006 to \$28.0 million pa'anga in 2007. Government and Quasi-government sector also increased by 31% from \$0.8 million pa'anga in 2006 to \$1.0 million pa'anga in 2007.

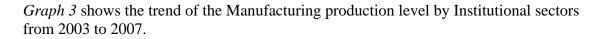
*Table 4* gives a more detailed information of the Manufacturing production level by Institutional Sectors.

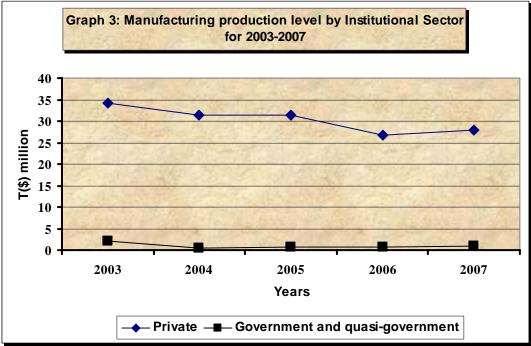
#### Table 4: Manufacturing production by Institutional sector for 2003-2007

				Τ\$('	000)
Institutional sector	2003	2004	2005 (R)	2006	2007
1 Private	34,255	31,298	31,365	26,639	27,956
2&3 Government and quasi-government	2,064	551	789	775	1,014
Total	36,319	31,849	32,154	27,414	28,970

Source: Manufacturing survey, Statistics Dept

As can be seen from the table above, the private sector produced 96% of the total production in 2007 compared to 97% in 2006. The remaining 4% was produced by the Government and Quasi-government sector, compared to only 3% in 2006.





Source: Manufacturing Survey, Statistics Dept.

The private sector fell from \$34.2 million pa'anga in 2003 to \$31.2 million pa'anga in 2004. In 2005 it slightly increased by \$0.07 million pa'anga and then fell again in 2006 to \$26.7 million pa'anga but in 2007 it slightly increased to \$28.0 million pa'anga.

The Government and Quasi-government sector also shows a similar trend in manufacturing production, falling rapidly from \$2.0 million pa'anga in 2003 to \$0.6 million pa'anga in 2004. It then slowly rises in 2005 to \$0.8 million pa'anga and remain at that level in 2006 before rising again in 2007 to \$1.0 million pa'anga.

## Manufacturing Employment

Total manufacturing employment for the year 2007 was a total of 1188 employees working in the Manufacturing sector, a decrease of 6.2% from 1267 employees in 2006. This decrease in manufacturing production occurred in the Food products and beverage group which fell by 13%, the Wood and products of wood group by 16%, Publishing and printing group by 14% and the Manufacture of Furniture group by 5.4%. Other production groups increased employment level namely the Non-metallic mineral products increased by 19%, the Fabricated metal products group by 15% and the Other manufacturing industries group also increases by 8%.

The Limu processing establishments usually employs large numbers of labour workers, but in 2007 their operations have ceased which contributed to the decline in the number of manufacturing employment.

*Table 5* shows the number of persons employed in the manufacturing sector by ISIC Divisions from 2003-2007.

				Nun	nber
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	761	825	853	710	621
20 Wood and products of wood	87	79	106	81	68
22 Publishing and printing	108	102	104	73	63
26 Non-metallic mineral products	87	30	75	97	115
28Fabricated Metal Products	36	41	63	48	55
36 Manufacture of furniture	102	70	77	93	88
37 Other manufacturing industries	194	186	212	165	178
Total	1,375	1,333	1,490	1,267	1,188

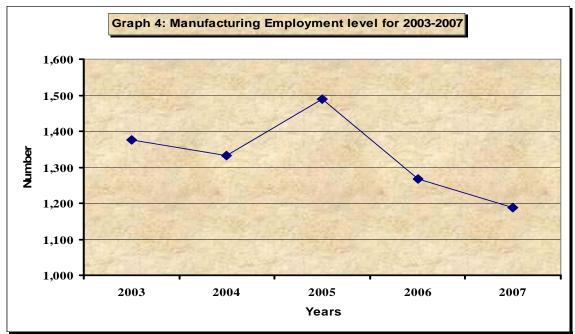
 Table 5: Manufacturing employment by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 17, 18, 19, 21, 24, 29, 30, 31 and 35

Of the employment by industries, 52% of the overall manufacturing employment worked in the Food products and beverages group, 15% in the Other manufacturing industries group, 10% in the Non-metallic mineral products group, 7% in the Manufacture of furniture group, 6% in the Wood and products of wood group, 5% in Publishing and printing group, and also 5% in the Fabricated metal products group.

From 2003 to 2004 manufacturing employment fell by 3%, then increased by 12% in 2005, fell again in 2006 by 15% and again in 2007 by 6%.

Graph 4 gives a clearer image of the manufacturing employment trend from 2003-2007.



Source: Manufacturing survey, Statistics Dept.

Tongatapu division shared 85% of the total manufacturing employment in 2007 whereas Vava'u with 6%, a decrease from 8% in 2006, the Ha'apai and 'Eua shared 9% compared to only 7% in 2006.

Table 6 gives the manufacturing employment level for 2003-2007 by Island Division.

Table 6. Manufacturing employment by Island division for 2003-200	1

			Number		
Island division	2003	2004	2005	2006	2007
1 Tongatapu	1,104	1,188	1,275	1076	1,005
2 Vava'u	219	105	127	103	77
3&4 Ha'apai & 'Eua	52	40	88	88	106
Total	1,375	1,333	1,490	1,267	1,188

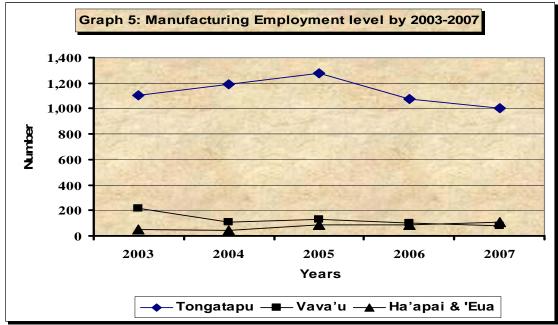
ifacturing ampleument by loland division for 2002 2007

Source: Manufacturing survey, Statistics Dept.

Table C. M.

The employment level for Tongatapu has decreased from 2006 to 2007 by 7% that is from 1076 to 1005. Vava'u decreased further by 25% from 103 to 77. Only the Ha'apai and 'Eua division shows some favourable outcome with an increase in employment of 21%, which was from 88 to 106 workers.

These trends are further elaborated in Graph 5 below.



Source: Manufacturing Survey, Stats Dept.

However, the employment level for the Institutional sectors both gives an unfavourable movement, as both the Private sector and the Government and Quasi-government sector decreased in total from the previous year. The Private sector employs 91% of the total manufacturing employment level, which is the same as last year, whereas the Government and Quasi-government sector still holds 9% of the overall employment level.

This is shown in *Table 7*.

