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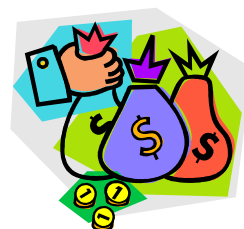
Kingdom of Tonga

Statistics Department

Household Income and Expenditure Survey

2009

Report



Price: T\$35.00

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Preface

This report is only the second of its type to be published by the department, despite its long history since the early 1970s under the Ministry of Finance. The first report was published in December 2002 for the Household Income and Expenditure Survey (HIES) 2001, then this report presents the results of the national HIES 2009. The survey was conducted in four phases during the year 2009. Each island division was surveyed in each of the four quarters, except the Ongo Niua which was surveyed only in June Quarter, due to transportation problems and the Tsunami in Niuatoputapu in September 2009. Very detailed information on household income and expenditure was collected from nearly 2,000 households spread around the Kingdom.

Within the Statistics Department, the results are being used to update the base period and weighting system for the Consumer Price Index (CPI), and to provide valuable statistical information on the household sector for the country's National Accounts estimates. It is hoped, this publication will also provide useful information for planners, policy makers and the general public.

Conducting a survey of this complexity posed immense challenges for the department, and I am grateful to all permanent and temporary staff who participated in the survey. My thanks go to the field supervisors and interviewers who worked tirelessly to ensure that the data collected was of good quality. Within our headquarters, Masiva'ilo Masila, Statistician (HIES coordinator) coordinated most HIES activities. Sione Lolohea was in-charge of the data processing of this HIES.

The Department also wishes to acknowledge the valuable contributions made by some of our international partners. As such, the Asian Development Bank (ADB) in collaboration with the Secretariat of the Pacific Community (SPC) in Noumea funded this project. Dr. Gerald Haberkorn, the Manager, Statistics and Demography Programme of the SPC, assisted to go ahead with this project here in Tonga, and approved the following Technical Assistances for this survey;

1. Chris Ryan, SPC Statistician three visits, (i) November 2007 for sampling design, (ii) February 2009 for survey training and, (iii) April/May 2010 for survey data analysis and the preparation of this report.
2. Leilua Taulealo, SPC Data Processor visited twice (i) in early 2009 to set up data processing system, and (ii) April/May 2010 for final data processing.
3. Sandra Gianini, visited twice (i) in early 2009 and (ii) May 2010 to assist with the financial recording of survey activities.
4. Bertrand Buffiere, SPC Statistician visit once in April/May 2010 to assist with finalising of the data and preparation of this report.

Last but not the least, many thanks for the cooperation that came from the 1,983 households that provided the detailed information needed in this survey. Without their full cooperation, the survey would not have been possible.

The information provided in this report contains a broad summary of the main findings of the survey. Much more detailed information can be made available to interested users on request.

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Executive Summary

The Household Income and Expenditure Survey 2009 was carried out by the Tonga Statistics Department over a period of 12 months throughout the course of 2009, in four separate phases, one each quarter. The survey collected information from 1,983 households from all island divisions in each quarter, with the exception of Ongo Niua which was only covered in the second quarter.

There were four main survey forms used to collect data for the survey:

- Household Questionnaire – focusing on large irregular expenditures
- Individual Questionnaire (Pt 1) – focusing on income
- Individual Questionnaire (Pt 2) – focusing on education, health and labour force
- Two 1-week Diaries – focusing on small regular expenditures and subsistence activity

Feedback from staff involved suggests the survey went well, despite the usual problems one encounters (some under-reporting and misunderstanding of questions) when undertaking a complex survey of this nature. As such there were no overly surprising results to come out of the survey, with the income and expenditure patterns of households across different geographical areas falling in line with expectations.

Expenditure Summary

In summary, households across Tonga had a total consumption expenditure of 333,027,000 pa'anga for the year. Food expenditure contributed just over half of this amount with 51% of the total, whilst other key expenditure categories were transportation (11%) and housing and utilities (10%).

There wasn't a huge difference between the breakdown of consumption expenditure for urban and rural, although food expenditure was more significant for the rural population, which is to be expected as they have less access to some non-food expenditure items.

The average monthly household consumption expenditure was 1,550 pa'anga; 1,856 pa'anga for the urban population and 1,460 pa'anga for the rural population.

Nearly all households recorded that they purchased food throughout the course of the survey. It was also found that whilst 51 per cent of urban households recorded they consumed home produce, this figure was much higher for rural households at 90 percent.

Non-consumption expenditure also had a significant impact on a typical household in Tonga's finances, with 98,819,000 being recorded for this category (nearly 30% the amount reported for consumption expenditure). This accounted for gifts to other households, gifts to the church, gifts to the school or for special events such as weddings and funerals.

Income Summary

Households across Tonga received 355,856,000 pa'anga as income for the year. Wages and Salary Income accounted for 43 per cent of the total household income, whilst income from subsistence activities (subsistence income + home produce consumed) accounted for 29 per cent. Remittances were also a major source of household income, accounting for 21 per cent.

The importance of each income source differed significantly between urban and rural, with the urban population being more reliant on wage and salary income, whereas the rural population was more reliant on subsistence activities. Both populations were equally reliant on remittances.

The average monthly household income was 1,657 pa'anga; 2,170 pa'anga for urban households and 1,505 pa'anga for rural households.

More than 70 per cent of urban households reported earning wage and salary income, whereas nearly 90 per cent of rural households reported consuming home produce. For remittances, over 80 per cent of households in both urban and rural reported receiving this source of income.

Section 1 – Introduction

1.1 Survey objectives

This report presents the results of the Tonga Household Income and Expenditure Survey 2009 (HIES), undertaken by the Tonga Statistics Department during the period from 1 January 2009 to 31 December 2009. This is the sixth survey of its kind in Tonga. The last one was carried out in 2000/01, and the results were used in November 2002 to rebase the Consumer Price Index (CPI). A report from that survey was produced in December 2002, and where possible, results from this report will be made to be comparable to the previous report.

This report presents a summary of major findings of the 2009 HIES. It is useful to planners, policy makers and other interested users. The report is divided into four parts: introduction, expenditure analysis, income analysis, and quality of results.

The survey had three main objectives:

- To provide updated information for the expenditure item weights for the CPI;
- To provide some data for the components of National Accounts; and
- To provide information on the nature and distribution of household income and expenditure for planners, policy makers, and the general public.

1.2 Sample design and implementation

The sample design was done in such a way that promoted estimates primarily at the national level, but also at the island division level. For that reason a higher sample fraction was selected in the smaller island divisions. The resulting sample was:

Table 1.1 Population and Sample counts for Tonga 2009 HIES (Households)

	Tongatapu Urban	Tongatapu Rural	Vava'u	Ha'apai	Eua	Ongo Niua	TOTAL
Population	4,657	9,285	3,447	1,556	1,041	446	20,432
Sample	432	768	336	240	192	96	2,064
Sample Fraction	9.3%	8.3%	9.7%	15.4%	18.4%	21.5%	10.1%

As can be seen from the table above, Rural Tongatapu received the smallest sample fraction (8.3%) as it had the highest population. On the other hand the Ongo Niua received the largest

sample fraction (21.5%) as their population was the smallest. Overall a sample of roughly 10 per cent was selected for Tonga.

The final sample numbers presented in the table above were rounded such that they were divisible by 12 (an enumerator's workload) to accommodate field logistics.

The sample was selected independently within each of the 6 target areas. Firstly, extremely remote areas were removed from the frame (and thus not given a chance of selection) as it was considered too expensive to cover these areas. These areas only represented about 3.5 per cent of the total population for Tonga, so the impact of their removal was considered very minimal.

The sampling in each area was then undertaken using a two-stage process. The first stage involved the selection of census blocks using Probability Proportional to Size (PPS) sampling, where the size measure was the expected number of households in that block. For the second stage, a fixed number (twelve) of households were selected from each selected census block using systematic sampling. The household lists for all selected blocks were updated just prior to the second stage of selection.

Given the sample was spread out over four quarters during the 2009 calendar year, every 4th selected census block was allocated to a respective quarter. To ensure an equally distribution of sample to each quarter, the number of census blocks selected for each of the six target group was made divisible by four. This therefore meant the sample size for each target group was adjusted so that it was divisible by $(4 \times 12) = 48$, as can be seen in table 1 above.

1.3 Response Rates

The final Response Rates for the survey was high, which will assist in yielding statistically significant estimates. Across all six target groups the response rate was in excess of 95 per cent, with the exception of Ongo Niua who only reported 50 per cent. The reason the number was so low in the Ongo Niua was because this target area was only visited in the 2nd quarter, where half the total sample were enumerated (to make up for the sample loss in the first quarter), and was not visited again in quarter 3 and 4.

Table 1.2: Response Rates by target group, Tonga

Stratum	Selected Households	Final Responding Households	Response Rate
Tongatapu Urban	432	416	96.3%
Tongatapu Rural	768	761	99.1%
Vava'u	336	331	98.5%
Ha'apai	240	236	98.3%
Eua	192	191	99.5%
Ongo Niua	96	48	50.0%
TOTAL	2064	1983	96.1%

Weights were increased significantly in the Ongo Niua to account for the large sample loss.

The reason behind the high response rates in other areas was due to the updated lists for selected census blocks excluding vacant dwellings. As such, it was mostly refusals that impacted on the final response rates.

1.4 Survey Schedules

There were 4 main survey schedules used to collect the information for the survey:

- 1) Household Questionnaire
- 2) Individual Questionnaire – Part 1
- 3) Individual Questionnaire – Part 2
- 4) Individual Diary (x2)

Household Questionnaire

This questionnaire is primarily used to collect information on large expenditure items, but also collects information about the dwelling characteristics. In total there are 14 sections to this questionnaire which cover:

- | | |
|-----------------------------|---|
| 1 Dwelling Characteristics | 8 Education/Recreation |
| 2 Household Possessions | 9 Medical & Health |
| 3 Dwelling Tenure | 10 Overseas Travel |
| 4 Construction of Dwellings | 11 Special Events |
| 5 Household Bills | 12 Subsistence Activity Sales |
| 6 Transport Expenses | 13 Remittances |
| 7 Major Consumer Durables | 14 Contributions to Church/Village/School |

As stated above, the first section is devoted to collecting information about key dwelling characteristics, whereas the second section collects information on household possessions. Sections 3-11, and Section 14, focus on expenses the household incurs, whereas Section 13 focuses on remittances both paid by and received by the household. Finally, Section 12 collects information from households about the income they generate from subsistence activities. This section is the main question collecting income from the household questionnaire, as was included here as it was considered more appropriate to collect this data at the household level.

The front page of this Questionnaire is also used for collecting the Roster of Household Members.

Individual Questionnaire – Part 1

This questionnaire collects basic demographic information about each individual in the household, including:

- Relationship to Household Head
- Sex
- Age
- Ethnicity
- Marital Status

Also collected in this form is information about health problems each individual may have encountered in the last 3 months, followed by education information. For the education section, if a person is currently attending an education institution, then current level is asked, whereas if the person attended an education institution but no longer attends, then the highest level completed is collected.

The last main section of this form collects information about labour force and is only asked of individuals aged 10 years and above. These questions aim to classify each person in scope for this section as either:

- In the Labour Force - Employed
- In the Labour Force - Unemployed
- Not in the Labour Force

Individual Questionnaire – Part 2

This questionnaire is focused on collecting information from individuals regarding their income. There are eight sections to this questionnaire of which six are devoted to income. They include:

- | | |
|--------------------|------------------------------------|
| 1 Wages and Salary | 5 Pensions/Welfare Benefits |
| 2 Self-Employment | 6 Other Income |
| 3 Previous Jobs | 7 Loan Information |
| 4 Ad-hoc Jobs | 8 Contributions to Benefit Schemes |

As stated above, the first six sections of this questionnaire focus on income. Section 7 collects information pertaining to loans for i) households, ii) cars, iii) special events and iv) other, and finally the last question is an expense related question covering contributions to benefit schemes which was considered best covered at an individual level.

Individual Diary

The last form used for the survey was the Individual Diary which each individual aged 10 years and over was required to fill in for two weeks (two one-week diaries).

Each diary had 4 sections covering the following:

- 1) Items Purchased: This section had a separate page for each day and was for recording all items bought in a store, street vendors, market or any other place (including credit)
- 2) Home Grown/Produced Items: This section was for recording home grown/produced items consisting of items such as food grown at home or at the family plantation, self caught or gathered fish and homemade handicrafts and other goods grown and produced at home. Information is recorded for these items consumed by the household which they produced themselves, these items they gave away as a gift, and these items they received as a gift.
- 3) Gifts Given and Received: This section of the diary is for recording gifts given and received including both cash and purchased goods (but not home produced). If any member of the household receives a gift that meets this criteria during the diary keeping period from someone who is not a member of their household it is recorded here.
- 4) Winnings from Gambling: The last section of the Diary is for recording all winnings from gambling during the diary keeping period.

1.5 Key Concepts and definitions

Household

For the purpose of this survey, a household was defined as *“those persons who usually eat together and share the work of preparing the food and/or the cost of work of providing it”*. Normally household members also live and sleep in the same building, but experience has shown that this is not always so. Examples of this might be the father who works as a night watchman, or the man who goes out fishing at night-time and stays in a temporary shelter offshore. This is why the definition is based on *eating together* rather than on living or sleeping in the same building.

Household Income and Expenditure

For the Tonga 2009 HIES, Resolution 1 from the Seventeenth International Conference of Labour Statisticians was used as the basis for defining household income and expenditure. Detail on those definitions is provided below, as well as in the sections addressing the expenditure and income analysis.

An abbreviated explanation for these two concepts is as follows:

Household Income

Household income consists of all receipts whether monetary or in kind (goods and services) that are received by the household or by individual members of the household at annual or more frequent intervals, but excludes windfall gains and other such irregular and typically onetime receipts. Household income receipts are available for current consumption and do not reduce the net worth of the household through a reduction of its cash, the disposal of its other financial or non-financial assets or an increase in its liabilities.

Household income may be defined to cover: (i) income from employment (both paid and self-employment); (ii) property income; (iii) income from the production of household services for own consumption; and (iv) current transfers received.

Household Income

1. Income from Employment
 - a. Employee Income
 - i. Wage & Salary Income (current jobs)
 - ii. Wage & Salary Income (previous jobs)
 - iii. Wage & Salary Income (casual jobs)
 - b. Income from Self-employment
 - i. Business Income
 - ii. Subsistence Activity Income
 - iii. Consumption of Home Produce
2. Property Income
 - a. Interest receipts
 - b. Dividends
 - c. Rental payments
 - d. Royalties
3. Income from household production of services for own consumption
4. Transfer Income
 - a. Welfare benefits
 - b. Regular NPF receipts
 - c. Child support
 - d. Remittances – Cash
 - e. Remittances – In kind

Irregular Gifts Received

1. Cash
2. In kind (not home produced)
3. In kind (home produced)

Other Receipts

1. Life Insurance
2. Large Irregular Receipts from NPF
3. Sale of Assets
4. Inheritance
5. Matrimony Property Settlement
6. Winnings from Gambling

Imputed Rent

Covers an estimated value of the rent households would be paying if they are either:

1. Living rent free
2. Own house outright
3. Own house with a mortgage

Household Expenditure

Consumer goods and services are those used by a household to directly satisfy the personal needs and wants of its members. **Household consumption expenditure** is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

The actual final consumption of a household is the sum of its household consumption expenditure and the value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households. This is the most appropriate concept for welfare analysis as it takes into account all consumer goods and services available to a household for the satisfaction of the needs and wants of its members.

Household expenditure is defined as the sum of household consumption expenditure and the **non-consumption expenditures** of the household. The latter are those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its “legal” commitments.

Household Expenditure

1. Household Consumption Expenditure (HCE)

- a. Food and Non-Alcoholic Beverages
- b. Alcohol & Tobacco
- c. Clothing & Footwear
- d. Housing and Utilities
- e. Household Furnishing, Equipment and Routine Maintenance
- f. Medical & Health
- g. Transport
- h. Communication
- i. Recreation
- j. Education
- k. Restaurants and Hotels
- l. Miscellaneous Goods & Services
- m. Remittances – received in kind

2. Other Consumption Expenditure (OCE)

- a. Gifts
 - i. Home Produce - Received
 - ii. Non-Home Produce – Received

3. Household Non-Consumption Expenditure (HNCE)

- a. Expenditure on special events
- b. Contributions to church, school and village
- c. Remittances
 - i. Cash - Given
- d. Gifts
 - i. Cash - Given
 - ii. Home Produced – Given

1.6 Fieldwork

The fieldwork was carried out by about 43 specially selected interviewers, supported by 9 senior staff of the Statistics Department who acted as supervisors (including the two out-based staff who work in Vava'u). The interviewers were selected via a recruitment process, with preference given to those applicants who had previous survey experience with the Statistics Department. Interviews were conducted to select the final list of interviewers.

There was a one-week training course for supervisors, followed by a one-week training course for interviewers (also attended by the supervisors). All field staff had to swear and sign an oath of confidentiality.

In order to take adequate account of seasonal effects, the survey was spread over four rounds throughout the 12-month period. The survey was publicized by means of TV and radio. Fieldwork for each round lasted about a month. This involved an initial week for listing households in the selected census block, selecting the required number of households for interview, and making an initial contact with the selected households to drop off the diaries. The households then had two weeks for completion of the diaries, and during this period the interviewers would call in from time to time to check that the recording of daily expenditures was proceeding satisfactorily. They would also use the occasion of their visits to collect some of the information required for the household and individual questionnaires. They would then make a final visit to the households to collect the diaries, and after checking the questionnaires, they passed them to their supervisors.

The interviewers were employed on a part-time basis, and were released after each round of fieldwork. Inevitably this created some problems, in that some of them managed to find full-time jobs and could not return to work on subsequent rounds of the survey. An additional couple of interviewers had been trained initially to form a reserve pool for the survey, which were utilized during the course of the survey.

When designing the survey, the decision was made to visit Ongo Niua in all four rounds (only two rounds took place in the previous HIES), however, access to these islands was not possible during the first round. As a result, the sample for this island division was doubled in the second round to make up for the sample loss. Unfortunately, Ongo Niua was not visited during the last two rounds which meant that only half the sample for this division was achieved.

In all other areas the sample ran fairly smoothly with just an occasional problem occurring from time to time which was addressed appropriately by the Statistics Department at the time. An example of such was the modification to the Ha'apai sample at the time of the ferry boat sinking in this area.

1.7 Data processing

All data entry, including editing, edit checks and queries, was done using CSPro (Census Survey Processing System) - the technical assistance was provided by the Secretariat of the Pacific Community (SPC). Preparation of the data for final tables was also done using this software, although tables were produced in excel.

Prior to this, all data coding of questionnaires was carried out by staff from the Statistics Department, ideally at the completion of each round. The data entry then took place, once again by staff from the Statistics Department, straight after completion of the coding. All data was double entered to minimize errors at this stage of the survey. Unfortunately due to other work commitments by the staff involved, the process of coding and entering the data was delayed for the first few rounds, causing some concerns with overall delays. To address this, the Statistics Department employed three additional staff to assist with the coding of questionnaires.

The coding and data entry was all completed by around mid March, 2010.

Batch edits in CSPro were performed on the data after data entry was completed. The batch edits were aimed at identifying any values falling outside acceptable ranges, as well as other inconsistencies in the data. As this process was done at the batch level, questionnaires were often referred to and manual changes to the data were performed to amend identified errors.

One significant problem which was identified during this process was the incorrect coding of phone card purchase to the purchase of actual phones. As there were many such cases, an automatic code change was applied to any purchase of phones which was less than \$40 – recoding them to purchase of phone cards.

Section 2 – Expenditure Analysis

2.1 Expenditure Analysis Approach

As discussed in section 1.5 of this report, it was decided to base the format of the expenditure tables on Resolution 1 from the Seventeenth International Conference of Labour Statisticians. As such, there were four key expenditure groups identified for inclusion in the tabulations addressing household expenditure. These included:

- Consumption Expenditure
 - Household Consumption Expenditure: The value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.
 - Other Consumption Expenditure: The value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households.
- Non-Consumption Expenditure: Those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members.
- Other Expenditures: Covers expense items incurred by household members for financial security or accumulation of significant assets, such as a house
- Imputed Rent: The estimated value of rent for households which either live in their own house (regardless of whether or not a mortgage is still outstanding) or are occupying the dwelling they inhabit, free of any rent charge

Consumption Expenditure is the most appropriate concept for welfare analysis as it takes into account all consumer goods and services available to a household for the satisfaction of the needs and wants of its members. This group has been divided into the twelve key expenditure groups comprised in COICOP (see Appendix 3 for a detailed description of each). A category thirteen was also added to accommodate remittances received in-kind as they were also considered as an appropriate consumption expenditure, but could not be classified into the appropriate group due to the manner in which it was collected. Some care should be taken in interpreting this value as it may well have been covered in other sections of the questionnaire and recorded already above in one of the twelve COICOP expenditure groups.

If one wishes to separate out the information contained in Household Consumption Expenditure from Other Consumption Expenditure this can be done by simply adding the results from the columns “purchases” and “home produce”. As such, the column covering “gifts” addresses Other Consumption Expenditure.

The group “Other Expenditures” is not considered complete and should be treated as incomplete. This group only covers those items which fall under this category which were covered in the HIES.

2.2 Analysis

For the expenditure analysis, the strategy was to primarily analyse the result of the survey at the national and urban/rural level. Further analysis was undertaken at the island division level, and this can be viewed in the appendices at the back of this report.

For each table, expenditure has been split by whether it was a cash purchase, gift, or a result of home production. The row categories follow the descriptions outlined above.

The analysis focuses on the following key tables:

- 1) Average Monthly Household Expenditure by Area
- 2) Average Annual Household Expenditure by Area
- 3) Average Annual Per Capita Expenditure by Area
- 4) Total Annual Household Expenditure by Area
- 5) Distribution of Expenditure by Area
- 6) Proportion of Households with each source by Area
- 7) Additional Analysis of Food, Housing and Transport Expenditure
- 8) Additional Food Expenditure Analysis
- 9) Additional Housing Expenditure Analysis
- 10) Additional Transport Expenditure Analysis
- 11) Additional Analysis of Donation Expenditure
- 12) Additional Communication Expenditure Analysis

Each of the sections is now discussed in more detail.

2.2.1 Average Monthly Household Expenditure

As can be seen in Table 2.1, the average household in Tonga go through 1,550 pa'anga on commodities for own consumption per month. Of this, 1,177 pa'anga is from purchases, 170 pa'anga from gifts received, and 204 pa'anga from items which were home produced.

The corresponding figures for the urban population are a little higher, with 1,856 pa'anga being consumed by a typical urban household per month, compared to only 1,460 pa'anga for a typical rural household per month. For purchases, the amount of consumption by an urban household is significantly higher than in the rural community; 1,560 pa'anga per month for urban compared with 1,063 pa'anga per month for rural. A similar trend is also noticed for gifts; 194 pa'anga per month for urban compared to 162 pa'anga per month for rural. However, the amount consumed from home produce in the rural population is significantly higher than the urban population; 235 pa'anga per month for rural, compared with 102 pa'anga per month for urban.

Table 2.1: Average Monthly Household Expenditure

EXPENDITURE TYPE	URBAN				RURAL				TOTAL			
	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL
Consumption Expenditure												
01.Food	694	38	89	820	509	39	225	774	552	39	194	784
02.Alcohol&Tobacco	57	1	2	59	55	1	0	57	56	1	1	57
03.Clothing&Footwear	42	4		45	30	4		34	33	4		37
04.Housing&Utilities	222	10	1	233	123	8	3	134	146	8	2	157
05.Household Furnishings & Equip.	72	8	10	90	45	13	4	62	51	12	6	68
06.Medical&Health	10	1	0	11	5	1		6	6	1	0	7
07.Transport	168	28		196	136	26		162	143	26		170
08.Communication	94	8		102	45	4		49	57	5		61
09.Recreation	30	6		36	18	5	0	22	21	5	0	26
10.Education	37	2		39	22	3		25	25	3		28
11.Restaurants&Hotels	44	7	0	51	17	2	2	20	23	3	1	27
12.Miscellaneous Gds&Ser.	91	3		94	58	4	0	61	65	4	0	69
13.Remittances - Received in kind		79		79	-	53		53		59		59
Total Consumption Expenditure	1,560	194	102	1,856	1,063	162	235	1,460	1,177	170	204	1,550
Non-Consumption Expenditure												
21.Special Events	111			111	97			97	100			100
22.Contributions to Church	152			152	135			135	139			139
23.Contributions to Village	3			3	8			8	6			6
24.Contributions to School	17	0		17	13	0		13	14	0		14
25.Other Cash Gifts	192			192	186			186	187			187
26.Cash Remittances	30			30	8			8	13			13
Total Non-Consumption Expenditure	505	0		505	446	0		447	460	0		460
Other Expenditure												
31.House Construction	25			25	21			21	22			22
32.Home Loan-Capital Payments	32			32	19			19	22			22
33.Savings (Credit Union, Life Ins.)	13			13	1			1	4			4
Total Other Expenditure	70			70	42			42	48			48
Imputed Rent												
41.Imputed Rent		421		421		261		261		298		298

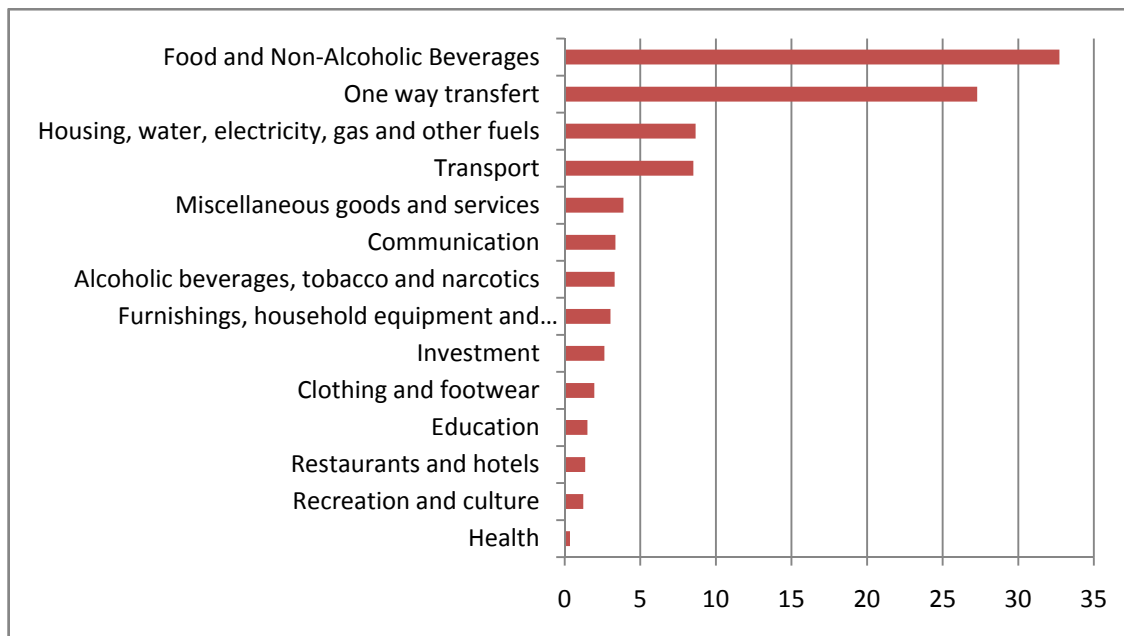
Of the 1,550 pa'anga consumed per month by a typical Tongan household, 784 pa'anga was found to be consumed on "food" items, as would be expected. The next most significant item was "transport" with 170 pa'anga being consumed by a typical household per month, closely followed

by 157 pa'anga on "housing and utilities". All other groups recorded less than 70 pa'anga consumption per month, with "medical and health" coming in as the lowest at only 7 pa'anga per month.

The urban population recorded a higher consumption for all consumption expenditure sub-groups when compared to the rural population. The most significant differences occurred for the sub-groups "housing and utilities" and "communication" which would be expected due to the higher availability of expenditure items falling under these two groups in the urban community.

For non-consumption expenditure, the average Tongan household spent 460 pa'anga per month. The corresponding figure for the urban population was 505 pa'anga, compared to 447 pa'anga for the rural population. "Contributions to special events" (weddings, funerals, etc), "contributions to the church" and "other cash gifts" all figured prominently in this group.

Graph 2.1: Percentage distribution of purchase made by a typical household, Tonga 2009



Source : Tonga HIES 2009

If you look at just the "purchases" made by households, a typical household in Tonga spent 1,685 pa'anga monthly. Graph 2.1 shows the percentage distribution for the "purchases" for each of the 12 main COICOP groupings (see Appendix 3), plus the non-consumption expenditures (referred to "One way transfers" below) and other expenses (referred to as "Investment" below). As can be seen from this graph the main expenditure group is "food and non alcoholic beverage" (33%).

This is closely followed by “one way transfers” (27%) with the next two significant groups being “housing” and “transport” (9% and 8% respectively).

These 4 main groups account for 77% of the total “purchases” expenditure.

2.2.2 Average Annual Household Expenditure

As can be seen in Table 2.2, when converted to an annual figure, the average household in Tonga goes through 18,606 pa'anga on commodities for own consumption per year. Of this, 14,120 pa'anga is from purchases, 2,036 pa'anga from gifts received, and 2,450 pa'anga from items which were home produced.

Table 2.2: Average Annual Household Expenditure

EXPENDITURE TYPE	URBAN				RURAL				TOTAL			
	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL
Consumption Expenditure												
01.Food	8,325	450	1,069	9,845	6,112	468	2,702	9,282	6,618	464	2,329	9,411
02.Alcohol&Tobacco	679	12	19	710	664	13	5	682	667	13	8	689
03.Clothing&Footwear	503	43		546	362	48		409	394	47		441
04.Housing&Utilities	2,665	116	10	2,791	1,478	98	34	1,610	1,750	102	29	1,880
05.Household Furnishings & Equip.	864	97	119	1,081	536	153	54	743	611	140	69	820
06.Medical&Health	114	16	1	131	57	13		70	70	14	0	84
07.Transport	2,022	330		2,352	1,631	314		1,945	1,720	318		2,038
08.Communication	1,132	95		1,227	545	43		589	679	55		735
09.Recreation	364	68		431	214	55	0	270	249	58	0	307
10.Education	438	28		466	262	39		301	302	37		339
11.Restaurants&Hotels	523	86	3	612	200	26	19	245	274	39	15	329
12.Miscellaneous Gds&Ser.	1,091	35		1,126	693	44	0	738	784	42	0	827
13.Remittances - Received in kind		953		953		635		635		708		708
Total Consumption Expenditure	18,719	2,330	1,222	22,271	12,756	1,949	2,814	17,519	14,120	2,036	2,450	18,606
Non-Consumption Expenditure												
21.Special Events	1,336			1,336	1,163			1,163	1,202			1,202
22.Contributions to Church	1,825			1,825	1,616			1,616	1,664			1,664
23.Contributions to Village	33			33	91			91	77			77
24.Contributions to School	201	1		202	155	5		160	165	4		169
25.Other Cash Gifts	2,309			2,309	2,232			2,232	2,249			2,249
26.Cash Remittances	356			356	101			101	159			159
Total Non-Consumption Expenditure	6,059	1		6,061	5,356	5		5,361	5,517	4		5,521
Other Expenditure												
31.House Construction	306			306	253			253	265			265
32.Home Loan-Capital Payments	378			378	234			234	267			267
33.Savings (Credit Union, Life Ins.)	150			150	15			15	46			46
Total Other Expenditure	834			834	501			501	577			577
Imputed Rent												
41.Imputed Rent		5,055		5,055		3,132		3,132		3,572		3,572

As expected, all other trends identified in table 2.1 can also be seen in the annual analysis.

2.2.3 Average Annual Per Capita Expenditure

The following analysis shows the average annual expenditure per person for a typical year. Care should be taken in interpreting these results as significant differences in the population, as estimated by the HIES, was noticed when compared to population projections generated from an alternate source.

The estimated populations for each island division from each source were as follows:

<u>Region</u>	<u>HIES</u>	<u>Projection</u>
Tongatapu-Urban	20,696	23,994
Tongatapu-Rural	45,402	49,423
Vava'u	15,227	15,451
Ha'apai	5,468	7,430
'Eua	4,591	5,279
Ongo Niua	1,845	1,584
TOTAL	93,231	103,161

The overall lower value from the HIES is not surprising, as population estimates from a HIES do tend to be understated a little as the same rigorous procedures in identifying all usual members of the selected households are not applied, when compared to a population census. Of more interest is the noticeable higher value estimated for Ongo Niua from the HIES. One explanation for this is that only one island was selected in the survey (Niuatoputapu), with half of the expected sample being discarded throughout the fieldwork. Judging from the household sizes of the 48 selected households from this area, the typical household size for a household selected in the HIES sample, was significantly higher than the average household size for the two islands in Ongo Niua, reported census figure of 2006 (5.40 in the HIES, compared to 4.57 in the 2006 census).

As a result of the findings above it was decided to adopt the projected population figures based on the most recent census in Tonga to determine what the expected populations were in each area of interest. These figures were then used to determine per capita income for each category in Table 2.3.

Table 2.3: Average Annual Per Capita Expenditure

EXPENDITURE TYPE	URBAN				RURAL				TOTAL			
	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL
Consumption Expenditure												
01.Food	1,421	77	182	1,680	1,066	82	471	1,619	1,148	81	404	1,633
02.Alcohol&Tobacco	116	2	3	121	116	2	1	119	116	2	1	119
03.Clothing&Footwear	86	7		93	63	8		71	68	8		76
04.Housing&Utilities	455	20	2	476	258	17	6	281	304	18	5	326
05.Household Furnishings & Equip.	147	17	20	184	93	27	9	130	106	24	12	142
06.Medical&Health	19	3	0	22	10	2		12	12	2	0	15
07.Transport	345	56		401	284	55		339	298	55		354
08.Communication	193	16		209	95	8		103	118	10		127
09.Recreation	62	12		74	37	10	0	47	43	10	0	53
10.Education	75	5		80	46	7		53	52	6		59
11.Restaurants&Hotels	89	15	1	104	35	4	3	43	48	7	3	57
12.Miscellaneous Gds&Ser.	186	6		192	121	8	0	129	136	7	0	143
13.Remittances - Received in kind		163		163		111		111		123		123
Total Consumption Expenditure	3,194	398	208	3,800	2,224	340	491	3,055	2,450	353	425	3,228
Non-Consumption Expenditure												
21.Special Events	228			228	203			203	209			209
22.Contributions to Church	311			311	282			282	289			289
23.Contributions to Village	6			6	16			16	13			13
24.Contributions to School	34	0		34	27	1		28	29	1		29
25.Other Cash Gifts	394			394	389			389	390			390
26.Cash Remittances	61			61	18			18	28			28
Total Non-Consumption Expenditure	1,034	0		1,034	934	1		935	957	1		958
Other Expenditure												
31.House Construction	52			52	44			44	46			46
32.Home Loan-Capital Payments	65			65	41			41	46			46
33.Savings (Credit Union, Life Ins.)	26			26	3			3	8			8
Total Other Expenditure	142			142	87			87	100			100
Imputed Rent												
41.Imputed Rent		863		863		546		546		620		620

As can be seen from this table, a typical person in Tonga consumes an average of 3,228 pa'anga on products and services in a given year. Of this amount, 2,450 pa'anga is on purchases, 353 pa'anga is on gifts, and 425 pa'anga on home produce.