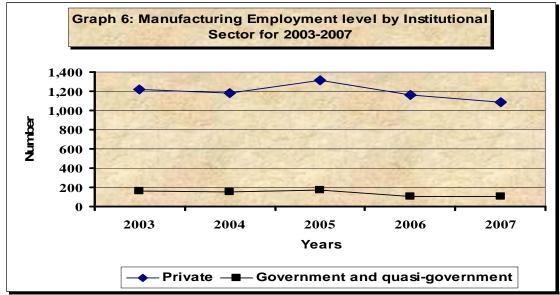
				Number	
Institutional sector	2003	2004	2005	2006	2007
1 Private	1,215	1,181	1,315	1158	1,087
2&3 Government and quasi-government	160	152	175	109	101
Total	1,375	1,333	1,490	1,267	1,188

Table 7: Manufacturing employment by Institutional sector for 2003-2007

Source: Manufacturing survey, Statistics Dept.

As we can see from the table above the private sector fell by 6% in 2007, from 1158 to 1087. The Government and Quasi-government sector also fell by 7% from 109 in 2006 to 101 in 2007.

Graph 6 gives the trend of Manufacturing level by Institutional sector for 2003-2007.



Source: Manufacturing survey, Statistics Dept.

## ✤ Manufacturing Wages/Salaries

From 2003 to 2005, total manufacturing wages and salaries increased by 8%. In 2006, it fell by 2% and again in 2007 by 1%.

Although some production groups show some favourable increases of wages and salaries from 2006 to 2007, namely the Wood and products of wood group, Non-metallic mineral products group, Manufacture of furniture group and the Other manufacturing industries group which increased by 23%, 40%, 7% and 6% respectively. These decreases were offset by the decreases in other industries. Such that, Food products and beverages group, Publishing and printing group and the Fabricated metal products group decreased by 7%, 7% and 27% respectively.

Table 8 below gives this information in more detail.

				T\$('00	00)
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	2,804	3,037	3011	2,954	2,739
20 Wood and products of wood	225	231	320	162	199
22 Publishing and printing	610	562	544	645	597
26 Non-metallic mineral products	347	132	258	307	429
28 Fabricated Metal Products	140	371	250	189	138
36 Manufacture of furniture	555	447	516	614	656
37 Other manufacturing industries	673	826	857	801	849
Total	5,354	5,606	5,756	5,663	5,607

#### Table 8: Manufacturing wages and salaries by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 16, 17, 18, 19, 21, 24, 29, 30, 31 and 35

Out of the \$5.6 million for manufacturing wages and salaries for 2007, \$2.7 million was from the Food products and beverage group, followed by \$0.8 million from the Other manufacturing industries group and \$0.7 million was from the Manufacture of furniture group.

The trend for the manufacturing wages and salaries level for 2003-2007 is illustrated on *Graph 7* below.



Source: Manufacturing survey, Statistics Dept.

For the year 2007, 90% of the overall manufacturing wages and salaries were earned by the Tongatapu division, 5% from the Vava'u division and another 5% by the Ha'apai and 'Eua division.

Tongatapu and Vava'u however represent a decrease in their manufacturing wages and salaries level from 2006 to 2007 of 1% and 12% respectively. Only the Ha'apai and 'Eua division gives a favourable increase of 19% for the period. These falls and rise in the manufacturing wages and salaries level were due to the changes in the number of manufacturing employment level in each division.

Table 9 shows the manufacturing wages and salaries level for the year 2003-2007.

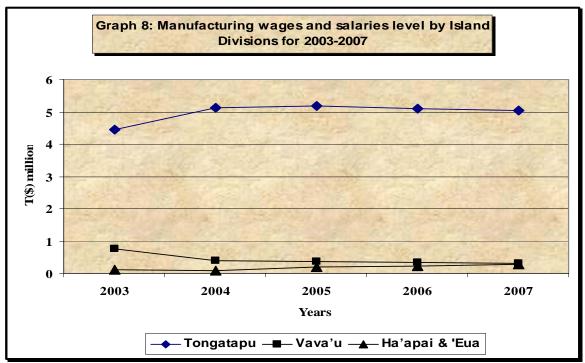
Island division	2003	2004	2005	2006	2007
1 Tongatapu	4461	5116	5173	5,089	5,033
2 Vava'u	772	399	374	348	306
3&4 Ha'apai & 'Eua	121	91	209	226	268
Total	5,354	5,606	5,756	5,663	5,607

Table 9:	Manufacturing wages and	d salaries by Island	l division for 2003-2007

Source: Manufacturing survey, Statistics Dept.

As we can see from the table above, Tongatapu and Vava'u divisions each shows a slow decreasing trend whereas the Ha'apai and 'Eua division shows a steady increasing trend.

This is illustrated on *Graph* 8 below.



Soure: Manufacturing survey, Statistics Dept.

However the manufacturing wages and salaries level for 2007 by Institutional sectors shows that the Private Sector was decreased by 0.1% from 2006 whereas the Government and Quasi-government sector decreased further by 8% from the previous year. Manufacturing wages and salaries level for the Private sector still remained at \$5 million and the Government and Quasi-government sector was \$0.58 million compared to \$0.63 million in 2006.

*Table 10* gives the detail of manufacturing wages and salaries by Institutional sectors for the years 2003 – 2007.

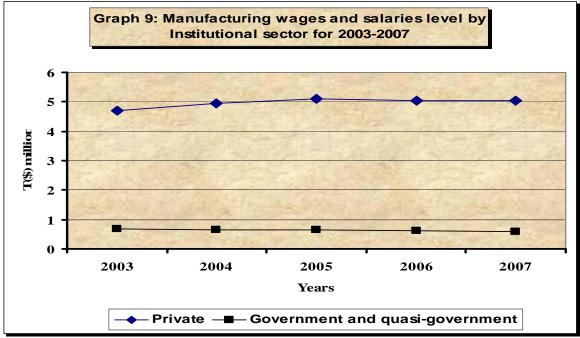
				T\$('000)	
Institutional sector	2003	2004	2005	2006	2007
1 Private	4,689	4,956	5,107	5,038	5,031
2&3 Government and quasi-government	665	650	649	625	577
Total	5,354	5,606	5,756	5,663	5,607

Table 10: Manufacturing wages and salaries by Institutional sector for 2003-2007

Source: Manufacturing survey, Statistics Dept.

The Private sector paid 90% of the Total manufacturing wages and salaries for 2007 compared to 89% in 2006. The remaining 10% was paid by the Government and Quasi-government sector which is a 1% decrease from 2006.

*Graph 9* below gives the Trend for the Manufacturing wages and salaries level by Institutional sectors for 2003-2007. The Private sector shows an increasing trend starting at \$4.7 million pa'anga in 2003 to \$5.1 million pa'anga in 2005 and then it slightly decreased to \$5.0 million pa'anga in 2007. On the other hand the Government and Quasigovernment give a steady decreasing trend from \$0.7 million pa'anga in 2003 to \$0.6 million pa'anga in 2007.



Source: Manufacturing survey, Statistics Dept.