For the urban population, a typical person consumes an average of 3,800 pa'anga on products and services, whereas the corresponding figure for the rural population is found to be 3,055.

As expected, "food" is the group which contains the greatest per capita consumption, with 1,633 pa'anga per year per person. This equates to 136 pa'anga per person a month on food, or alternatively, 31 pa'anga per person a week.

2.2.4 Total Annual Household Expenditure

The following analysis shows the total annual expenditure on respective groups by Tongans in a given year. In total, Tongans consume 333,027,000 pa'anga on products and services for the country as a whole. Of this total, the urban population account for just over 27 per cent (91,176 / 333,027) of the total consumption expenditure, which is a little more than their share as they make up an estimated 23 per cent of the population.

The total food consumption expenditure is shown as 168,444,000 pa'anga per year, which is split between the urban and rural population as 40,304,000 for urban, and 128,141,000 for rural.

This table also shows that Tongans have a total non-consumption expenditure of 98,819,000 pa'anga per year. Of this total, a little over 40,000,000 pa'anga is given in ad-hoc gifts, largely to other households, whilst the church receive nearly 30,000,000 pa'anga per year and a bit over 20,000,000 pa'anga in spent on special events each year.

Table 2.4: Total Annual Household Expenditure ('000s)

EXPENDITURE TYPE	URBAN				RURAL				TOTAL			
	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL
Consumption Expenditure												
01.Food	34,084	1,843	4,376	40,304	84,373	6,465	37,303	128,141	118,457	8,308	41,679	168,444
02.Alcohol&Tobacco	2,778	50	80	2,907	9,167	182	71	9,419	11,944	232	150	12,327
03.Clothing&Footwear	2,059	174		2,234	4,993	659		5,653	7,053	834		7,886
04.Housing&Utilities	10,911	476	42	11,428	20,407	1,348	470	22,225	31,318	1,824	512	33,653
05.Household Furnishings & Equip.	3,538	398	488	4,424	7,401	2,112	741	10,254	10,939	2,511	1,229	14,679
06.Medical&Health	467	65	4	536	786	182		968	1,253	247	4	1,504
07.Transport	8,276	1,352		9,628	22,516	4,337		26,853	30,792	5,689		36,481
08.Communication	4,633	389		5,022	7,528	597		8,125	12,161	986		13,147
09.Recreation	1,490	277		1,766	2,961	761	5	3,726	4,450	1,038	5	5,493
10.Education	1,794	115		1,910	3,620	539		4,159	5,414	655		6,069
11.Restaurants&Hotels	2,139	352	12	2,504	2,766	354	261	3,381	4,906	706	273	5,884
12.Miscellaneous Gds&Ser.	4,468	144		4,611	9,572	610	1	10,184	14,040	754	1	14,795
13.Remittances - Received in kind		3,902		3,902		8,763		8,763		12,665		12,665
Total Consumption Expenditure	76,636	9,538	5,001	91,176	176,091	26,910	38,851	241,851	252,727	36,448	43,852	333,027
Non-Consumption Expenditure												
21.Special Events	5,470			5,470	16,050			16,050	21,520			21,520
22.Contributions to Church	7,472			7,472	22,306			22,306	29,777			29,777
23.Contributions to Village	135			135	1,250			1,250	1,385			1,385
24.Contributions to School	822	6		827	2,134	69		2,203	2,956	74		3,030
25.Other Cash Gifts	9,452			9,452	30,807			30,807	40,260			40,260
26.Cash Remittances	1,457			1,457	1,389			1,389	2,846			2,846
Total Non-Consumption Expenditure	24,808	6		24,813	73,937	69		74,006	98,745	74		98,819
Other Expenditure												
31.House Construction	1,252			1,252	3,490			3,490	4,742			4,742
32.Home Loan-Capital Payments	1,548			1,548	3,224			3,224	4,772			4,772
33.Savings (Credit Union, Life Ins.)	616			616	203			203	819			819
Total Other Expenditure	3,416			3,416	6,917			6,917	10,333			10,333
Imputed Rent												
41.Imputed Rent		20,697		20,697		43,235		43,235		63,931		63,931

2.2.5 Distribution of Expenditure across groups

This section illustrates how expenditure is distributed across each sub-group for the four different expenditure groups. To make the analysis more meaningful, the expenditure distribution is done separately within each group. As can be seen from Table 2.5, within the consumption expenditure group, "food" accounts for just over half the expenditure (51%). The equivalent figures for urban and rural were 44 per cent for urban and 53 per cent for rural.

Within each consumption type, "food" accounts for 47 per cent of purchases, 23 per cent of gifts, and 95 per cent of home produce. This last figure is not surprising as it would be expected that a very high proportion of home produce would be food items.

For non-consumption expenditure, “other cash gifts” account for 41 per cent of the total, whereas “contributions to church” (30%) and “special events” (22%) are also significant. Very little difference can be observed between the urban and rural population on how they distribute the expenditures between the respective non-cash expenditure groups.

Table 2.5: Distribution of Expenditure across groups

EXPENDITURE TYPE	URBAN				RURAL				TOTAL			
	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL	PURCH.	GIFTS	HOME PR	TOTAL
Consumption Expenditure												
01.Food	44	19	88	44	48	24	96	53	47	23	95	51
02.Alcohol&Tobacco	4	1	2	3	5	1	0	4	5	1	0	4
03.Clothing&Footwear	3	2		2	3	2		2	3	2		2
04.Housing&Utilities	14	5	1	13	12	5	1	9	12	5	1	10
05.Household Furnishings & Equip.	5	4	10	5	4	8	2	4	4	7	3	4
06.Medical&Health	1	1	0	1	0	1		0	0	1	0	0
07.Transport	11	14		11	13	16		11	12	16		11
08.Communication	6	4		6	4	2		3	5	3		4
09.Recreation	2	3		2	2	3	0	2	2	3	0	2
10.Education	2	1		2	2	2		2	2	2		2
11.Restaurants&Hotels	3	4	0	3	2	1	1	1	2	2	1	2
12.Miscellaneous Gds&Ser.	6	2		5	5	2	0	4	6	2	0	4
13.Remittances - Received in kind		41		4		33		4		35		4
Total Consumption Expenditure	100	100	100	100	100	100	100	100	100	100	100	100
Non-Consumption Expenditure												
21.Special Events	22			22	22			22	22			22
22.Contributions to Church	30			30	30			30	30			30
23.Contributions to Village	1			1	2			2	1			1
24.Contributions to School	3	100		3	3	100		3	3	100		3
25.Other Cash Gifts	38			38	42			42	41			41
26.Cash Remittances	6			6	2			2	3			3
Total Non-Consumption Expenditure	100	100		100	100	100		100	100	100		100
Other Expenditure												
31.House Construction	37			37	50			50	46			46
32.Home Loan-Capital Payments	45			45	47			47	46			46
33.Savings (Credit Union, Life Ins.)	18			18	3			3	8			8
Total Other Expenditure	100			100	100			100	100			100
Imputed Rent												
41.Imputed Rent		100		100		100		100		100		100

2.2.6 Proportion of households with respective expenditures

The following analysis shows the proportion of households who recorded an expenditure against each expenditure category during the course of the survey. Not surprising, close to every household recorded a “food” purchase in the survey, regardless of whether they lived in the urban or rural areas. For the other consumption expenditure groups, there was little difference noticed between the proportions of households who made a purchase for both urban and rural.

For home produce however, there was a very significant difference in the proportion of households who consumed food as a result of home produce in the urban area (51%), compared to the proportion of households who consumed food as a result of home produce in the rural area (90%). This is to be expected due to the high dependence on home production in the rural communities.

Table 2.6: Proportion of Households with Respective Expenditures (%)

EXPENDITURE TYPE	URBAN			RURAL			TOTAL		
	PURCH.	GIFTS	HOME PR	PURCH.	GIFTS	HOME PR	PURCH.	GIFTS	HOME PR
Consumption Expenditure									
01.Food	100	20	51	100	28	90	100	26	81
02.Alcohol&Tobacco	55	3	1	55	2	0	55	2	0
03.Clothing&Footwear	69	8		66	8		67	8	
04.Housing&Utilities	95	7	1	93	7	7	94	7	6
05.Household Furnishings & Equip.	86	10	2	82	14	1	83	14	1
06.Medical&Health	27	4	0	21	3		23	3	0
07.Transport	77	17		67	15		69	16	
08.Communication	86	10		75	6		77	7	
09.Recreation	70	10		66	13	0	67	12	0
10.Education	52	5		48	7		49	7	
11.Restaurants&Hotels	52	6	1	35	5	5	39	5	4
12.Miscellaneous Gds&Ser.	94	3		89	4	0	90	3	0
13.Remittances - Received in kind		44			28			32	
Non-Consumption Expenditure									
21.Special Events	72			67			68		
22.Contributions to Church	88			89			89		
23.Contributions to Village	26			47			42		
24.Contributions to School	50	2		59	3		57	3	
25.Other Cash Gifts	48			56			54		
26.Cash Remittances	19			13			14		
Other Expenditure									
31.House Construction	6			2			3		
32.Home Loan-Capital Payments	7			5			6		
33.Savings (Credit Union, Life Ins.)	12			7			8		
Imputed Rent									
41.Imputed Rent		94			98			97	

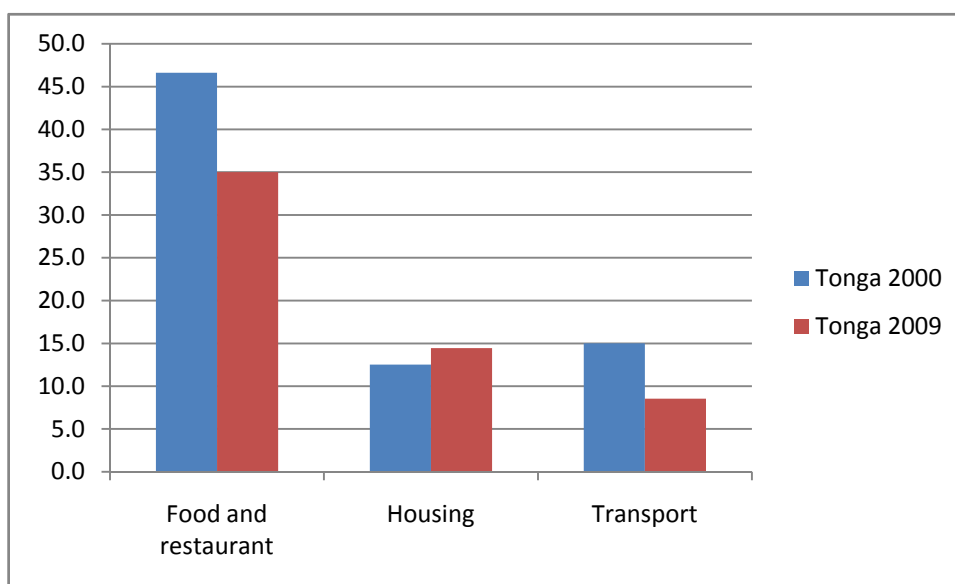
2.2.7 Additional Analysis of Food, Housing and Transport

An interesting form of analysis is to undertake a comparison of three of the major groups:

- 1) Food and restaurant : “food and non alcoholic beverage” (COICOP 01), “alcohol and kava” (COICOP 02.1 and 02.3), and “restaurant” (COICOP 11.1).
- 2) Housing: “housing” (COICOP 04), “furnishing...” (COICOP 05), “house insurance” (COICOP 12.52) and house investment (division 14 out of COICOP).
- 3) Transport: “Transport” (COICOP 07) and “Insurance connected to transport” (COICOP 12.52).

Since 2001, the expenditure on these three groups has increased by 38% in real terms, from 917 pa'anga per month on average per household to 1,266 pa'anga 9 years later. As can be seen from graph 2.2, the percentage contribution of these three groups has also changed a lot; the food and restaurant group declined during this period from 46% to 35% but remains the most important division in terms of household expenditures.

Graph 2.2: Percentage contribution of the 3 groups to expenditure, 2000 and 2009

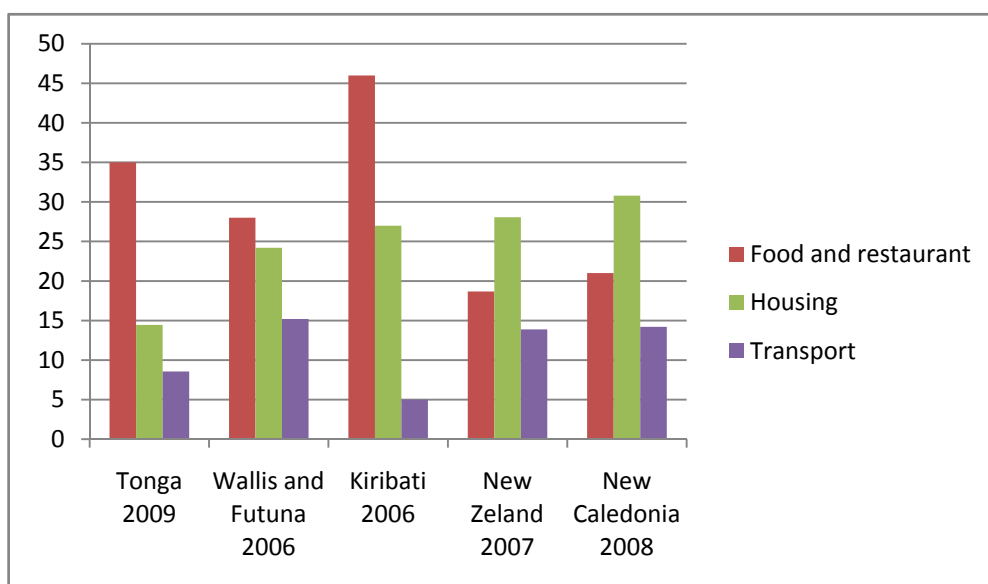


Sources: *Tongan HIES 2000 and 2009.*

As can also be seen, the contribution of housing expenditure remains at roughly the same level (12.5% in 2000 and 14.5% in 2009). The transport group on the other hand had a significant decrease in 9 years, losing more than 6 percentage points. You can argue that the Tongan expenditure pattern is converging towards to a modern expenditure pattern with the percentage contribution for food declining, whilst the percentage contribution for housing is on the rise.

If you examine the percentage contribution of these three groups across different countries in the pacific, including New Zealand, you see that Tonga more closely resembles Kiribati, whilst it differs quite considerably to New Zealand and New Caledonia.

Graph 2.3 Proportion of expenditure on 3 key groups, by selected countries

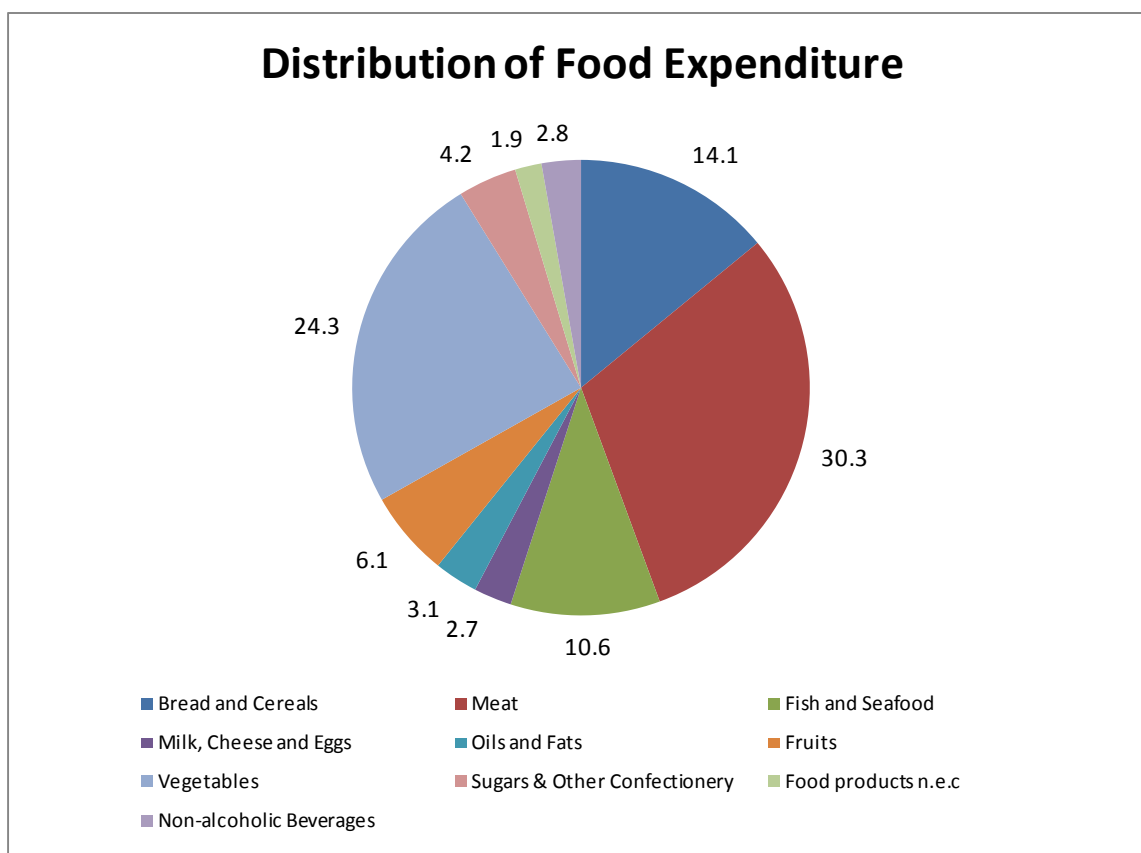


Sources: HIES 2006: Wallis and Futuna – Kiribati. 2007: New-Zealand .2008: New Caledonia 2009: Tonga

2.2.8 Additional Food Expenditure Analysis

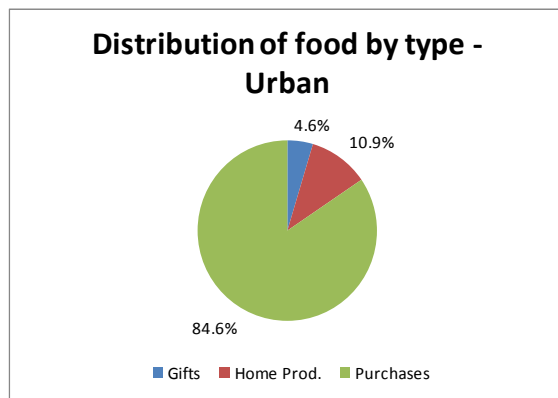
The section looks at some additional analysis undertaken of the food expenditure for households across Tonga. As can be seen from Graph 2.4 below, meat accounts for just over 30 per cent of food expenditure for Tongans, with vegetables coming in second with just over 24 per cent of food expenditure. The next biggest was the bread and cereals group which contributed a little over 14 per cent. All up, these three groups contributed nearly 70 per cent of the overall food expenditure for Tongans.

Graph 2.4: Distribution of Food Expenditure by type - Tonga

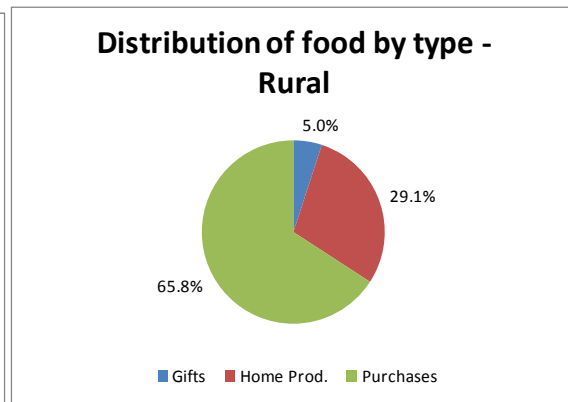


The following two pie charts (Graph 2.5 and 2.6) show how food expenditure is distributed between purchases made by the household, gifts received by the household, and home produce consumed, for both the urban and rural populations. The graphs show that the rural population rely more heavily on home produce (29.1%) than the urban population (10.9%), whereas the urban population rely more heavily on purchases (84.5%) than the rural population (65.8%). The graphs also show the reliance on gifts received does not differ much between urban and rural, contributing around 5 per cent for both.

Graph 2.5 – Food Distribution by type – urban



Graph 2.6 – Food Distribution by type - rural



The following 5 pie charts (graphs 2.7 – 2.11) show how the food expenditure is distributed for each of the five island divisions, with respect to the 5 broad categories:

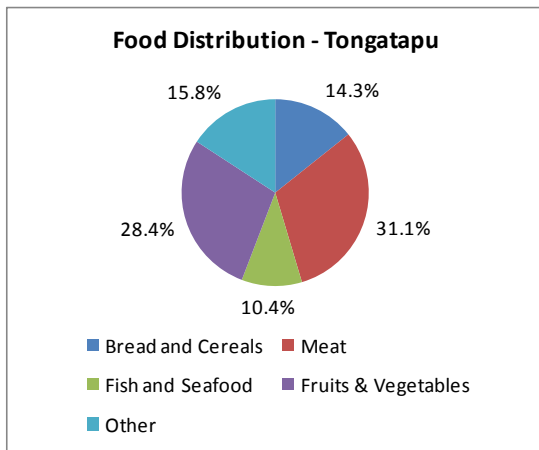
- Bread and Cereals
- Meats
- Fish & Seafood
- Fruit & Vegetables
- Other

The analysis shows that the meats are slightly more popular in the island divisions of Tongatapu and ‘Eua, whereas fish and seafood are more popular in the areas of Ha’apai and Ongo Niua.

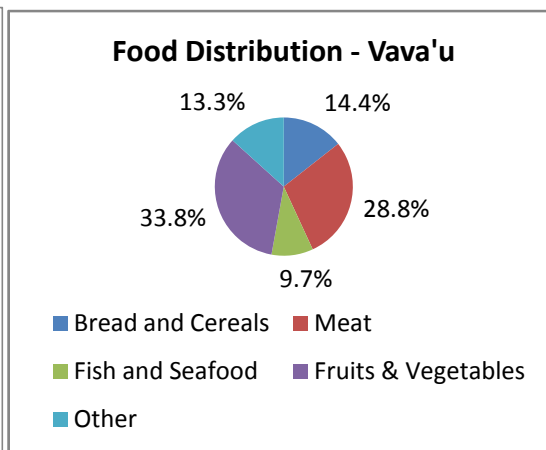
The bread and cereal groups are more prevalent in Tongatapu and Vava’u, as is the group “other”, which covers such items as “milk, cheese and eggs”, “oils and fats” and “sugar and confectionary”. These items are expected to be more accessible on these island divisions so this result is not surprising.

It is interesting to note that “fruit and vegetables” is the dominant group in all island divisions, with the exception of Tongatapu. This could be due to the higher availability of other items in Tongatapu.

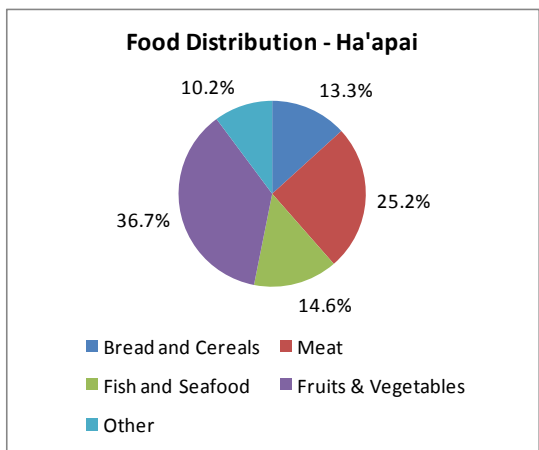
Graph 2.7 – Food Dist'n by category – Tongatapu



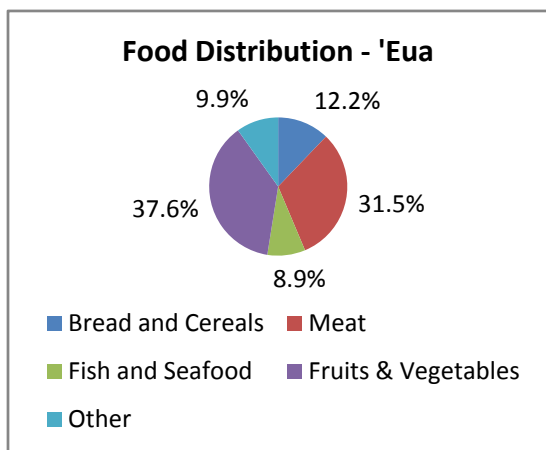
Graph 2.8 – Food Dist'n by category – Vava'u



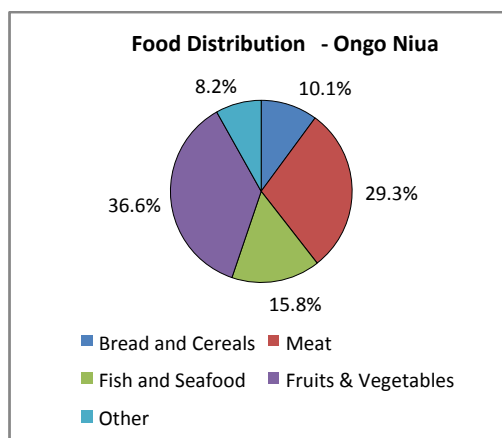
Graph 2.9 – Food Dist'n by category – Ha'apai



Graph 2.10 – Food Dist'n by category – 'Eua



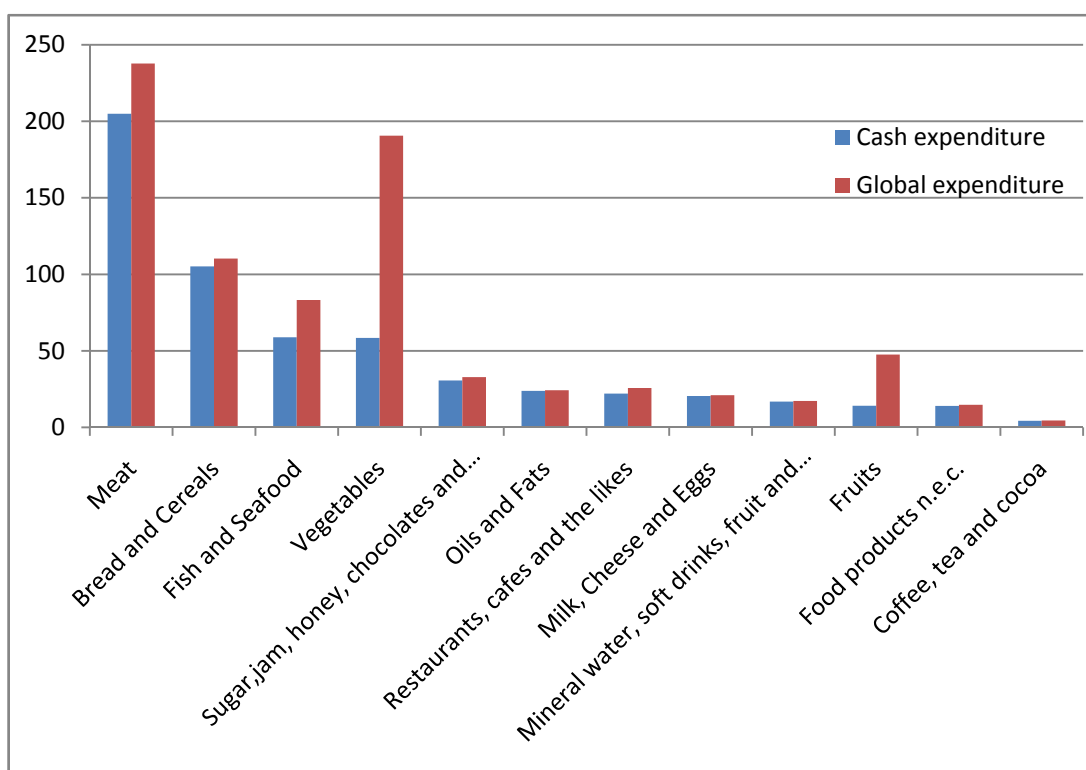
Graph 2.11 – Food Dist'n by category – Ongo Niua



The following graph (2.12) shows the average monthly expenditure (in cash and global) for each food group. In this analysis, global expenditure refers to cash expenditure, home produced and gifts received.

As can be seen from the analysis, the cash expenditure makes up the vast majority of the global expenditure for groups such as “breads and cereals”, “sugar and other confectionery”, “oils and fats”, “milk, cheese and eggs”, “non-alcoholic drinks” and “other food products, n.e.c”. Where the large differences exist are especially with “fruit” and “vegetables”, where the cash expenditure is only a small part of the overall global expenditure (around 30% for each). The non-cash expenditures also make a noticeable contribution for the “meat” and “fish and seafood”, but not to the same extent as “fruit” and “vegetables”.

Graph 2.12: Average monthly Cash and Global expenditure by food items

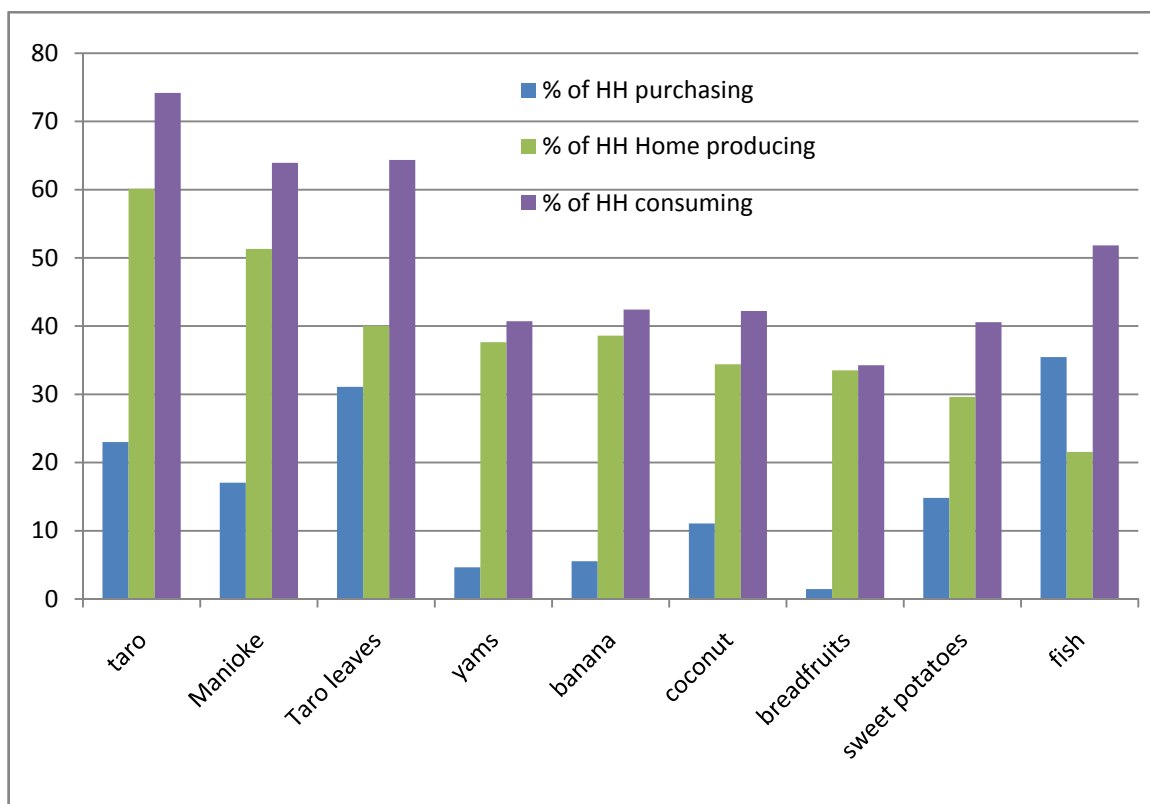


Source: Tonga HIES 2009

Graph 2.13 shows the proportion of households that “purchase”, “home produce” and “consume” selected food items. Amongst the selected items, taro is the item which most households consume (74%), although only a little over 20% purchase this product. This is largely due to the large number of households which produce this crop across Tonga (60%).

The graph also shows that the vast majority of “breadfruit” consumed by households is a result of home production, with only a very small amount being purchased. This trend is also noticeable to a lesser degree for “yams” and “bananas”. For the selected items below, only fish saw a higher proportion of households purchasing this item, as opposed to home production.

Graph 2.13: Proportion of household purchasing, home producing and consuming by food items



The last table for this section, table 2.7, shows a breakdown of expenditures for each of the food groups, as well as for some selected items within each group. The table is split into two main sections, cash expenses and total expenses. For each section four bits of information is provided:

- Average expenditure per household per month
- Percentage contribution of that item to food expenditure
- Percentage of households who purchase that food item
- Percentage contribution of that item to total expenditure

It should also be mentioned that these percentages won't match exactly with figures produced earlier as “restaurants” expenditure and “alcohol and kava” are now included.