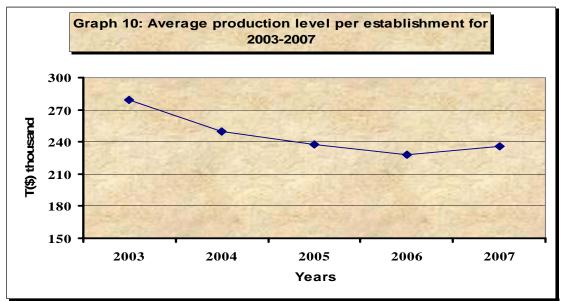
## **3. COMPLEMENTARY ANALYSIS**

### 3.1 Production Level

### ✤ Average production per establishment

The manufacturing annual average production per establishment for the year 2007 stood at 236 thousand pa'anga, a 4% increase from 228 thousand pa'anga in 2006. From 2003, average production per establishment stood at 252 thousand pa'anga and has decreased over the years up to year 2006, but has finally shown a favourable movement in year 2007 indicating an increase in the productivity level of establishments.

*Graph 10* shows the trend of annual manufacturing average production per establishment for the years 2003-2007.



Source: Manufacturing survey, Statistics Dept.

The increase in overall average production per establishment was accounted for by the increases in these production groups from 2006 to 2007, the Publishing and printing group by 12%, Chemicals and chemical products group by 10%, Non-metallic mineral products group by 3%, Fabricated metal products group by 412% and the Manufacture of furniture group by 18%. Only the Food products and beverages group and other manufacturing industries groups were decreased by 6% and 11% respectively in year 2007.

*Table 3.1a* shows the fluctuations in the overall average production per establishments by ISIC divisions from 2003 to 2007.

				Т <i>\$('0</i>	00)
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	358	268	277	283	265
22 Publishing and printing	327	347	321	318	355
24 Chemicals and chemical products	1028	1,301	512	786	864
26 Non-metallic mineral products	391	412	499	276	285
28 Fabricated metal products	115	150	170	43	220
36 Manufacture of Furniture	71	115	85	126	148
37 Other manufacturing industries	113	669	89	79	70
Total	279	250	238	228	236

#### Table 3.1a: Average production per establishment by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include16, 17, 21, 18, 19, 20, 29, 30, 31 and 35

#### *Average production per establishment by Island division*

In terms of average production per establishment by Island division, Tongatapu division shows an average production of \$298 thousand per establishment in 2007, which is a 2% decrease from 2006. Ha'apai and 'Eua division also decreased \$39 thousand in 2006 to \$30 thousand in 2007. In contrast, Vava'u division increased by 108%, from \$64 thousand in 2006 to \$133 thousand in 2007.

This is shown in table 3.1b below.

#### Table3.1b: Average production per establishment by Island division for 2003-2007

Island division				T\$('0	00)
	2003	2004	2005	2006	2007
1 Tongatapu	315	365	338	304	298
2 Vava'u	265	71	75	64	133
3&4 Ha'apai & 'Eua	55	43	40	39	30
Total	279	250	238	228	236

Source: Manufacturing survey, Statistics Dept.

#### ✤ Average production per establishment in terms of Institutional Sector

Average production per establishment in terms of Institutional Sector shows a favourable movement in both the Private and Government sector in 2007. The Private sector increased by 2% \$232 thousand in 2006 to \$237 thousand in 2007. Government and quasi-government sector also increased by 31% from \$155 thousand in 2006 to \$203 thousand per establishment in 2007.

This is shown in Table 3.1c below.

				T\$('000)	
Institutional sector	2003	2004	2005	2006	2007
1 Private	275	256	241	232	237
2&3 Government and quasi-government	412	110	158	155	203
Total	279	250	238	228	236

#### Table 3.1c: Average production per establishment by Institutional sector for 2003-2007

Source: Manufacturing survey, Statistics Dept.

Manufacturing average production per establishments is further detailed in Tables 4.7, 4.8 and 4.9 of this report.

### ✤ Average production per production worker

Manufacturing average production per production worker for the year 2007 has increased from 26 thousand per worker in the previous year to 29 thousand pa'anga per worker. This rise in the productivity of manufacturing production workers reflects the increase in overall production level despite the decrease in the total number of production workers in year 2007.

Some industries even produced more than the national average production rate such as the Food product and beverage group 30 thousand, the Chemicals and chemical products group 138 thousand, the Non-metallic mineral products group 39 thousand and the Fabricated metal products 30 thousand pa'anga.

*Table 3.1d* shows the average production per production worker for the period 2003-2007.

Г <u> </u>				T <i>\$('000)</i>		
ISIC division	2003	2004	2005	2006	2007	
15 Food product & beverages	36	25	28	29	30	
22 Publishing and Printing	13	26	22	21	24	
24 Chemicals and chemical products	146	52	20	137	138	
26 Non-metallic mineral products	44	85	160	30	39	
28 Fabricated metal products	23	38	17	7	30	
35 Other transport equipment	14	36	11	15	15	
36 Manufactures of Furnitures	14	31	23	24	24	
37 Other manufacturing industries	15	15	9	9	9	
Total	32	27	25	26	29	

#### Table 3.1d: Average production per production worker by ISIC division for 2003-2007.

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include16, 17, 18, 19, 20, 21, 30 and 31

### Average production per production worker by Island divisions

For the Island divisions by industry level, value produced by the production workers of Tongatapu division averaged to 30 thousand pa'anga, Vava'u division an average of 35 thousand pa'anga and the Ha'apai and 'Eua division averaged to 7 thousand pa'anga. Both the Tongatapu and Vava'u division gives a favourable increase from the previous year whereas the Ha'apai and 'Eua division decreased from the previous year.

This is shown on Table 3.1e below.

#### Table 3.1e: Average production per production worker by Island division for 2003-2007

Island division	2003	2004	2005	2006	2007
1 Tongatapu	30	27	26	27	30
2 Vava'u	47	25	23	21	35
3&4 Ha'apai & 'Eua	17	25	10	11	7
Total	32	27	25	26	29

Source: Manufacturing survey, Statistics Dept.

### ✤ Average production per production worker by Institutional Sectors

Both the Private and the Government and quasi-government sectors give a favourable increase of their average production per production worker in year 2007 with comparison to year 2006. The Private Sector produced an average of 31 thousand pa'anga per production worker and the Government and quasi-government sector produced 10 thousand pa'anga per production worker.

Table 3.1f shows the average production per production worker from year 2003 – 2007.

Table 3.1f: Average production per production worker by Institutional sector for 2003-2007	

			T\$('000)			
Institutional sector	2003	2004	2005	2006	2007	
1 Private	35	30	28	28	31	
2&3 Government and quasi-government	13	4	6	7	10	
Total	32	27	25	26	29	

Source: Manufacturing survey, Statistics Dept.

More detailed information about average production per production worker is given on Tables 4.10, 4.11 and 4.12 of the Statistical Tables.

### 3.2 Employment Level

Overall number of production workers in manufacturing industries again decreases from 2006 to 2007 by 5%.

Majority of the production workers worked in the Food products and beverages group (51%), the Non-metallic mineral products group (10%) and the Other manufacturing industries (12%).

This is given on Table 3.2a below.