Table 2.7: Food expenditure – main figures

COICOP	LABEL	CASH EXPENSE				TOTAL EXPENSE			
		average per HH per month (pa'anga)	% in the food expenditure	% Of household exp	% of the cash expenditure	average per HH per month (pa'anga)	% in the food expenditure	% Of household exp	% of the total expenditure
01.12	Meat	205	34.7	97.4	12.2	238	28.7	98.4	10.1
	including poultry	86	14.5	87.9	5.1	94	11.4	90.8	4.0
	mutton	72	12.2	74.6	4.3	76	9.2	76.3	3.2
	cooked meat	34	5.8	69.8	2.0	38	4.6	71.2	1.6
	pork	5	0.8	3.2	0.3	19	2.3	11.6	0.8
	beef	8	1.4	15.2	0.5	10	1.2	17.5	0.4
01.11	Bread and Cereals	105	17.8	97.7	6.2	110	13.3	98.0	4.7
	including bread	35	6.0	80.0	2.1	36	4.3	80.6	1.5
	biscuits, cake ice cream	27	4.6	79.4	1.6	29	3.5	80.2	1.2
	flour	20	3.4	68.1	1.2	22	2.6	69.1	0.9
	noodles	15	2.5	73.8	0.9	15	1.8	74.5	0.6
	rice	5	0.8	23.3	0.3	5	0.6	24.1	0.2
01.13	Fish and Seafood	59	10.0	80.5	3.5	83	10.1	85.6	3.5
	including fish	30	5.1	35.5	1.8	50	6.0	51.8	2.1
	canned fish	22	3.7	69.1	1.3	23	2.8	70.0	1.0
	seafood	7	1.1	10.4	0.4	10	1.2	17.3	0.4
01.17	Vegetables	58	9.9	84.6	3.5	191	23.0	98.1	8.1
	including yams	7	1.1	4.6	0.4	47	5.7	40.7	2.0
	taro	12	2.0	23.0	0.7	43	5.2	74.2	1.8
	Manioke	8	1.3	17.1	0.4	31	3.8	63.9	1.3
	sweet potatoes	7	1.2	14.8	0.4	20	2.4	40.6	0.8
	Taro leaves	5	0.8	31.1	0.3	13	1.5	64.4	0.5
	breadfruits	0	0.1	1.5	0.0	9	1.1	34.3	0.4
	Onion	5	0.8	54.8	0.3	5	0.6	55.9	0.2
	tomatoes	4	0.7	26.7	0.2	5	0.6	30.0	0.2
01.18	Sugar, jam, honey, chocolates and confectionery	31	5.2	87.6	1.8	33	4.0	88.2	1.4
	including sugar	17	2.9	79.8	1.0	18	2.2	80.9	0.8
	Ice-cream	9	1.5	23.3	0.5	9	1.1	24.1	0.4
01.15	Oils and Fats	24	4.0	80.5	1.4	24	2.9	81.1	1.0
	including butter margarine	18	3.0	74.6	1.0	18	2.2	75.0	0.8
	oil	5	0.8	29.0	0.3	5	0.6	29.1	0.2
01.14	Milk, Cheese and Eggs	20	3.5	50.3	1.2	21	2.5	51.7	0.9
	including milk	14	2.3	42.8	0.8	14	1.7	43.6	0.6
	eggs	5	0.9	16.8	0.3	6	0.7	17.7	0.2
01.22	Mineral water, soft drinks, fruit and vegetable juice	17	2.9	61.5	1.0	17	2.1	62.3	0.7
01.16	Fruits	14	2.4	40.2	0.8	48	5.8	81.5	2.0
	including banana	1	0.2	5.5	0.1	14	1.7	42.4	0.6
	coconut	2	0.4	11.1	0.1	10	1.2	42.2	0.4
	watermelon	4	0.7	15.3	0.2	4	0.5	17.1	0.2
01.19	Food products n.e.c.	14	2.4	71.3	0.8	15	1.8	71.7	0.6
01.21	Coffee, tea and cocoa	4	0.7	31.1	0.3	5	0.5	31.7	0.2
01.13	Total food and non alcoholic beverages	552	93.5	99.7	32.7	784	94.8	99.9	33.3
01.13	Total restaurants, cafes and the likes	22	3.7	38.1	1.3	26	3.1	42.9	1.1
	FOOD NON ALCOHOLIC BEVERAGES & RESTAURANTS	574	97.2	99.7	34.0	810	97.9	99.9	34.4
02.1	Alcohol	9	1.5	6.6	0.5	9	1.1	6.7	0.4
	including Beer	5	0.9	4.4	0.3	5	0.6	4.5	0.2
	Spirits	4	0.6	3.0	0.2	4	0.5	3.2	0.2
02.3	Kava	8	1.3	13.5	0.4	8	1.0	13.8	0.4
	ALCOHOL & KAVA	16	2.8	18.7	1.0	17	2.1	19.1	0.7
	FOOD, BEVERAGES (alcohol and non alcohol) and RESTAURANTS	590	100.0		35.0	827	100.0		35.1

Some interesting things to note in this table include:

- The significance of poultry and mutton to the meat group
 - The jump in the percentage contribution of items like:
 - Pork
 - Vegetables
 - Fruits
- when we look at total expenses, instead of just cash expenses
- The relatively small contribution of alcohol and kava (largely due to the significant under-reporting for this group)

2.2.9 Additional Housing Expenditure Analysis

The following housing analysis covers the following COICOP codes:

- COICOP 4: bills (water, electricity...), connection fees, small maintenance,
- COICOP 5: furnishing, routine household maintenance product, tools, domestic services,
- COICOP 12.52: insurance connected to the dwelling,
- COICOP 14.01: investment (dwelling purchase and dwelling major alteration).

On average, a household spends 243 pa'anga a month on housing. Nearly one-third of the cash expense in terms of housing is related to electricity supply. If the cost of water supply is added, this figure increases to nearly 45%.

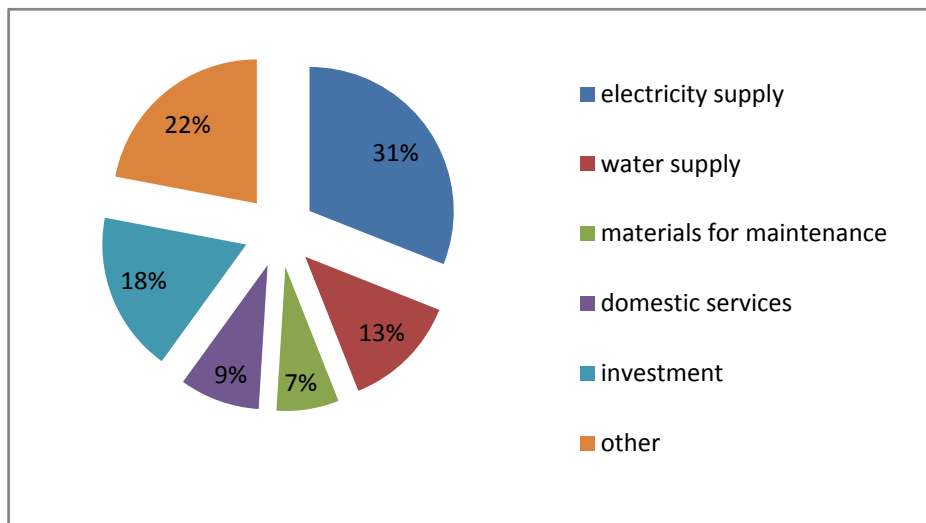
- 87% of the household have electricity fees (87 pa'anga monthly on average)
- 84% of the household have water fees (36 pa'anga monthly on average)

Investments (18% of housing expenditure) can be divided in two components:

- Mortgages
- Major house work investments or house construction fees.

Half of the investments are dedicated to mortgage and half to house work. Only 3% of the households had expenditure on house construction, but the amount spent on average was as high as 700 pa'anga a month. In terms of mortgage, 6% of the household reported this expenditure, each spending 382 pa'anga per month on average.

Graph 2.14: Percentage breakdown of housing expenditure, Tonga



In term of rents, 3% of the household paid rent, with an average amount of 358 pa'anga a month. The remaining households (the other 97%) were recorded with an imputed rent, which came to 306 pa'anga monthly (this is considered an expense in-kind).

The split for housing expenditure to “cash”, “in-kind” and “home production” is as follows:

- 43% for cash expense
- 56% for in-kind expense (imputed rent composed 93% and gift received 7% of this group)
- 1% for home production (wood for maintenance of the house, non durable household goods...)

Table 2.8 below provides detailed information about a wide range of housing expenditures. Five bits of information are provided:

- The average household expenditure per month
- The percentage contribution of each housing item to total housing expenditure
- The percentage of households which reported that expenditure in the survey
- The average household expenditure per month for households that had that expenditure
- The percentage contribution of each housing item to total cash expenditure

As can be seen from the table below, “electricity” and “water” are the two most common housing expenses with 85.7% and 84.5% of households recording this expense. This was closely followed by “domestic services and household services” with 77.0% reporting expenditure for this item.

For those household who reported an expenditure for each housing expense, “investment – construction fees/mortgage” had the highest average monthly figure of 530 pa’anga per month, followed by “actual rent paid by tenants” with 358 pa’anga per month.

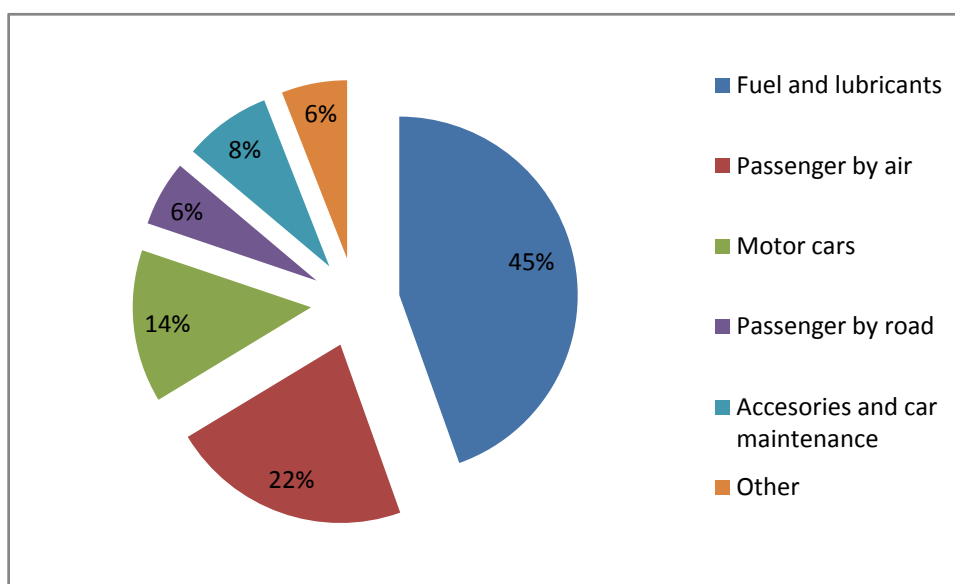
Table 2.8: Expenditure distribution of housing expenses, Tonga

COICOP	average per total HH per month (pa’anga)	% in the housing exp	% Of housing exp	average per HH exp per month (pa’anga)	%of the cash exp
0411 Actual rentals paid by tenants	9	3.8	2.6	358	0.6
0421 Imputed rental for housing - owner	0	0.0	1.7	0	0.0
0431 Materials and services for maintenance and repair of dwelling	21	8.5	21.0	99	1.2
0441 Water supply	31	12.6	84.5	36	1.8
0451 Electricity	76	31.1	86.7	87	4.5
0452 Gas	8	3.5	8.2	103	0.5
0453 Liquid fuels	1	0.3	2.3	29	0.0
0454 Solid fuels	0	0.1	0.7	50	0.0
0511 Furniture and furnishing	6	2.3	9.6	59	0.3
0512 Carpets and other floor coverings	1	0.4	6.5	15	0.1
0513 Repair of furniture, furnish and floor covering	0	0.0	0.1	25	0.0
0520 Household textiles	6	2.5	17.7	34	0.4
0531 Major household appliances whether electric or not	5	2.2	10.3	51	0.3
0532 Small electric household appliances	1	0.3	2.2	33	0.0
0540 Glassware, tableware and household utensils	1	0.5	8.2	15	0.1
0551 Major tools and equipment	1	0.3	0.5	141	0.0
0552 Small tools and misc. accessories	1	0.3	1.1	58	0.0
0561 Non-durable household goods	8	3.2	7.3	107	0.5
0562 Domestic services and household services	22	8.9	77.0	28	1.3
1252 Insurance connected with the dwelling	2	1.0	4.4	57	0.1
1401 investment - construction fees-mortgage	44	18.2	8.3	530	2.6
TOTAL HOUSING EXPENDITURE	244	100.0			14.5

2.2.10 Additional Transport Expenditure Analysis

On average, households in Tonga spent 144 pa’anga on transport per month. As can be seen in graph 2.15 below, the main contributor to this expense is fuel (45%), followed by air fares (22%). Almost 60% of the household own at least one car in Tonga, and 13% own at least 2 cars. For households with fuel expenses (including oil and other fluid 5%, diesel 30% and 65% petrol), their monthly average expenditure on fuel was 190 pa’anga. It is worth noting here that although 60% of households reported owning a car, only 34% of households reported fuel expenses during the survey.

Graph 2.15: Percentage distribution of transport cash expenditure



For air fare, 97% of the expenditure is dedicated to the overseas travel and only 3% for the local travel. There were 20% of the households in Tonga who reported paying for overseas air fare, on average 1890 pa'anga a year (or 157 pa'anga a month).

The purchase of vehicles is the third most important in the transport expenditure. There were 3 per cent of households who reported buying a car during the survey period, at an average price of 8,460 pa'anga.

Table 2.9 below shows the difference in transport expenditure patterns for cash expenditure and total expenditure (which also includes non-cash expenditure). Transport non-cash expenditure comprises of gifts received and represents 16% of the total transport expenditure (84% dedicated to cash expenditure). The gifts received in terms of transport are mainly dominated by:

- Motor cars: On average, 4 motor cars in 10 received by the household come as a gift,
- Overseas air fare: One quarter of the total expenditure is received by the household as a gift.

Table 2.9: Transport cash and total expenditure

COICOP	LABEL	CASH EXPENSE				TOTAL EXPENSE			
		average per total HH per month (pa'anga)	% in the transport expenditure	% Of household exp	average per HH exp per month (pa'anga)	average per total HH per month (pa'anga)	% in the transport expenditure	% Of household exp	average per HH exp per month (pa'anga)
0722	Fuels and lubricants for personal transport equipment	64	45	34	189	65	38	34	189
0733	Passenger transport by air	31	22	20	157	41	24	25	162
0711	Motor cars	21	14	3	640	36	21	5	696
0732	Passenger transport by road	8	6	21	41	9	5	22	40
0721 / 0723	Accessories and car maintenance	11	8	33	33	12	7	34	34
	Other ¹	9	6	39	22	9	5	39	23
TOTAL TRANSPORT		144	100			171	100		

¹ Other is composed by COICOP 0712, 0713, 0724, 0734, 0736 and 1254: motor bike, bicycles, other transport service, transport by sea, other purchased transport services and insurance connected to transport.

2.2.11 Additional Analysis of Donations Expenditure

Providing gifts is very common in the Tonga community and is the second highest expense after food and restaurant. Gift expenditure is not considered a part of consumption expenditure because it represents a one way transfer

This category includes casual gift in cash or regular remittances given away. The recipient could be family in another household, the church, the school or some other association. Gifts can be divided into three categories:

- Casual gift in cash to another household (birthday, wedding, etc),
- Regular remittances given away (in Tonga or overseas),
- Gift in cash given away to a community or association (church, school, etc) casual or irregular.

Three quarters of cash given away is offered to a community, mostly the church (96% of households in Tonga reported making community donations). On average, a typical household in Tonga will give 346 pa'anga to the community, which represents 21 per cent of the total cash expenditure.

Table 2.10: Distribution of gifts in cash, Tonga

CODE	LABEL	average per total HH per month (pa'anga)	% in the donation expenditure	% Of household exp	average per HH exp per month (pa'anga)
1300	Gift in cash to another household	100	22	68	147
1301	Remittance cash given	13	3	14	93
1304	contribution to a community cash	346	75	96	360
TOTAL DONATION		460	100		

2.2.12 Additional Communication Expenditure Analysis

The communication division also has a significant impact on an average household's expenditure in Tonga. In particular, the telephone services are very significant, with 61 pa'anga monthly on average per household (similar level as fuel). In this division the main item are:

- Mobil phone services: This makes up 66 per cent of the telephone service expenditure. In the survey, almost 90% of households in Tonga reported having at least one mobile phone, with each spending on average 60 pa'anga a month.
- Land line services: This makes up 27 per cent of the telephone service expenditure. In the survey, 48 per cent of households reported having a land line at home, with each spending on average 49 pa'anga a month.
- Internet fees. This makes up 4 per cent of the communication service expenses. Only 3 per cent of the households in the survey reported having internet at home, with each reporting an average expenditure of 95 pa'anga a month.

Section 3 – Income Analysis

3.1 Income Analysis Approach

As with the case for the expenditure tables, the income tables were based on Resolution 1 from the Seventeenth International Conference of Labour Statisticians. Each Income Source was therefore defined as follows:

Household Income

Household income was split into three main components:

- Income from employment
 - Employee Income: This income comprises direct wages and salaries for time worked and work done, cash bonuses and gratuities, commissions and tips, directors' fees, profit-sharing bonuses and other forms of profit-related pay, remuneration for time not worked as well as free or subsidized goods and services from an employer. It may include severance and termination pay as well as employers' social insurance contributions.
 - Income from self-employment: This is income received by individuals, over a given reference period, as a result of their involvement in self-employment jobs. In particular, income from self-employment concerns primarily owners of unincorporated enterprises who work in these enterprises. It also includes the estimated value of goods and services produced for barter as well as goods produced for own consumption, less expenses.
- Property Income: Property income is defined as receipts that arise from the ownership of assets (return for use of assets) that are provided to others for their use. These are returns, usually monetary, from financial assets (interests, dividends), from non-financial assets (rents) and from royalties (returns for services of patented or copyright material).
- Transfer Income: These are receipts for which the recipient does not give anything to the donor in direct return for the receipts. Transfers can consist of cash (in the monetary sense), of goods or of services. Current transfers are those that usually recur regularly (relative to the reference used for income), tend to be small and are also mostly available for use during the reference period.

A fourth category, "income from household production of services for own consumption" was also included in the Resolution, but was not considered relevant for this analysis.

In the income tabulations produced within this section, employee income has been split into the three main sections covered in the survey:

- a) Wage and Salary from current job
- b) Wage and Salary from previous jobs (not held now, but held during the reference period)
- c) Wage and Salary from casual jobs

For income from self-employment, the income was also split into three main components:

- a) Business Income
- b) Subsistence Activity Income
- c) Consumption of Home Produce

Irregular Gifts Received

Irregular gifts received cover the value of cash or goods received on a less regular basis. There were three main areas these receipts were recorded in the survey materials:

- a) Cash receipts as recorded in the household diary
- b) Home produce received from other households
- c) Other non-monetary gifts received

It could be argued that these receipts occur frequently enough to be included in Transfer Income (above), but by separating them out, the readers of this report will have the option to do either.

Other Receipts

Other receipts cover any other receipts received by the household, usually as an irregular one-off payment. Some examples covered in the survey materials include; life insurance payments, sales of assets, inheritance, matrimonial property settlement, insurance claims and gambling wins.

Imputed Rent

As with expenditure, imputed rent can also be classified as an income and is the estimated value of rent for households which either live in their own house (regardless of whether or not a mortgage is still outstanding) or are occupying the dwelling they inhabit, free of any rent charge

3.2 Analysis

As with the expenditure analysis, the strategy for the income analysis was to primarily analyse the result of the survey at the national and urban/rural level. Further analysis was also undertaken at the island division level, and this can be viewed in the appendices at the back of this report.

For each table, income has been split by whether it was a cash receipt, or in-kind. The row categories follow the descriptions outlined above.

The analysis focuses on the following key tables:

- 1) Average Monthly Household Income by Area
- 2) Average Annual Household Income by Area
- 3) Average Annual Per Capita Income by Area
- 4) Total Annual Household Income by Area
- 5) Distribution of Income by Area
- 6) Proportion of Households with each source by Area
- 7) Additional Subsistence Income Analysis

Each of the sections is now discussed in more detail.

3.2.1 Average Monthly Household Income

As can be seen in Table 3.1, the average household in Tonga receives 1,657 pa'anga from household income per month. Of this, 1,391 pa'anga is from cash receipts and 266 pa'anga from income in-kind.

The corresponding figures for the urban population are a little higher, with 2,170 pa'anga being received by a typical urban household per month, compared to only 1,505 pa'anga for a typical rural household per month. For cash income, the value of receipts for a typical urban household is significantly higher than a typical rural household (1,970 pa'anga for urban, compared to 1,219 pa'anga for rural). On the other hand, a typical rural household receives more in-kind household income per month than a typical urban household (286 pa'anga for rural, compared to 200 pa'anga for urban). Better employment opportunities and business opportunities in the urban areas relative to rural areas imply that cash incomes are respectively higher.

The main contributor to the average monthly income is "Wage & Salary – Current Job", which generates 672 pa'anga per month across Tonga. "Remittances" and "Subsistence Income" were the next biggest contributors with 347 pa'anga and 311 pa'anga a month on average respectively,

being recorded. Finally, “Home Produce Consumed” also made a sizeable contribution with 174 pa’anga per month for a typical Tongan household. For remittances, the contribution is significantly higher for the urban population compared to rural (477 pa’anga compared with 309 pa’anga), but due to the much higher proportion of people living in the rural communities, remittances in the rural areas form a bigger part of the Tongan economy, than urban areas (see table 3.4).

For the section on Irregular Gifts, it can be seen that a typical Tongan household receives 335 pa’anga from this source. Of this amount, 194 pa’anga is from cash receipts, whilst 141 pa’anga is from in-kind. Once again a typical household in the urban population receives a higher amount from this section, 433 pa’anga, compared to 306 for a rural household.

Other receipts also made a slightly significant contribution for urban households, contributing 146 pa’anga per household per month, however, the corresponding figure for the rural population was only 22 pa’anga.

Table 3.1 Average Monthly Household Income

INCOME TYPE	URBAN			RURAL			TOTAL		
	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL
Household Income									
Income from Employment									
11.Wage & Salary - Current Job	1,054	30	1,083	534	16	551	653	19	672
12.Wage & Salary - Previous Job	49		49	18		18	25		25
13.Wage & Salary - Casual Jobs	15	5	19	22	3	25	20	3	24
14.Business Income	121	18	139	35	7	43	55	10	65
15.Subsistence Income	244		244	331		331	311		311
16.Home Produce Consumed		68	68		206	206		174	174
Property Income									
17.Property Income	66		66	11		11	24		24
Transfer Income									
18.Welfare, NPF & Child Support	24		24	11		11	14		14
19.Remittances	398	79	477	256	53	309	288	59	347
Total Household Income	1,970	200	2,170	1,219	286	1,505	1,391	266	1,657
Irregular Gifts Received									
21.Irregular Cash Gifts	284		284	168		168	194		194
22.Home Produce - Received		34	34		29	29		30	30
23.Bought Goods - Received		115	115		110	110		111	111
Total Irregular Gifts	284	149	433	168	139	306	194	141	335
Other Receipts	146		146	22		22	51		51
Imputed Rent		421	421		261	261		298	298

3.2.2 Average Annual Household Income

As can be seen in Table 3.2, when converted to an annual figure, the average household in Tonga receives 19,881 pa'anga from both cash and in-kind household income, per year. Of this, 16,690 pa'anga is from cash receipts, and 3,191 pa'anga is from in-kind receipts.

As expected, all other trends identified in table 3.1 can also be seen in the annual analysis.

Table 3.2: Average Annual Household Income

INCOME TYPE	URBAN			RURAL			TOTAL		
	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL
Household Income									
Income from Employment									
11.Wage & Salary - Current Job	12,645	356	13,000	6,410	197	6,606	7,836	233	8,069
12.Wage & Salary - Previous Job	585		585	218		218	302		302
13.Wage & Salary - Casual Jobs	174	56	231	265	36	301	245	40	285
14.Business Income	1,449	220	1,669	425	88	514	659	119	778
15.Subsistence Income	2,926		2,926	3,973		3,973	3,734		3,734
16.Home Produce Consumed		812	812		2,471	2,471		2,091	2,091
Property Income									
17.Property Income	795		795	138		138	288		288
Transfer Income									
18.Welfare, NPF & Child Support	292		292	129		129	166		166
19.Remittances	4,773	953	5,726	3,072	635	3,707	3,461	708	4,168
Total Household Income	23,640	2,397	26,037	14,630	3,426	18,056	16,690	3,191	19,881
Irregular Gifts Received									
21.Irregular Cash Gifts	3,403		3,403	2,011		2,011	2,330		2,330
22.Home Produce - Received		410	410		343	343		359	359
23.Bought Goods - Received		1,378	1,378		1,321	1,321		1,334	1,334
Total Irregular Gifts	3,403	1,788	5,191	2,011	1,664	3,676	2,330	1,692	4,022
Other Receipts	1,753		1,753	268		268	607		607
Imputed Rent		5,055	5,055		3,132	3,132		3,572	3,572

3.2.3 Average Annual Per Capita Income

The same restrictions encountered with the per capita analysis for the expenditure analysis apply for income as well. As such, population projection figures were used to determine the estimated number of people in each area of interest, as opposed to estimates of people from the HIES itself.

As can be seen from Table 3.3 below, the average person in Tonga receives 3,450 pa'anga per year from household income, 698 pa'anga per year from irregular gifts received and 105 pa'anga a year from other receipts. The wage and salary component of this is by far the largest contributor with 1,501 (1,400+52+41) pa'anga per year coming from this source.

As expected, the figures per capita for the urban population are much higher overall compare to rural, however this trend is reversed for the income categories “subsistence income” (693 pa’anga for rural, versus 499 pa’anga for urban), and “home produce consumed” (431 pa’anga for rural, versus 139 pa’anga for urban). This is expected due to the large reliance on subsistence activities in the rural areas.

Table 3.3 Average Annual Per Capita Income

INCOME TYPE	URBAN			RURAL			TOTAL		
	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL
Household Income									
Income from Employment									
11.Wage & Salary - Current Job	2,158	61	2,218	1,118	34	1,152	1,360	40	1,400
12.Wage & Salary - Previous Job	100		100	38		38	52		52
13.Wage & Salary - Casual Jobs	30	10	39	46	6	53	42	7	49
14.Business Income	247	38	285	74	15	90	114	21	135
15.Subsistence Income	499		499	693		693	648		648
16.Home Produce Consumed		139	139		431	431		363	363
Property Income									
17.Property Income	136		136	24		24	50		50
Transfer Income									
18.Welfare, NPF & Child Support	50		50	22		22	29		29
19.Remittances	814	163	977	536	111	646	600	123	723
Total Household Income	4,034	409	4,443	2,551	597	3,149	2,896	554	3,450
Irregular Gifts Received									
21.Irregular Cash Gifts	581		581	351		351	404		404
22.Home Produce - Received		70	70		60	60		62	62
23.Bought Goods - Received		235	235		230	230		231	231
Total Irregular Gifts	581	305	886	351	290	641	404	294	698
Other Receipts	299		299	47		47	105		105
Imputed Rent		863	863		546	546		620	620

3.2.4 Total Annual Household Income

The following analysis shows the total annual income for respective groups for Tongans in a given year. In total, Tongans receive 355,856,000 pa’anga of household income for the country as a whole. Of this total, the urban population account for roughly 30 per cent (106,595 / 355,856) of the total household income, which is a little more than their share as they make up an estimated 23 per cent of the population.

Table 3.4 also shows that income equivalent for Tongans from subsistence activities is 66,834,000 pa’anga, whereas this figure is 37,434,000 for home produce consumed. This results in over 100,000,000 pa’anga per year in subsistence activity income for Tonga, whether the produce be sold or consumed by the household.

This table also shows that Tongans receive 74,612,000 pa’anga per year in remittances, and a further 71,992, 000 pa’anga in additional gifts (cash and in-kind) per year.

Table 3.4 Total Annual Household Income ('000s)

INCOME TYPE	URBAN			RURAL			TOTAL		
	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL
Household Income									
Income from Employment									
11.Wage & Salary - Current Job	51,768	1,456	53,224	88,484	2,716	91,200	140,252	4,171	144,424
12.Wage & Salary - Previous Job	2,397		2,397	3,007		3,007	5,403	-	5,403
13.Wage & Salary - Casual Jobs	714	230	944	3,665	492	4,157	4,379	721	5,101
14.Business Income	5,930	902	6,833	5,868	1,221	7,089	11,798	2,123	13,922
15.Subsistence Income	11,981		11,981	54,853		54,853	66,834		66,834
16.Home Produce Consumed		3,324	3,324		34,109	34,109		37,434	37,434
Property Income									
17.Property Income	3,254		3,254	1,900		1,900	5,154		5,154
Transfer Income									
18.Welfare, NPF & Child Support	1,197		1,197	1,777		1,777	2,974		2,974
19.Remittances	19,540	3,902	23,442	42,407	8,763	51,170	61,947	12,665	74,612
Total Household Income	96,780	9,814	106,595	201,961	47,300	249,262	298,742	57,114	355,856
Irregular Gifts Received									
21.Irregular Cash Gifts	13,933		13,933	27,766		27,766	41,699		41,699
22.Home Produce - Received		1,677	1,677		4,742	4,742		6,419	6,419
23.Bought Goods - Received		5,641	5,641		18,233	18,233		23,874	23,874
Total Irregular Gifts	13,933	7,318	21,251	27,766	22,975	50,740	41,699	30,293	71,992
Other Receipts	7,177		7,177	3,695		3,695	10,872		10,872
Imputed Rent		20,697	20,697		43,235	43,235		63,931	63,931

3.2.5 Distribution of Income across groups

This section illustrates how income is distributed across each sub-group, in particular for the household income group and irregular gifts received group. To make the analysis more meaningful, the income distribution is done separately within each group. As can be seen from Table 3.5, within the household income group, wages and salary accounts for 44% (41+2+1). The equivalent figures for urban and rural were 53% (50+2+1) for urban and 40% (37+1+2) for rural.

For household income received as cash, wages and salary accounts for 50 per cent (47+2+1), whilst for in-kind household income, home produce consumed accounts for 66 per cent. For the urban community, the prevalence of wage and salary household income from cash is even more significant at 56 per cent (53+2+1), whereas, in the rural community, the prevalence of home produce consumed from in-kind household income is more noticeable at 72 per cent.

Table 3.5 Distribution of Income across groups (%)

INCOME TYPE	URBAN			RURAL			TOTAL		
	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL	CASH	IN-KIND	TOTAL
Household Income									
Income from Employment									
11.Wage & Salary - Current Job	53	15	50	44	6	37	47	7	41
12.Wage & Salary - Previous Job	2		2	1		1	2	-	2
13.Wage & Salary - Casual Jobs	1	2	1	2	1	2	1	1	1
14.Business Income	6	9	6	3	3	3	4	4	4
15.Subsistence Income	12		11	27		22	22		19
16.Home Produce Consumed		34	3		72	14		66	11
Property Income									
17.Property Income	3		3	1		1	2		1
Transfer Income									
18.Welfare, NPF & Child Support	1		1	1		1	1		1
19.Remittances	20	40	22	21	19	21	21	22	21
Total Household Income	100	100	100	100	100	100	100	100	100
Irregular Gifts Received									
21.Irregular Cash Gifts	100		66	100		55	100		58
22.Home Produce - Received		23	8		21	9		21	9
23.Bought Goods - Received		77	27		79	36		79	33
Total Irregular Gifts	100	100	100	100	100	100	100	100	100
Other Receipts	100		100	100		100	100		100
Imputed Rent		100	100		100	100		100	100

3.2.6 Proportion of households with different types of income source

The following analysis shows the proportion of households who recorded an income against each income category during the course of the survey. There are no great surprises for the section covering “income from employment”, as the proportion of wage and salary households from cash income are expected to be high. You would also expect a high proportion of households stating income from “home produced consumed” in the rural areas (89%).

Of some surprise however is the high proportion of households reporting cash remittances – 84 per cent for urban, 81 per cent for rural, and 81 per cent overall. These figures are very much influenced by the way remittances were interpreted during the survey by the households selected. The question simply asks “In the last 12 months, has your household received any remittances, whether it be in a cash payment or in kind?”. Remittances are generally regarded as regular sources of income the recipient can depend on. Whilst the proportion of households in Tonga receiving regular remittance assistance on a weekly or even monthly basis may not be too high, there are a very high proportion who receive regular assistance on an annual basis, whether it be for a church conference, or even an event such as mother's day. This can be regarded as a legitimate “remittance” if it is expected to be reliable from year to year, so if households have interpreted this question as such, then these high figures may well be accurate.

Table 3.6 Proportion of households with different types of income source(%)

INCOME TYPE	URBAN		RURAL		TOTAL	
	CASH	IN-KIND	CASH	IN-KIND	CASH	IN-KIND
Household Income						
Income from Employment						
11.Wage & Salary - Current Job	68	14	49	6	53	8
12.Wage & Salary - Previous Job	7		4		5	
13.Wage & Salary - Casual Jobs	14	5	23	9	21	8
14.Business Income	9	5	9	6	9	5
15.Subsistence Income	19		40		35	
16.Home Produce Consumed		44		89		79
Property Income						
17.Property Income	9		2		4	
Transfer Income						
18.Welfare, NPF & Child Support	4		1		2	
19.Remittances	84	44	81	28	81	32
Irregular Gifts Received						
21.Irregular Cash Gifts	37		38		38	
22.Home Produce - Received		26		36		34
23.Bought Goods - Received		62		71		69
Other Receipts	6		4		5	
Imputed Rent		94		98		97

3.2.7 Additional Subsistence Income Analysis

This section further investigates some of the key sources of subsistence income, to look at the impact of each for different geographical areas.

Handicrafts activities remain a major subsistence activity in Tonga. Incomes associated with handicrafts constitute the highest component of subsistence income in Tonga. Of subsistence income received by households handicrafts account for 40 percent followed by agriculture at 27 per cent.

Table 3.7 shows the total subsistence income for Tonga as 66,834,000 pa'anga, of which the largest contributor is from handicrafts with 26,527,000 pa'anga coming from this source. The rural population makes up biggest proportion of subsistence income with 82 per cent of subsistence income coming from this region.

Generally a number of factors explain the variations in the distribution and source of income. Rural areas are generally highly endowed with land and consequently generate more income from subsistence activities such as agriculture unlike urban areas. On the other hand availability

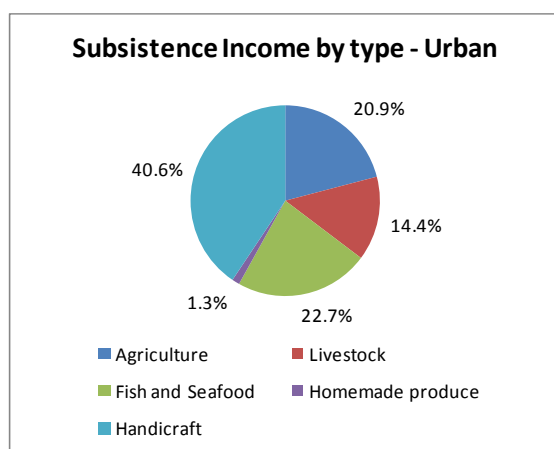
of employment opportunities in the urban areas plus a highly formalized economic system accounts for disproportionately wage-based income sources.

Graphs 3.1 and 3.2 show the distribution of each subsistence income source within the urban and rural populations. The most noticeable differences are that the rural community tends to earn a higher proportion of their subsistence income from agriculture and livestock, when compared to urban. Urban on the other hand have a much higher proportion coming from fish and seafood.

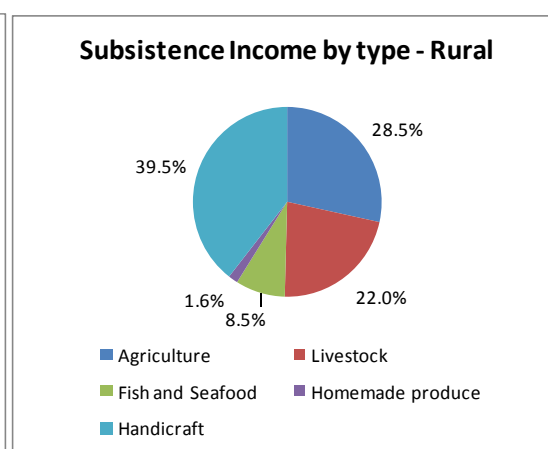
Table 3.7: Total Subsistence Income by Type by Urban/Rural ('000s)

Income Type	Urban	Rural	Total
Agriculture	2,504	15,606	18,111
Livestock	1,727	12,046	13,773
Fish and Seafood	2,724	4,639	7,363
Homemade produce	156	904	1,060
Handicraft	4,870	21,658	26,527
Total Subsistence Income	11,981	54,853	66,834

Graph 3.1: Subsistence Income – Urban



Graph 3.2: Subsistence Income – Rural



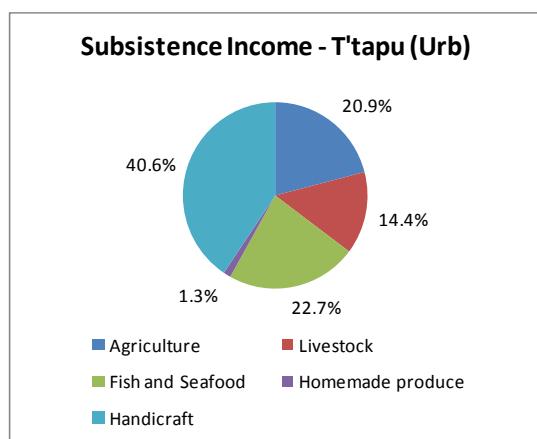
The second part of the analysis shows the contribution of each subsistence income source by island division. Table 3.8 shows that Tongatapu accounts for just under half of all the subsistence income in Tonga, despite comprising over 70 per cent of the country's population. Vava'u comes in next accounting for a little over one quarter of subsistence income. This is not surprising given the higher reliance on subsistence income in the rural communities of which the island divisions outside Tongatapu all are.