Table 3.2a: Number of manufacturing production workers by	y ISIC division for 2003-2007
---	-------------------------------

				Nun	nber
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	612	728	734	569	512
20 Wood and products of wood	87	79	102	79	68
22 Publishing and printing	103	54	59	61	60
24 Chemicals and Chemical Products	28	99	101	23	25
26 Non-metallic mineral products	80	24	25	91	102
28 Fabricated Metal Products	34	28	69	45	52
36 Manufacture of furniture	80	52	55	68	67
37 Other manufacturing industries	122	117	136	117	119
Total	1,146	1,181	1,281	1,053	1,005

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include 16, 17, 18, 19, 21, 29, 30, 31 and 35

By Island Divisions, 87% of the overall production workers are working in Tongatapu, 5% in Vava'u and 8% are at the Ha'apai and 'Eua division. The number of manufacturing production workers by Island Division for 2003 - 2007 is shown in Table 3.2b below.

Γ				N	umber
Island division	2003	2004	2005	2006	2007
1 Tongatapu	937	1,059	1110	936	871
2 Vava'u	170	93	103	54	53
3&4 Ha'apai & 'Eua	39	28	68	63	81
Total	1,146	1,181	1,281	1,053	1,005

Source: Manufacturing survey, Statistics Dept.

The Private sector employed 904 production workers in 2007, a 4% decrease from year 2006, whereas the Government and quasi-government sector employed 101 production

workers in 2007, a decrease of 7% from 109 in the previous year. This is shown in Table 3.2c below.

Table 3.2c: Number of manufacturing production workers by institutional sector for 2003-2007
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Γ				Number	
Institutional sector	2003	2004	2005	2006	2007
1 Private	986	1,029	1107	944	904
2&3 Government and quasi-government	155	152	174	109	101
Total	1,146	1,181	1,281	1,053	1,005

Source: Manufacturing survey, Statistics Dept.

### 3.3 Wages and Salaries

The annual average weekly wage rate for production workers for 2007 was 81 pa'anga, a 4 pa'anga rise from 2006. As shown on Table *3.3a* below, all the manufacturing industry groups has a rise in their average wage rates, except the Fabricated metal products group, Other Transport Equipment group and the Other manufacturing products group.

Table 3.3a: Average weekly wage rate per production worker by ISIC division for 2003-2007

				Т\$	
ISIC division	2003	2004	2005	2006	2007
15 Food and Beverages	72.00	64.00	64.00	71.00	75.00
20 Wood and Products of Wood	103.00	56.00	60.00	39.00	56.00
22 Publishing and printing	102.00	67.00	60.00	159.00	175.00
24Chemicals& Chemical Products	55.00	81.00	58.00	57.00	57.00
26 Non-metallic mineral products	74.00	77.00	72.00	60.00	68.00
28 Fabricated metal products	73.00	197.00	57.00	72.00	43.00
35 Other Transport Equipment	101.00	101.00	92.00	98.00	83.00
36 Manufacture of furniture	102.00	113.00	113.00	133.00	143.00
370ther Manufacturing Products	30.00	29.00	83.00	71.00	65.00
Total	73.00	74.00	67.00	77.00	81.00

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 include16, 17, 18, 19, 21, 29, 30 and 31

By Island Division, Tongatapu average wage rate increased in 2007 from 79 pa'anga to 83 pa'anga, and the same goes for the Vava'u division from 54 pa'anga to 86 pa'anga per week. The Ha'apai and 'Eua division average wage rate however has gone down from 63 pa'anga to 55 pa'anga. This is shown in Table *3.3b* below.

				Τ\$	
Island division	2003	2004	2005	2006	2007
1 Tongatapu	73.00	74.00	68.00	79.00	83.00
2 Vava'u	77.00	79.00	64.00	54.00	86.00
3&4 Ha'apai & 'Eua	59.00	56.00	54.00	63.00	55.00
Total	73.00	74.00	67.00	77.00	81.00

 Table 3.3b: Average weekly wage rate per production worker by Island division for 2003-2007

Source: Manufacturing survey, Statistics Dept.

Both the **institutional sectors** have an increase in their average weekly wage rate for production workers. The Private sector increased by 2 pa'anga to 77 pa'anga and the Government and quasi-government sector increased by 16 pa'anga in year 2007. Table *3.3c* gives institutional sector levels for the average wage rate.

			Т\$	
2003	2004	2005	2006	2007
72.00	73.00	67.00	75.00	77.00
79.00	82.00	69.00	94.00	110.00
73.00	74.00	67.00	77.00	81.00
	72.00 79.00	72.0073.0079.0082.00	72.0073.0067.0079.0082.0069.00	200320042005200672.0073.0067.0075.0079.0082.0069.0094.00

## **Statistical Tables**

#### Table 4.1: Manufacturing production by ISIC division for 2003-2007

					T\$('000)
ISIC division	2003	2004	2005 (R)	2006	2007
15 Food products and beverages	22,249	18,514	20,238	16,404	15,118
17 Manufacture of textiles	354	306	256	200	201
18 Manufacture of wearing apparel	525	359	494	368	359
19 Manufacture of leather products	0	0	0	0	0
20 Wood and products of wood	1,119	79	211	225	212
22 Publishing and printing	1,311	1,389	1,283	1,273	1,419
24 Chemicals and chemical products	4,113	5,204	2,047	3,143	3,455
26 Non-metallic mineral products	3,520	2,062	3,990	2,761	3,995
28 Fabricated metal products	807	1,052	1,193	302	1,543
35 Other transport equipment	155	294	152	184	174
36 Manufacture of furniture	1,150	1,621	1,272	1,644	1,630
37 Other manufacturing industries	1016	969	1,019	910	865
Total	36,319	31,849	32,155	27,414	28,970

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

#### Table 4.2: Manufacturing production by Island division for 2003-2007

				T\$('000)		
Island division	2003	2004	2005 (R)	2006	2007	
1 Tongatapu	27,714	28,859	29,076	25,572	26,510	
2 Vava'u	7,945	2,287	2,398	1,143	1,857	
3&4 Ha'apai & 'Eua	660	703	680	699	602	
Total	36,319	31,849	32,154	27,414	28,970	

Source: Manufacturing survey, Statistics Dept.

#### Table 4.3: Manufacturing production by Institutional sector for 2003-2007

							T\$('00	0)
Institutional sector	2003	2004	2005 (R)	2006	2007			
1 Private	34,255	31,298	31,365	26,639	27,956			
2&3 Government and quasi-government	2,064	551	789	775	1,014			
Total	36,319	31,849	32,154	27,414	28,970			

				Percent	tages
ISIC division	2003	2004	2005 (R)	2006	2007
15 Food products and beverages	61.3	58.1	62.9	59.8	52.2
17 Manufacture of textiles	2.6	1.0	0.8	0.7	0.7
18 Manufacture of wearing apparel	1.0	1.1	1.5	1.3	1.2
19 Manufacture of leather products	1.4	0	0.0	0.0	0.0
20 Wood and products of wood	0	0.2	0.7	0.8	0.7
22 Publishing and printing	3.1	4.4	4.0	4.6	4.9
24 Chemicals and chemical products	3.6	16.3	6.4	11.5	11.9
26 Non-metallic mineral products	11.3	6.5	12.4	10.1	13.8
28 Fabricated metal products	9.6	3.3	3.7	1.1	5.3
35 Other transport equipment	0	1.0	0.5	0.7	0.6
36 Manufacture of furniture	0.4	5.1	3.9	6.0	5.6
37 Other manufacturing industries	2.8	3.0	3.2	3.3	3.0
Total	100.0	100.0	100.0	100.0	100.0

 Table 4.4: Percentage distribution of manufacturing production by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

				Percentages	
Island division	2003	2004	2005 (R)	2006	2007
1 Tongatapu	76.3	90.6	90.4	93.3	91.5
2 Vava'u	21.9	7.2	7.5	4.2	6.4
3&4 Ha'apai & 'Eua	1.8	2.2	2.1	2.5	2.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Manufacturing survey, Statistics Dept.