Graphs 3.3 to 3.8 show the distribution of each subsistence income source within each island division – Tongatapu is split by urban and rural. Handicrafts are the most significant income source for the island divisions of Tongatapu (Urban), Vava'u, Ha'apai and Ongo Niua. For the other two areas, Tongatapu (Rural) and 'Eua, agriculture is the most significant.

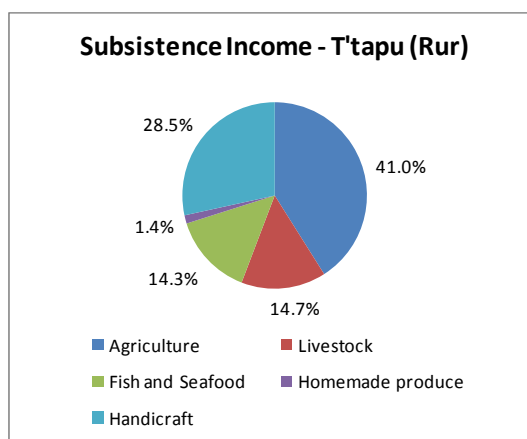
Table 3.8: Total Subsistence Income by Type by Island Division ('000s)

Income Type	T'tapu (Urb)	T'tapu (Rur)	Vava'u	Ha'apai	Eua	Ongo Niua	Total
Agriculture	2,504	8,734	3,791	1,064	1,793	224	18,111
Livestock	1,727	3,139	5,264	2,122	1,182	339	13,773
Fish and Seafood	2,724	3,046	573	406	572	42	7,363
Homemade produce	156	308	186	192	217	-	1,060
Handicraft	4,870	6,057	7,569	6,147	1,247	638	26,527
Subsistence Income	11,981	21,283	17,384	9,931	5,011	1,244	66,834

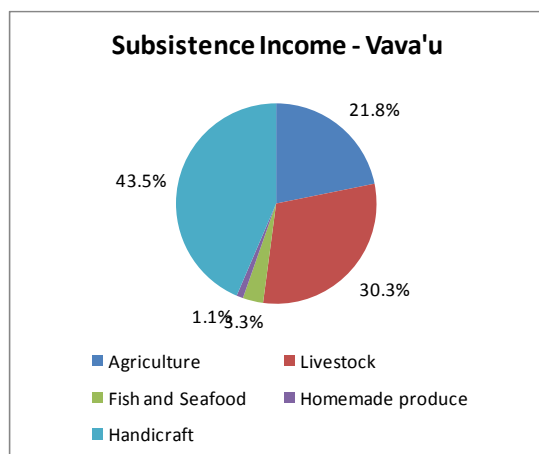
Graph 3.3 Subsistence Income – T'tapu (U)



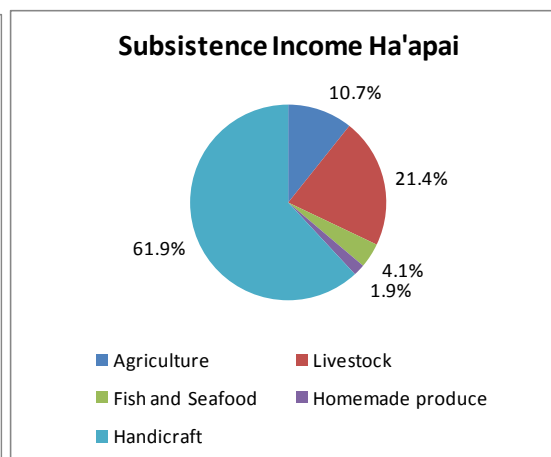
Graph 3.4 Subsistence Income – T'tapu (R)



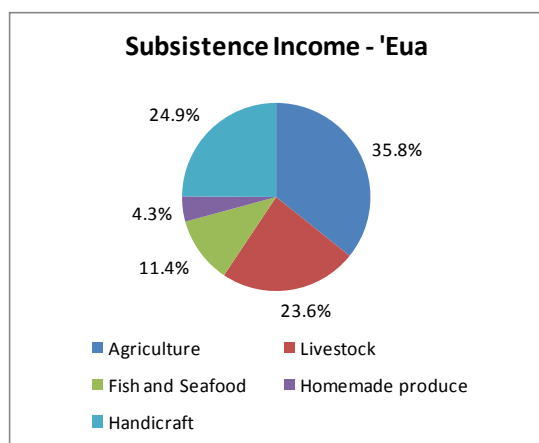
Graph 3.5 Subsistence Income – Vava'u



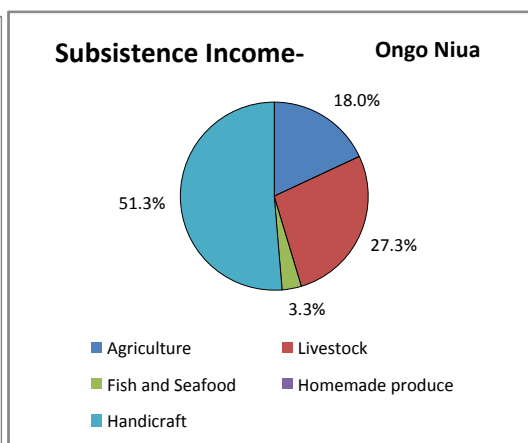
Graph 3.6 Subsistence Income – Ha'apai



Graph 3.7 Subsistence Income – 'Eua



Graph 3.8 Subsistence Income – Ongo Niua



3.2.8 Trends in the structure of Household Income

Tonga conducted a previous HIES in 2001 whose sample size was 1,627 households with 8,679 persons. The current HIES has a slightly higher sample with 1,983 households. Generally a cross comparison of HIES is not easy particularly when methodologies change and are improved over time. In the case of the current HIES, definitions of income are in line with ILO declarations and bank loans are not considered part of income. The 2001 HIES for instance considers bank loans as part of income. It is therefore difficult to make a direct comparison of total incomes.

Nonetheless per capita measures of income would provide a reasonable measure of comparison. The 2001 HIES reports annual per capita income as 3,376 Pa'anga at 2001 prices¹. The results of the current HIES indicate a slight rise to 3,450 Pa'anga (Table 3.3) representing a 2.1% jump. However, if the annual per capita incomes are adjusted for inflation, it would appear that the annual per capita income declines substantially in 2009. Using the annual CPI for Tonga, and adjusting the 2009 annual per capita income, the resultant estimate becomes 2,735 Pa'anga. This represents a decline of 18 per cent in real per capita income.

¹ 2001 Tonga Household Income and Expenditure Survey.

Section 4 – Quality of Results

4.1 Introduction

This section provides background information about sampling and non-sampling errors. Sampling errors refer to those errors that are implicit in any sample survey, where only a portion of the population is covered. Non-sampling errors refer to all other types of error. These can arise at any stage of the survey process. Examples of activities that are likely to increase the level of non-sampling error are: failing to select a proper sample, poor questionnaire design, weak field supervision, inaccurate data entry, insufficient data editing, or failure to analyze or report on the data correctly. If a census of all the households in Tonga were carried out, there would be no sampling error (but probably increased non-sampling error).

4.2 Sampling Errors

Because of the complex nature of the sample design, it was considered more appropriate to calculate approximate standard errors - these were calculated using the jack-knife variance estimation procedure. It was not possible to calculate sampling errors for all estimates in this report, so just some sample errors for key estimates of expenditure and income were produced for selected geographical areas. This in itself should give users a guide as to what can be expected from results with respect to sampling errors.

The procedure for addressing this was to firstly calculate the variance associate with key estimates, convert these to standard errors, and then represent these standard errors as a percentage of the estimate. Such a figure is referred to as a relative standard error (RSE) as is useful for comparing the quality of different size estimates from a survey.

To assist with the interpretation of the RSEs, the following table can be used as a guide:

<u>Magnitude of the RSE</u>	<u>Interpretation</u>
Less than 5%	Estimate is very good quality
Between 5% and 10%	Estimate is of good quality
Between 10% and 25%	Estimate is ok, but should be used with caution
Greater than 25%	Estimate cannot be considered reliable

4.2.1 Expenditure

Table 4.1 shows the relative standard errors for key expenditure estimates by selected geographical areas. As can be seen from this table, the RSEs for Total Consumption Expenditure for Tonga was 3.3 per cent, suggesting it is a very reliable figure from a sample error perspective. The corresponding RSE for urban and rural estimate of Total Consumption Expenditure is also quite low at 5.4 per cent and 4.1 per cent respectively. The table also shows that the RSEs for individual expenditure groups within Consumption Expenditure are a little higher, especially within the island divisions, and as such should be used with care.

For the estimates of Non-Consumption Expenditure, the RSEs are a little higher, but not too many exceed the point where the estimates are not considered usable.

Table 4.1: RSEs for key expenditure categories by selected geographical regions

EXPENDITURE TYPE	Tongatapu	Vava'u	Ha'apai	'Eua	Ongo Niua	Urban	Rural	Total
Consumption Expenditure								
01.Food	3.1%	5.2%	8.4%	7.6%	3.8%	4.9%	4.0%	3.3%
02.Alcohol&Tobacco	7.0%	9.8%	11.6%	19.4%	16.0%	11.0%	8.7%	7.1%
03.Clothing&Footwear	8.7%	14.3%	21.4%	15.8%	28.0%	9.1%	13.5%	10.0%
04.Housing&Utilities	4.3%	8.4%	11.8%	11.0%	45.4%	5.9%	6.8%	4.9%
05.Household Furnishings & Equip.	11.2%	14.0%	20.9%	18.7%	47.8%	19.3%	14.5%	11.7%
06.Medical&Health	16.3%	22.2%	56.1%	40.9%	100.0%	26.2%	26.8%	19.6%
07.Transport	6.2%	14.9%	29.5%	20.1%	72.8%	10.9%	9.2%	7.3%
08.Communication	6.1%	17.2%	10.7%	13.2%	16.5%	10.1%	9.7%	7.2%
09.Recreation	7.2%	12.3%	22.2%	18.8%	49.8%	10.1%	10.5%	7.8%
10.Education	7.2%	8.7%	23.5%	19.1%	18.2%	13.4%	9.9%	8.0%
11.Restaurants&Hotels	9.0%	11.9%	20.2%	28.1%	43.2%	13.8%	15.7%	10.7%
12.Miscellaneous Gds&Ser.	4.9%	10.5%	10.7%	16.6%	25.0%	7.5%	7.5%	5.7%
13.Remittances - Received in kind	15.4%	20.6%	41.8%	33.5%	88.7%	22.4%	22.5%	17.0%
Total Consumption Expenditure	3.0%	4.9%	9.9%	7.9%	10.4%	5.4%	4.1%	3.3%
Non-Consumption Expenditure								
21.Special Events	9.4%	10.1%	28.5%	18.1%	53.7%	13.6%	12.5%	9.9%
22.Contributions to Church	6.8%	10.6%	28.0%	13.4%	27.0%	8.7%	10.0%	7.8%
23.Contributions to Village	18.5%	17.8%	34.7%	16.7%	48.7%	21.8%	18.9%	17.2%
24.Contributions to School	9.8%	10.3%	35.6%	21.4%	38.8%	16.0%	13.1%	10.4%
25.Other Cash Gifts	8.6%	19.0%	24.9%	19.8%	22.8%	14.3%	11.7%	9.6%
26.Cash Remittances	21.9%	22.6%	53.6%	31.5%	42.8%	30.2%	36.4%	23.5%
Total Non-Consumption Expenditure	5.2%	11.3%	17.8%	9.9%	21.3%	7.2%	7.4%	5.9%
Other Expenditure								
31.House Construction	28.6%	71.2%	50.8%	57.9%	n/a	44.1%	45.1%	35.1%
32.Home Loan-Capital Payments	17.5%	37.7%	91.6%	27.3%	n/a	27.7%	27.5%	20.6%
33.Savings (Credit Union, Life Ins.)	27.4%	37.1%	99.8%	39.1%	100.0%	31.8%	101.8%	34.8%
Total Other Expenditure	16.9%	35.3%	59.3%	44.1%	100.0%	24.4%	27.9%	20.3%
Imputed Rent								
41.Imputed Rent	4.0%	6.9%	6.6%	9.5%	19.5%	5.7%	5.8%	4.4%

4.2.2 Income

Table 4.2 shows the relative standard errors for key income estimates by selected geographical areas. As can be seen from this table, the RSEs for Total Household Income for Tonga was 5.0 per cent, suggesting once again it is a very reliable figure from a sample error perspective. The corresponding RSE for urban and rural estimate of Total Household Income went up a little higher, but still remain good quality estimates. Their corresponding RSEs were at 8.2 per cent and 6.3 per cent respectively. The table also shows that the RSEs for individual income groups within Household Income differed quite significantly depending on the income category. Estimates of “business income”, “property income” and “welfare, npf & child support” showed to be a lot more unreliable, due to the variation of responses between households for this type of income. The RSEs for the income groups “home produce consumed” and “wage and salary – current job” proved to be a lot more reliable.

The RSEs for the section on Irregular Gifts Received, were a little higher, but not to the point where the information was not considered usable.

Table 4.2: RSEs for key income categories by selected geographical regions

INCOME TYPE	Tongatapu	Vava'u	Ha'apai	'Eua	OngoNiua	Urban	Rural	Total
Household Income								
Income from Employment								
111.Wage & Salary - Current Job	6.9%	14.7%	15.0%	21.1%	37.8%	10.4%	11.6%	8.3%
112.Wage & Salary - Previous Job	20.3%	68.7%	98.9%	42.2%	77.8%	30.5%	37.9%	25.1%
113.Wage & Salary - Casual Jobs	17.1%	24.7%	41.5%	39.7%	61.1%	20.9%	18.3%	15.4%
114.Business Income	27.2%	37.5%	58.1%	43.6%	67.6%	42.9%	50.2%	33.1%
115.Subsistence Income	12.4%	17.6%	17.3%	19.5%	37.3%	21.2%	11.7%	10.3%
116.Home Produce Consumed	7.0%	7.4%	12.0%	7.7%	4.5%	15.3%	6.2%	5.8%
Property Income								
117.Property Income	29.4%	77.7%	88.3%	100.0%	100.0%	35.4%	74.0%	35.3%
Transfer Income								
122.Welfare, NPF & Child Support	35.4%	68.9%	n/a	68.4%	n/a	53.7%	56.1%	39.9%
123.Remittances	7.9%	14.4%	21.4%	12.8%	82.6%	12.8%	12.4%	9.4%
Total Household Income	4.7%	7.6%	11.0%	9.3%	20.2%	8.2%	6.3%	5.0%
Irregular Gifts Received								
211.Irregular Cash Gifts	11.2%	28.1%	13.8%	39.1%	17.2%	17.6%	15.9%	12.1%
212.Home Produce - Received	12.3%	13.7%	20.5%	29.1%	45.6%	18.6%	15.0%	12.1%
213.Bought Goods - Received	9.6%	14.1%	28.1%	17.7%	44.9%	15.3%	12.5%	10.2%
Total Irregular Gifts	8.1%	17.5%	13.6%	23.6%	22.4%	13.4%	11.1%	8.8%
Other Receipts	49.5%	49.3%	44.8%	44.4%	100.0%	63.6%	130.4%	61.1%
Imputed Rent	4.0%	6.9%	6.6%	9.5%	19.5%	5.7%	5.8%	4.4%

4.3 Non-Sampling Errors

As discussed above, non-sampling errors refer to all other errors which can take place during the course of the survey, which impact on the accuracy of survey results.

Unlike the sampling error, it is very difficult to measure the magnitude of the non-sampling error, and as such, users are often left with information on the types of errors which can go wrong and the likelihood of such errors occurring within the survey, and to what extent. A brief explanation below provides this information for each of the key types of non-sampling error identified in the Tonga 2009 HIES.

Selection Bias

The sample selection methodology was briefly outlined in the introduction of this report. The sampling procedure adopted for the survey in all island divisions was a commonly used two-stage approach which involved the selection of census blocks for the first stage and a fixed number of households at the second stage. Where some selection bias was expected to be introduced, was through the removal of remote areas from the sample frame due to the high costs and difficulties of covering these areas. These areas only represented about 3.5 per cent of the total population for Tonga, so the impact of their removal was considered very minimal.

Non-response Bias

Non-response Bias is the bias generated in estimates as a result of selected households not responding to the survey for a variety of reasons. Without knowing information about the non-responding households, it is difficult to determine the extent of the bias generated by non-response. What can be said however, is that the higher the response rates, the lower the bias.

As already mentioned in the introduction of this report, the response rates for this survey were very high for all island divisions, with the exception of Ongo Niua. For Ongo Niua, the plan was to visit each of the two islands twice, enumerating 24 households on each visit, to each island. Due to transport issues, only one of the islands was visited, and 48 households were enumerated on that visit, impacting on the quality of the representation achieved for this island. Due to the small population of Ongo Niua, this problem was not expected to cause significant problems at the national level.