#### Table 4.6: Percentage distribution of manufacturing production by Institutional sector for 2003-2007

				Percentages	
Institutional sector	2003	2004	2005 (R)	2006	2007
1 Private	94.3	98.3	97.5	97.2	96.5
2&3 Government and quasi-government	5.7	1.7	2.5	2.8	3.5
Total	100.0	100.0	100.0	100.0	100.0

				T\$('000)		
ISIC division	2003	2004	2005 (R)	2006	2007	
15 Food products and beverages	358	268	277	283	265	
17 Manufacture of textiles	118	102	165	67	67	
18 Manufacture of wearing apparel	37	32	45	41	33	
19 Manufacture of leather products	0	0	0	0	0	
20 Wood and products of wood	279	13	35	38	35	
22 Publishing and printing	327	347	321	318	355	
24 Chemicals and chemical products	1028	1,301	512	786	864	
26 Non-metallic mineral products	391	412	499	276	285	
28 Fabricated metal products	115	150	170	43	220	
35 Other transport equipment	77	294	152	92	87	
36 Manufacture of furniture	71	115	85	126	148	
37 Other manufacturing industries	338	322	340	303	216	
Total	279	250	238	228	236	

#### Table 4.7: Average production per establishment by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

#### Table4.8: Average production per establishment by Island division for 2003-2007

Γ			T\$('(	000)	
Island division	2003	2004	2005 (R)	2006	2007
1 Tongatapu	315	365	338	304	298
2 Vava'u	265	71	75	64	133
3&4 Ha'apai & 'Eua	55	43	40	39	30
Total	279	250	238	228	236

Source: Manufacturing survey, Statistics Dept.

#### Table 4.9: Average production per establishment by Institutional sector for 2003-2007

				T\$('000	))
Institutional sector	2003	2004	2005 (R)	2006	2007
1 Private	275	256	241	232	237
2&3 Government and quasi-government	412	110	158	155	203
Total	279	250	238	228	236

Г				T\$('000)	
ISIC division	2003	2004	2005 (R)	2006	2007
15 Food products and beverages	36	25	28	8	30
17 Manufacture of textiles	17	43	12	12	8
18 Manufacture of wearing apparel	14	8	14	12	18
19 Manufacture of leather products	0	0	0	0	0
20 Wood and products of wood	13	1	2	3	3
2122 Publishing and printing	13	26	22	21	24
24137 Chemicals and chemical products	147	52	20	137	138
26 Non-metallic mineral products	44	85	160	30	39
28 Fabricated metal products	24	38	17	7	30
35 Other transport equipment	14	36	11	15	15
36 Manufacture of furniture	14	31	23	24	24
37 Other manufacturing industries	23	15	15	18	14
Total	32	27	25	26	29

Table 4.10: Average production per production worker by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

#### Table 4.11: Average production per production worker by Island division for 2003-2007

Γ				T\$('0	T\$('000)	
Island division	2003	2004	2005 (R)	2006	2007	
1 Tongatapu	30	27	26	27	30	
2 Vava'u	47	25	23	21	35	
3&4 Ha'apai & 'Eua	17	25	10	11	7	
Total	32	27	25	26	29	

Source: Manufacturing survey, Statistics Dept.

#### Table 4.12: Average production per production worker by Institutional sector for 2003-2007

T\$('000)

Institutional sector	2003	2004	2005 (R)	2006	2007
1 Private	35	30	28	28	31
2&3 Government and quasi-government	13	4	5	7	10
Total	32	27	25	26	29

				Number	
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	761	825	853	710	621
17 Manufacture of textiles	25	8	25	28	28
18 Manufacture of wearing apparel	60	52	49	40	36
19 Manufacture of leather products	14	0	0	0	0
20 Wood and products of wood	87	79	106	81	68
22 Publishing and printing	108	102	104	73	63
24 Chemicals and chemical products	31	30	30	27	30
26 Non-metallic mineral products	87	31	75	97	115
28 Fabricated metal products	36	41	63	48	55
35 Other transport equipment	12	10	14	14	14
36 Manufacture of furniture	102	70	77	93	88
37 Other manufacturing industries	52	85	94	56	70
Total	1,375	1,333	1,490	1,267	1,188

Table 4.13: Manufacturing employment by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

#### Table 4.14: Manufacturing employment by Island division for 2003-2007

Г				Numbe	er
Island division	2003	2004	2005	2006	2007
1 Tongatapu	1,104	1,188	1,275	1,076	1,005
2 Vava'u	219	105	127	103	77
3&4 Ha'apai & 'Eua	52	40	88	88	106
Total	1,375	1,333	1,490	1,267	1,188

Source: Manufacturing survey, Statistics Dept.

#### Table 4.15: Manufacturing employment by Institutional sector for 2003-2007

				Number	•
Institutional sector	2003	2004	2005	2006	2007
1 Private	1,215	1,181	1,315	1,158	1,087
2&3 Government and quasi-government	160	152	175	109	101
Total	1,375	1,333	1490	1,267	1,188

			Percen	tages	
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	55.3	61.8	57.2	56.0	52.3
17 Manufacture of textiles	1.8	0.6	1.6	2.2	2.4
18 Manufacture of wearing apparel	4.3	3.8	3.3	3.2	3.0
19 Manufacture of leather products	1.0	0	0	0.0	0.0
20 Wood and products of wood	6.3	5.8	7.1	6.4	5.7
22 Publishing and printing	7.9	7.6	7.0	5.8	5.3
24 Chemicals and chemical products	2.3	2.3	2.0	2.1	2.5
26 Non-metallic mineral products	6.3	2.2	5.0	7.7	9.7
28 Fabricated metal products	2.6	3.0	4.2	3.8	4.6
35 Other transport equipment	1.0	0.9	0.9	1.1	1.2
36 Manufacture of furniture	7.4	5.3	5.2	7.3	7.4
37 Other manufacturing industries	3.7	6.4	6.5	4.4	5.9
Total	100.0	100.0	100.0	100.0	100.0

Table 4.16: Percentage distribution of manufacturing employment by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

Γ				Percen	tages
Island division	2003	2004	2005	2006	2007
1 Tongatapu	80.3	89.1	85.6	84.9	84.6
2 Vava'u	15.9	7.8	8.5	8.1	6.5
3&4 Ha'apai & 'Eua	3.8	3.1	5.9	7.0	8.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Manufacturing survey, Statistics Dept.

## Table 4.18: Percentage distribution of manufacturing employment by Institutional sector for 2003-2007

				Percer	ntages
Institutional sector	2003	2004	2005	2006	2007
1 Private	88.4	88.6	88.3	91.4	91.5
2&3 Government and quasi-government	11.6	11.4	11.7	8.6	8.5
Total	100.0	100.0	100.0	100.0	100.0

				Numb	er
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	612	728	734	569	512
17 Manufacture of textiles	20	7	21	24	24
18 Manufacture of wearing apparel	37	41	35	30	20
19 Manufacture of leather products	11	0	0	0	0
20 Wood and products of wood	87	79	102	79	68
22 Publishing and printing	103	54	59	61	60
24 Chemicals and chemical products	28	99	101	23	25
26 Non-metallic mineral products	80	24	25	91	102
28 Fabricated metal products	34	28	69	45	52
35 Other transport equipment	11	8	14	12	12
36 Mafacture of furniture	80	52	55	68	67
37 Other manufacturing industries	45	61	66	51	63
Total	1,148	1,181	1,281	1,053	1,005

 Table 4.19: Number of manufacturing production workers by ISIC division for 200-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

				Numbe	r
Island division	2003	2004	2005	2006	2007
1 Tongatapu	939	1,059	1,110	936	871
2 Vava'u	170	94	103	54	53
3&4 Ha'apai & 'Eua	39	28	68	63	81
Total	1,148	1,181	1,281	1,053	1,005

#### Table 4.21: Number of manufacturing production workers by Institutional sector for 2003-2007

				Numbe	r
Institutional sector	2003	2004	2005	2006	2007
1 Private	988	1,029	1,107	944	904
2&3 Government and quasi-government	160	152	174	109	101
Total	1,148	1,181	1,281	1,053	1,005

				T\$('000	)
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	2,804	3,037	3,011	2,945	2,739
17 Manufacture of textiles	101	90	100	88	95
18 Manufacture of wearing apparel	178	204	163	164	178
19 Manufacture of leather products	44	0	0	0	0
20 Wood and products of wood	225	231	320	162	199
22 Publishing and printing	610	562	544	645	597
24 Chemicals and chemical products	154	205	218	236	268
26 Non-metallic mineral products	347	132	258	307	429
28 Fabricated metal products	140	371	250	189	138
35 Other transport equipment	73	49	83	68	59
36 Manufacture of furniture	555	445	516	614	656
37 Other manufacturing industries	123	280	293	245	249
Total	5,354	5,606	5,756	5,663	5,607

Table 4.22: Manufacturing wages and salaries by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includesm16, 21, 29, 30 and 31

#### Table 4.23: Manufacturing wages and salaries by Island division for 2003-2007

、				T\$('000)		
Island division	2003	2004	2005	2006	2007	
1 Tongatapu	4,461	5,116	5,173	5,089	5,033	
2 Vava'u	772	399	374	347	306	
3&4 Ha'apai & 'Eua	121	91	209	227	268	
Total	5,354	5,606	5,756	5,663	5,607	

Source: Manufacturing survey, Statistics Dept.

#### Table 4.24: Manufacturing wages and salaries by Institutional sector for 2003-2007

				T\$('000	))
Institutional sector	2003	2004	2005	2006	2007
1 Private	4,689	4,.957	5,010	5,038	5,031
2&3 Government and quasi-government	665	649	746	625	577
Total	5,354	5,606	5,756	5,663	5,607

Table 4.25:	Percentage distribution	of manufacturing	wages and salarie	es by ISIC division	for 2003-
2007					

				Percent	ages
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	52.4	54.2	52.3	52.0	48.9
17 Manufacture of textiles	1.9	1.6	1.7	1.6	1.7
18 Manufacture of wearing apparel	3.3	3.6	2.8	2.9	3.2
19 Manufacture of leather products	0.8	0	0	0.0	0.0
20 Wood and products of wood	4.2	4.1	5.6	2.9	3.6
22 Publishing and printing	11.4	10.0	9.5	11.4	10.6
24 Chemicals and chemical products	2.9	3.7	3.8	4.2	4.8
26 Non-metallic mineral products	6.5	2.4	4.5	5.4	7.6
28 Fabricated metal products	2.6	6.6	4.3	3.3	2.5
35 Other transport equipment	1.4	1.0	1.4	1.2	1.0
36 Manufacture of furniture	10.4	7.9	8.9	10.8	11.7
37 Other manufacturing industries	2.2	4.9	5.1	4.3	4.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

## Table 4.26: Percentage distribution of manufacturing wages and salaries by Island division for 2003-2007

				Percent	ages
Island division	2003	2004	2005	2006	2007
1 Tongatapu	83.3	91.3	89.9	89.9	89.8
2 Vava'u	14.4	7.1	6.5	6.1	5.5
3&4 Ha'apai & 'Eua	2.3	1.6	3.6	4.0	4.8
Total	100.0	100.0	100.0	100.0	100.0

Source: Manufacturing survey, Statistics Dept.

## Table 4.27: Percentage distribution of manufacturing wages and salaries by Institutional sector for 2003-2007

				Percenta	nges
Institutional sector	2003	2004	2005	2006	2007
1 Private	87.6	88.4	87.0	89.0	89.7
2&3 Government and quasi-government	12.4	11.6	13.0	11.0	10.3
Total	100.0	100.0	100.0	100.0	100.0

				T\$('000)	
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	2,309	2,440	2,444	2,096	2,004
17 Manufacture of textiles	79	90	92	80	84
18 Manufacture of wearing apparel	113	154	119	128	116
19 Manufacture of leather products	17	.0	0	0	0
20 Wood and products of wood	225	231	320	161	198
22 Publishing and printing	548	187	184	503	547
24 Chemicals and chemical products	80	414	305	69	74
26 Non-metallic mineral products	308	96	94	285	362
28 Fabricated metal products	130	288	204	167	116
35 Other transport equipment	58	42	67	61	52
36 Manufacture of furniture	425	306	324	471	499
37 Other manufacturing industries	70	327	313	180	163
Total	4,362	4,575	4,466	4,201	4,216

Table 4.28: Wages and salaries of production workers by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

Table 4.29: Wages and salaries of	production workers b	v Island division for 2003-2007
Table Hige trages and salaries en		

				T\$('000)	
Island division	2003	2004	2005	2006	2007
1 Tongatapu	3,558	4,113	3,932	3,845	3,747
2 Vava'u	683	380	342	151	238
3&4 Ha'apai & 'Eua	121	82	192	205	231
Total	4,362	4,575	4,466	4,201	4,216

Source: Manufacturing survey, Statistics Dept.

#### Table 4.30: Wages and salaries of production workers by Institutional sector for 2003-2007

				T\$('000)	)
Institutional sector	2003	2004	2005	2006	2007
1 Private	3,697	3,925	3,844	3,670	3,639
2&3 Government and quasi-government	665	650	622	531	577
Total	4,362	4,575	4,466	4,201	4,216

					Т\$
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	72	64	64	71	75
17 Manufacture of textiles	76	246	84	64	67
18 Manufacture of wearing apparel	59	72	65	82	111
19 Manufacture of leather products	30	0	0	0	0
20 Wood and products of wood	103	56	60	39	56
22 Publishing and printing	102	67	60	159	175
24 Chemicals and chemical products	55	81	58	57	57
26 Non-metallic mineral products	74	77	72	60	68
28 Fabricated metal products	73	197	57	72	43
35 Other transport equipment	101	90	92	98	83
36 Manufacture of furniture	102	36	113	133	143
37 Other manufacturing industries	30	89	91	68	50
Total	73	74	67	77	81

Table 4.31: Average weekly wage rate for production worker by ISIC division 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31.

				Τ\$		
Island division	2003	2004	2005	2006	2007	
1 Tongatapu	75	74	68	79	83	
2 Vava'u	60	79	64	54	86	
3&4 Ha'apai & 'Eua	53	56	54	63	55	
Total	73	74	67	77	81	

Source: Manufacturing survey, Statistics Dept.

#### Table 4.33: Average weekly wage rate for production worker by Institutional sector 2003-2007

					Т\$
Institutional sector	2003	2004	2005	2006	2007
1 Private	68	73	67	75	77
2&3 Government and quasi-government	95	82	69	94	110
Total	73	74	67	77	81

					Number
ISIC division	2003	2004	2005	2006	2007
15 Food products and beverages	62	69	73	58	57
17 Manufacture of textiles	3	3	3	3	3
18 Manufacture of wearing apparel	14	11	11	9	11
19 Manufacture of leather products	2	0	0	0	0
20 Wood and products of wood	4	6	6	6	6
22 Publishing and printing	4	4	4	4	4
24 Chemicals and chemical products	4	4	4	4	4
26 Non-metallic mineral products	9	5	8	10	14
28 Fabricated metal products	7	7	7	7	7
35 Other transport equipment	2	1	1	2	2
36 Manufacture of furniture	16	14	15	13	11
37 Other manufacturing industries	3	3	3	4	4
Total	130	127	135	120	123

Table 4.34: Number of manufacturing establishments by ISIC division for 2003-2007

Source: Manufacturing survey, Statistics Dept. Note: ISIC 37 includes 16, 21, 29, 30 and 31

					Number
Island division	2003	2004	2005	2006	2007
1 Tongatapu	88	79	86	84	89
2 Vava'u	30	32	32	18	14
3&4 Ha'apai & 'Eua	12	16	17	18	20
Total	130	127	135	120	123

Source: Manufacturing survey, Statistics Dept.

#### Table 4.36: Number of manufacturing establishments by Institutional sector for 2003-2007

					Number
Institutional sector	2003	2004	2005	2006	2007
1 Private	125	122	130	115	118
2&3 Government and quasi-government	5	5	5	5	5
Total	130	127	135	120	123

## APPENDICES

#### "<u>CONFIDENTIAL</u>"

#### INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE ON QUARTERLY SURVEY OF MANUFACTURING PRODUCTION, EMPLOYMENT AND WAGES/SALARIES.

#### 1. GENERAL

Please note that the code number on the right hand corner of the questionnaire is your establishment's code number based on the Register of Establishments maintained in the Statistics Department. The information, being requested should relate only to the quarter referred to in the questionnaire.

#### 2. PRODUCTION

- 2.1 Please enter all the products produced by the establishment and for each such product please: -
- i) Specify the unit used for measuring each product (e.g. kg, dozen, litre etc.)
- ii) Enter the average quantity, in the unit stated in (I) above, of the products produced during each month of the reference quarter.
- iii) Enter the average ex-factory value of the quantity referred to in (II) above.
- **2.2** Enter here the total value of the products other than the main ones mentioned in 2.1 manufactured by the establishment.
- **2.3** Enter here the total value of work done by your establishment for others.

#### 3. EMPLOYMENT AND WAGES/SALARIES

#### For each category of employees (at 3.1 a to d) please: -

- i) Enter in the column "No" either column 2,5 and 8 the total number of persons engaged in the establishment on the last payday of each month of the reference quarter. The family workers working on the last payday should be entered though they may not be paid.
- ii) Enter in column "Wages/Salaries Paid" either column 3, 6 and 9 the total amount of wages and salaries paid to employees by cash/cheque as compensation for the services rendered by them. This should include all payments made on account of bonuses, cost of living allowances and wages paid during vacation and sick leave for the reference period. Payments made to (1) regular/full-time and (2) part-time/casual and daily paid workers should be shown separately.

#### 3.1 Category of Employees: -

- a) **Working proprietors and active partners:** are all individual proprietors and partners who are actively engaged in the work of the establishment.
- b) **<u>Production workers</u>:** are those who are directly engaged for pay in the production activities of the establishment. They may be full-time/regular or part-time/casual/daily paid.
- c) <u>Unpaid family workers</u>: refers to all such family members working in the establishment without regular pay at least one-third of the normal working time.
- d) **Other employees:** refers to all persons other than those listed above working in the establishment. This shall include administrative, technical and clerical personnel such as salaried Managers, Directors, Clerks, Typist, Bookkeepers, Administrative Supervisors, Salesmen, etc. Proprietors and partners shall be excluded in here but included under 3.1(a) above.
- **3.2** <u>Memorandum items</u>: (wages and salaries paid in kind) refers to the net cost to the employer, of those goods and services provided to employees free of charge or at a markedly reduced cost which are clearly of benefit to employees. The items included normally are food, beverages, tobacco, clothing etc. Note that an estimated value of these items will be acceptable.

#### NGAAHI FAKAHINOHINO 'O E FOOMU FEHU'I FEKAU'AKI MO E SAVEA FAKAKUATA <u>'O E NGAAHI NGAUE'ANGA NGAOHI KOLOA</u>.

#### 1. FAKALUKUFUA

Kataki 'o fakatokanga'i ange ko e fika mo e fakamatala kotoa pe teke 'omai 'e tauhi fakapulipuli ia 'i he potungaue pea 'e 'ikai ke to e faka'aonga'i ia ki ha 'uhinga kehe. Ko e fika ko ia he ki'i puha he tuliki to'omata'u 'i 'olunga, ko e fika ia ho fale ngaue'anga 'o fakatatau ki he lekooti 'oku mau tauhi he potungaue ni. Ko e ngaahi fakamatala mo e fika kotoa pe 'a ia 'oku fai ki ai e faka'eke'eke ni kuo pau ke fekau'aki ia mo e kuata 'oku fakaha atu he foomu fehu'i.

#### 2. KOLOA NA'E NGAOHI

- **2.1** Kataki 'o lisi mai e ngaahi koloa kehekehe kotoa pe na'e ngaohi 'i ho fale ngaue lolotonga e kuata ko ia 'oku fai ki ai e faka'eke'eke pea kataki 'o: -
  - I) Fokotu'u mai he kolomu 2 'a e 'iuniti takitaha 'oku ngaue'aki ki hono fua/lau 'o e koloa takitaha na'e ngaohi 'i he ngaue'anga, (hange ko e kilokalami, toseni, lita etc.)
  - II) Fakafonu mai he kolomu 3, 5 mo e 7 'a e lahi 'o e koloa takitaha fakatatau ki he 'iuniti 'oku ha 'i he I) 'i 'olunga na'e ngaohi 'i he ngaue'anga lolotonga e mahina takitaha 'o e kuata 'oku fai ki ai e faka'eke'eke.
  - III) Fakafonu 'i he kolomu 4, 6 mo e 8 'a e mahu'inga e koloa takitaha na'e ngaohi 'i he ngaue'anga fakatatau ki he lahi 'oku ha 'i he II) 'i 'olunga lolotonga e mahina takitaha 'o e kuata ko ia.
- **2.2** Fakafonu mai e mahu'inga fakakatoa e ngaahi koloa na'e ngaohi kehe mei he koloa 'oku ha 'i he 2.1.
- **2.3** Fakafonu e mahu'inga fakakatoa e pa'anga na'e ma'u mai 'i ha ngaue kehe na'e fai 'i he ngaue'anga (hange ko e ngaue konituleki).

#### 3. KAU NGAUE MO E VAHENGA

#### 'I hono fakakalakalasi 'o e kau ngaue ('i he 3.1 (a ki he h)) kataki: -

- i) Hanga 'o fakafonu ange 'i he kolomu 2, 5 mo e 8 'a e tokolahi fakakatoa e kau ngaue he mahina takitaha 'o e kulupu takitaha 'o e kau ngaue 'o fakatatau ki hono fakakalakalasi 'oku ha atu.
- ii) Fakafonu ange he kolomu 3, 6 mo e 9 'a e fakakatoa e pa'anga vahenga ne 'oange ki he kulupu takitaha 'o e kau ngaue lolotonga e mahina takitaha 'o e kuata.

#### 3.1 Kulupu 'o e kau ngaue: -

- a) **Tokotaha 'oku 'o'ona e ngaue'ang:** 'oku 'uhinga 'eni ki he tokotaha 'oku 'o'ona e ngaue'anga pea ne toe ngaue foki ki hono ngaohi e koloa.
- e) <u>Kau ngaue 'oku nau ngaohi e koloa</u>: 'oku 'uhinga eni ki he kau ngaue 'oku nau tautonu ki hono ngaohi e koloa ko ia 'i he ngaue'anga, hange ko e kau ngaue tu'upau/fakataimi/lau'aho (kau ta'oma, kau ta piliki etc.)
- f) <u>Memipa 'o e famili 'oku ngaue 'o 'ikai ha vahenga</u>: 'oku 'uhinga 'eni ki ha memipa 'o e famili 'oku ngaue 'i he ngaue'anga 'o 'ikai ha totongi tu'upau 'o 'ikai toe si'i hifo 'i he vahetolu 'e taha 'o e houa ngaue tu'upau.
- h) <u>Toenga 'o e kau ngaue</u>: 'oku 'uhinga 'eni ki he kau ngaue 'oku 'ikai ke nau kau 'i he fa'ahinga 'o e kau ngaue 'oku ha atu 'i 'olunga, ki hono ngaohi 'o e koloa, (hange ko e kalake, tauhitohi, le'o, faka'uli, faitaipe etc.) ka 'oku nau kau he ma'u vahenga he ngaue'anga.
- **3.2** <u>Ngaahi koloa 'oku foaki 'ikai ha totongi</u>: 'oku 'uhinga 'eni ki hono fakamahu'inga'i ki he tokotaha 'oku 'a'ana 'a e ngaue'anga 'a e ngaahi koloa pe ko e ngaahi 'aonga 'o e ngaue'anga ki he kau ngaue 'o 'ikai ha totongi pe ko e totongi 'oku ma'ulalo ange 'i he totongi totonu (lau ki ai 'a e me'atokoni, inu, tapaka mo e vala).

## **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:

1. Name and Address:

of Establishment

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

#### 3. EMPLOYMENT AND WAGES/SALARIES

3.1 Category of Employees:

a. Working Proprietors and Active Partners

b. Production Workers:

1. Regular/Full-time

2. Part-time/Casual/Daily Paid

c. Unpaid Family Workers

d. All Other Employees

Total Male

**Total Female** 

#### **GRAND TOTAL**

3.2 Memorandum item: Wages and Salaries Paid in kind; estimated value

Month	n:		Month	1:		Month	1:	
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
M	_		M		Ŭ	M		
F			F			F		
м			М			М		
F			F			F		
М			М			М		
F			F			F		
М			М			М		
F			F			F		
М			М			М		
F			F			F		
М			М			М		
F			F			F		
No.			No.			No.		
	(T\$)		_	(T\$)			(T\$)	

Note: M (Male) F (Female)

QUARTER:

#### 4. DECLARATION:

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

#### Name:

Position:

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

Establishment No.							
Type of Organisation							
ISIC Code							
Island division							

## POTUNGAUE SITETISITIKA 'A E PULE'ANGA

"MALU'I MO FAKAPULIPULI"

#### SAVEA FAKAKUATA 'O E NGAAHI NGAUE'ANGA NGAOHI KOLOA "KO E NGAAHI FAKAMATALA NI 'OKU TANAKI IA HE MAFAI 'O E LAO FIKA 31 'O E 1978 KUPU 8(3)"

		FIKA 'O E NGAUE'ANGA	
KUATA:		FA'AHINGA KAUTAHA	
		KOUTI (ISIC)	
1. HINGOA MO E:		VAHENGA	
TU'ASILA 'O E			
NGAUE'ANGA			
2. KOLOA NE NGAOHI	Fika <b>KUATA:</b>		

	е	Fua 'o e	Mahina:		Mahina:		Mahina:	
	Koloa	Koloa		(T\$)		(T\$)		(T\$)
2.1 Tefito'i koloa ne ngaohi	('Ofisi)	('luniti)	Lahi Koloa	Mahu'inga	Lahi Koloa	Mahu'inga	Lahi Koloa	Mahu'inga
a.								
е.								
f.								
h.								
2.2 Koloa kehe								
2.3 Pa'anga mei ha ngaue kehe								
ΚΑΤΟΑ								
								μ

Fakamatala: \_\_\_\_\_

3. KAU NGAUE MO E VAHENGA	KUATA:									
	Mahina:			Mahina:			Mahina:			
	Tangata Pe Fefine	Kau Ngaue	Vahenga (T\$)	Tangata Pe Fefine	Kau Ngaue	Vahenga (T\$)	Tangata Pe Fefine	Kau Ngaue	Vahenga (T\$)	
3.1 Fakakalakalasi e kau ngaue:	1	2	3	4	5	6	7	8	9	
a. Tokotaha 'a'ana e ngaue'anga	т			т			т			
	F			F			F			
e. Kau Ngaue Ngaohi Koloa: 1. Kau ngaue tu'upau	т			т			т			
	F			F			F			
2. Kau ngaue fakataimi	т			т			т			
	F			F			F			
f. Kakai/famili 'oku ngaue ta'etotongi	т			т			т			
He ngaue'anga	F			F			F			
h. Toenga e kau ngaue	Т			т			Т			
	F			F			F			
Katoa kakai tangata	Т			т			Т			
Katoa kakai fefine	F			F			F			
FAKAKATOA	Katoa.			Katoa			Katoa			
3.2 Mahu'inga e ngaahi koloa na'e foaki atu ta'etotongi ma'ae kau ngaue		(T\$)			(T\$)			(T\$)		
	Fakatokang	a'i ange:	T (Tangata)	F (Fefine)						

#### 4. FAKAPAPAU:

"'Oku ou fakamahino'i heni ko e ngaahi fakamatala kotoa pe 'oku 'oatu ni 'oku tonu mo mo'oni 'o fakatatau ki he lelei taha 'o 'eku 'ilo."

Hingoa:	 	 	 
Lakanga:		 	 

'Aho: \_\_\_\_/\_\_\_/\_\_\_\_

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