Stratum	Selected Households	Final Responding Households	Response Rate
Tongatapu Urban	432	416	96.3%
Tongatapu Rural	768	761	99.1%
Vava'u	336	331	98.5%
Ha'apai	240	236	98.3%
'Eua	192	191	99.5%
Ongo Niua	96	48	50.0%
TOTAL	2064	1983	96.1%

Questionnaire Design Flaws

Questionnaire design flaws address any problems with the way questions were worded which will result in an incorrect answer provided by the respondent. Despite every effort to minimize this problem during the design of the respective survey questionnaires and the diaries, problems were still identified during the analysis of the data. Some examples are provided below:

Gifts, Remittances & Donations

Covering the receipt and provision of gifts, the receipt and provision of remittances, and the provision of donations to the church, school and other communities is a very difficult task in a HIES. The extent of these activities in the Kingdom of Tonga is very high, so every effort should be made to address these activities as best as possible. A key problem lies in identifying the best form (questionnaire or diary) for covering such activities. A general rule of thumb for a HIES is that if the activity occurs on a regular basis, and involves the exchange of small monetary amounts or in-kind gifts, the diary is more appropriate. On the other hand, if the activity is less infrequent, and involves larger sums of money, the questionnaire with a recall approach is preferred. It is not always easy to distinguish between the two for the different activities, and as such, both the diary and questionnaire were used to collect this information. Unfortunately it probably wasn't made clear enough as to what types of transactions were being collected from the different sources, and as such some transactions might have been missed, and others counted twice. The effects of this problem are expected to be minimal overall.

Business Expenses Still Recorded

The aim of the survey is to measure "household" expenditure, and as such, any expenditure made by a household for an item or service which was primarily used for a business activity should be excluded. It was not always clear in the questionnaire that this was the case, and as such some business expenses were included. Efforts were made during data cleaning to remove any such business expenses which would impact significantly on survey results.

Water and Electricity Bills

When water and electricity bills are received by households, they stipulate the amount owed by the household, which may not necessarily cover the last month, if there is still an outstanding amount owed from the previous amount. This question should have been expanded more to make it clearer to the respondents what reference period was being referred to so confusion could be minimized.

Respondent Error

Whether intentional or not, respondents in the household will at times provide incorrect information to questions, despite how well the question is worded and asked by the interviewer. This may sometimes be because the respondent may not wish the interviewer to know the true amount and intentionally provide an incorrect answer, which happens at times for income, or they simply misunderstood the question. A common misunderstanding for questions in a HIES is the reference period being referred. Interviewers are trained to reduce the likelihood of this error as much as possible.

Under-Reporting and Incorrect Reporting as a result of Poor Field Work Procedures

The most crucial stage of any survey activity, whether it be a population census or a survey such as a HIES is the fieldwork. It is crucial for intense checking to take place in the field before survey forms are returned to the office for data processing. Unfortunately, it became evident during the cleaning of the data that fieldwork wasn't checked as thoroughly as required, and as such large unexpected values appeared in the questionnaires, and under-reporting took place in the diary.

Data Entry Errors

Data entry errors are always expected, but can be kept to a minimum with double entry taking place. This was adopted for the Tonga HIES and as such very little data errors were detected when random checking took place.

Appendices

1. Additional Expenditure Analysis

2. Additional Income Analysis

3. COICOP categories

4. Tonga Maps

Appendix 1: Additional Expenditure Analysis

Section 1: Average Monthly Household Expenditure by Island Division

Tongatapu				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	604	40	157	801
02.Alcohol&Tobacco	55	1	1	57
03.Clothing&Footwear	38	4		42
04.Housing&Utilities	167	10	2	179
05.Household Furnishings & Equip.	53	10	7	71
06.Medical&Health	7	1	0	9
07.Transport	163	28		191
08.Communication	66	6		71
09.Recreation	22	4		27
10.Education	28	3		31
11.Restaurants&Hotels	28	4	1	33
12.Miscellaneous Gds&Ser.	75	4	0	79
13.Remittances - Received in kind		65		65
Total Consumption Expenditure	1,307	181	167	1,655
Non-Consumption Expenditure				
21.Special Events	106			106
22.Contributions to Church	159			159
23.Contributions to Village	6			6
24.Contributions to School	14	0		14
25.Other Cash Gifts	196			196
26.Cash Remittances	14			14
Total Non-Consumption Expenditure	495	0		495
Other Expenditure				
31.House Construction	27			27
32.Home Loan-Capital Payments	26			26
33.Savings (Credit Union, Life Ins.)	5			5
Total Other Expenditure	58			58
Imputed Rent				
41.Imputed Rent		321		321

Vava'u				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	515	39	271	825
02.Alcohol&Tobacco	64	1	2	67
03.Clothing&Footwear	29	5		34
04.Housing&Utilities	114	3	8	125
05.Household Furnishings & Equip.	45	17	1	63
06.Medical&Health	4	1		5
07.Transport	121	30		151
08.Communication	26	1		27
09.Recreation	23	5	0	28
10.Education	20	1		22
11.Restaurants&Hotels	16	1	3	20
12.Miscellaneous Gds&Ser.	49	6		55
13.Remittances - Received in kind		37		37
Total Consumption Expenditure	1,026	148	285	1,459
Non-Consumption Expenditure				
21.Special Events	102			102
22.Contributions to Church	89			89
23.Contributions to Village	7			7
24.Contributions to School	12	0		12
25.Other Cash Gifts	217			217
26.Cash Remittances	5			5
Total Non-Consumption Expenditure	432	0		433
Other Expenditure				
31.House Construction	4			4
32.Home Loan-Capital Payments	18			18
33.Savings (Credit Union, Life Ins.)	0			0
Total Other Expenditure	23			23
Imputed Rent				
41.Imputed Rent		287		287

Ha'apai				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	313	29	241	584
02.Alcohol&Tobacco	40	1		41
03.Clothing&Footwear	7	1		8
04.Housing&Utilities	84	8		92
05.Household Furnishings & Equip.	22	6	10	39
06.Medical&Health	1	0		1
07.Transport	81	18		99
08.Communication	54	4		58
09.Recreation	6	4		9
10.Education	15	7		21
11.Restaurants&Hotels	5	1	1	7
12.Miscellaneous Gds&Ser.	33	1		34
13.Remittances - Received in kind		44		44
Total Consumption Expenditure	660	123	253	1,036
Non-Consumption Expenditure				
21.Special Events	38			38
22.Contributions to Church	69			69
23.Contributions to Village	5			5
24.Contributions to School	20	0		20
25.Other Cash Gifts	136			136
26.Cash Remittances	7			7
Total Non-Consumption Expenditure	274	0		275
Other Expenditure				
31.House Construction	1			1
32.Home Loan-Capital Payments	4			4
33.Savings (Credit Union, Life Ins.)	2			2
Total Other Expenditure	7			7
Imputed Rent				
41.Imputed Rent		177		177

'Eua				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	368	37	261	666
02.Alcohol&Tobacco	32	2	0	34
03.Clothing&Footwear	16	1		16
04.Housing&Utilities	97	2		100
05.Household Furnishings & Equip.	73	21		95
06.Medical&Health	5			5
07.Transport	67	19		87
08.Communication	45	4		49
09.Recreation	19	12		32
10.Education	22	4		25
11.Restaurants&Hotels	8	1	2	11
12.Miscellaneous Gds&Ser.	39	1		40
13.Remittances - Received in kind		69		69
Total Consumption Expenditure	792	173	263	1,227
Non-Consumption Expenditure				
21.Special Events	131			131
22.Contributions to Church	152			152
23.Contributions to Village	12			12
24.Contributions to School	14	0		14
25.Other Cash Gifts	70			70
26.Cash Remittances	18			18
Total Non-Consumption Expenditure	397	0		397
Other Expenditure				
31.House Construction	49			49
32.Home Loan-Capital Payments	21			21
33.Savings (Credit Union, Life Ins.)	2			2
Total Other Expenditure	72			72
Imputed Rent				
41.Imputed Rent		249		249

Ongo Niua				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	423	32	502	957
02.Alcohol&Tobacco	111	6	0	117
03.Clothing&Footwear	27	1		28
04.Housing&Utilities	29	6		35
05.Household Furnishings & Equip.	65	9		74
06.Medical&Health	0	0		0
07.Transport	79	7		87
08.Communication	37	1		38
09.Recreation	11	3		14
10.Education	8	0		8
11.Restaurants&Hotels	0	1	3	4
12.Miscellaneous Gds&Ser.	45	1		47
13.Remittances - Received in kind		66		66
Total Consumption Expenditure	836	134	506	1,476
Non-Consumption Expenditure				
21.Special Events	35			35
22.Contributions to Church	72			72
23.Contributions to Village	15			15
24.Contributions to School	8	0		8
25.Other Cash Gifts	146			146
26.Cash Remittances	59			59
Total Non-Consumption Expenditure	334	0		334
Other Expenditure				
31.House Construction				
32.Home Loan-Capital Payments				
33.Savings (Credit Union, Life Ins.)	4			4
Total Other Expenditure	4			4
Imputed Rent				
41.Imputed Rent		140		140

Section 2: Average Annual Household Expenditure by Island Division

Tongatapu				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	7,244	479	1,885	9,608
02.Alcohol&Tobacco	666	12	7	685
03.Clothing&Footwear	457	50		507
04.Housing&Utilities	2,003	124	20	2,146
05.Household Furnishings & Equip.	641	124	83	848
06.Medical&Health	85	16	0	102
07.Transport	1,957	332		2,289
08.Communication	788	69		857
09.Recreation	268	51		319
10.Education	339	37		376
11.Restaurants&Hotels	338	52	9	400
12.Miscellaneous Gds&Ser.	903	43	0	946
13.Remittances - Received in kind		778		778
Total Consumption Expenditure	15,689	2,167	2,004	19,860
Non-Consumption Expenditure				
21.Special Events	1,273			1,273
22.Contributions to Church	1,906			1,906
23.Contributions to Village	71			71
24.Contributions to School	164	5		168
25.Other Cash Gifts	2,353			2,353
26.Cash Remittances	171			171
Total Non-Consumption Expenditure	5,937	5		5,942
Other Expenditure				
31.House Construction	326			326
32.Home Loan-Capital Payments	310			310
33.Savings (Credit Union, Life Ins.)	59			59
Total Other Expenditure	695			695
Imputed Rent				
41.Imputed Rent		3,856		3,856

Vava'u				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	6,180	470	3,252	9,902
02.Alcohol&Tobacco	769	12	20	801
03.Clothing&Footwear	345	65		410
04.Housing&Utilities	1,373	40	92	1,506
05.Household Furnishings & Equip.	537	207	13	756
06.Medical&Health	45	13		58
07.Transport	1,451	356		1,807
08.Communication	309	9		318
09.Recreation	271	66	2	339
10.Education	246	17		263
11.Restaurants&Hotels	191	11	36	238
12.Miscellaneous Gds&Ser.	593	67		660
13.Remittances - Received in kind		448		448
Total Consumption Expenditure	12,310	1,781	3,414	17,505
Non-Consumption Expenditure				
21.Special Events	1,226			1,226
22.Contributions to Church	1,073			1,073
23.Contributions to Village	79			79
24.Contributions to School	145	2		148
25.Other Cash Gifts	2,602			2,602
26.Cash Remittances	64			64
Total Non-Consumption Expenditure	5,189	2		5,191
Other Expenditure				
31.House Construction	51			51
32.Home Loan-Capital Payments	219			219
33.Savings (Credit Union, Life Ins.)	5			5
Total Other Expenditure	275			275
Imputed Rent				
41.Imputed Rent		3,448		3,448

Ha'apai

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	3,759	353	2,894	7,005
02.Alcohol&Tobacco	485	6		491
03.Clothing&Footwear	86	14		99
04.Housing&Utilities	1,007	93		1,100
05.Household Furnishings & Equip.	269	76	122	466
06.Medical&Health	8	3		12
07.Transport	966	221		1,188
08.Communication	643	48		691
09.Recreation	67	47		113
10.Education	177	79		256
11.Restaurants&Hotels	58	11	15	85
12.Miscellaneous Gds&Ser.	398	7		405
13.Remittances - Received in kind		522		522
Total Consumption Expenditure	7,923	1,480	3,031	12,434
Non-Consumption Expenditure				
21.Special Events	454			454
22.Contributions to Church	829			829
23.Contributions to Village	58			58
24.Contributions to School	239	5		243
25.Other Cash Gifts	1,633			1,633
26.Cash Remittances	80			80
Total Non-Consumption Expenditure	3,293	5		3,298
Other Expenditure				
31.House Construction	10			10
32.Home Loan-Capital Payments	51			51
33.Savings (Credit Union, Life Ins.)	25			25
Total Other Expenditure	86			86
Imputed Rent				
41.Imputed Rent		2,129		2,129

'Eua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	4,417	439	3,130	7,986
02.Alcohol&Tobacco	389	19	1	409
03.Clothing&Footwear	187	7		193
04.Housing&Utilities	1,170	29		1,198
05.Household Furnishings & Equip.	879	257		1,136
06.Medical&Health	59			59
07.Transport	809	233		1,042
08.Communication	538	46		585
09.Recreation	232	148		380
10.Education	259	43		302
11.Restaurants&Hotels	95	8	28	130
12.Miscellaneous Gds&Ser.	465	17		482
13.Remittances - Received in kind		826		826
Total Consumption Expenditure	9,498	2,071	3,159	14,729
Non-Consumption Expenditure				
21.Special Events	1,573			1,573
22.Contributions to Church	1,822			1,822
23.Contributions to Village	147			147
24.Contributions to School	170	0		170
25.Other Cash Gifts	838			838
26.Cash Remittances	212			212
Total Non-Consumption Expenditure	4,762	0		4,763
Other Expenditure				
31.House Construction	592			592
32.Home Loan-Capital Payments	250			250
33.Savings (Credit Union, Life Ins.)	26			26
Total Other Expenditure	868			868
Imputed Rent				
41.Imputed Rent		2,984		2,984

Ongo Niua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	5,077	388	6,024	11,489
02.Alcohol&Tobacco	1,327	68	4	1,399
03.Clothing&Footwear	326	9		335
04.Housing&Utilities	343	78		420
05.Household Furnishings & Equip.	786	105		891
06.Medical&Health	1	5		6
07.Transport	954	87		1,041
08.Communication	448	11		459
09.Recreation	132	40		172
10.Education	92	4		96
11.Restaurants&Hotels	5	8	39	53
12.Miscellaneous Gds&Ser.	544	17		560
13.Remittances - Received in kind		789		789
Total Consumption Expenditure	10,035	1,610	6,067	17,711
Non-Consumption Expenditure				
21.Special Events	416			416
22.Contributions to Church	864			864
23.Contributions to Village	183			183
24.Contributions to School	90	0		90
25.Other Cash Gifts	1,747			1,747
26.Cash Remittances	709			709
Total Non-Consumption Expenditure	4,009	0		4,009
Other Expenditure				
31.House Construction				
32.Home Loan-Capital Payments				
33.Savings (Credit Union, Life Ins.)	51			51
Total Other Expenditure	51			51
Imputed Rent				
41.Imputed Rent		1,683		1,683

Section 3: Average Annual Per Capita Expenditure by Island Division

Tongatapu				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	1,218	81	317	1,616
02.Alcohol&Tobacco	112	2	1	115
03.Clothing&Footwear	77	8		85
04.Housing&Utilities	337	21	3	361
05.Household Furnishings & Equip.	108	21	14	143
06.Medical&Health	14	3	0	17
07.Transport	329	56		385
08.Communication	133	12		144
09.Recreation	45	9		54
10.Education	57	6		63
11.Restaurants&Hotels	57	9	1	67
12.Miscellaneous Gds&Ser.	152	7	0	159
13.Remittances - Received in kind		131		131
Total Consumption Expenditure	2,639	364	337	3,340
Non-Consumption Expenditure				
21.Special Events	214			214
22.Contributions to Church	320			320
23.Contributions to Village	12			12
24.Contributions to School	28	1		28
25.Other Cash Gifts	396			396
26.Cash Remittances	29			29
Total Non-Consumption Expenditure	999	1		999
Other Expenditure				
31.House Construction	55			55
32.Home Loan-Capital Payments	52			52
33.Savings (Credit Union, Life Ins.)	10			10
Total Other Expenditure	117			117
Imputed Rent				
41.Imputed Rent		649		649
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Vava'u				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	1,171	89	616	1,876
02.Alcohol&Tobacco	146	2	4	152
03.Clothing&Footwear	65	12		78
04.Housing&Utilities	260	8	17	285
05.Household Furnishings & Equip.	102	39	2	143
06.Medical&Health	9	2		11
07.Transport	275	67		342
08.Communication	59	2		60
09.Recreation	51	12	0	64
10.Education	47	3		50
11.Restaurants&Hotels	36	2	7	45
12.Miscellaneous Gds&Ser.	112	13		125
13.Remittances - Received in kind		85		85
Total Consumption Expenditure	2,332	337	647	3,316
Non-Consumption Expenditure				
21.Special Events	232			232
22.Contributions to Church	203			203
23.Contributions to Village	15			15
24.Contributions to School	28	0		28
25.Other Cash Gifts	493			493
26.Cash Remittances	12			12
Total Non-Consumption Expenditure	983	0		983
Other Expenditure				
31.House Construction	10			10
32.Home Loan-Capital Payments	42			42
33.Savings (Credit Union, Life Ins.)	1			1
Total Other Expenditure	52			52
Imputed Rent				
41.Imputed Rent		653		653
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Ha'apai				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	685	64	527	1,277
02.Alcohol&Tobacco	88	1		90
03.Clothing&Footwear	16	2		18
04.Housing&Utilities	184	17		200
05.Household Furnishings & Equip.	49	14	22	85
06.Medical&Health	1	1		2
07.Transport	176	40		216
08.Communication	117	9		126
09.Recreation	12	9		21
10.Education	32	14		47
11.Restaurants&Hotels	11	2	3	15
12.Miscellaneous Gds&Ser.	72	1		74
13.Remittances - Received in kind		95		95
Total Consumption Expenditure	1,444	270	552	2,266
Non-Consumption Expenditure				
21.Special Events	83			83
22.Contributions to Church	151			151
23.Contributions to Village	11			11
24.Contributions to School	44	1		44
25.Other Cash Gifts	298			298
26.Cash Remittances	15			15
Total Non-Consumption Expenditure	600	1		601
Other Expenditure				
31.House Construction	2			2
32.Home Loan-Capital Payments	9			9
33.Savings (Credit Union, Life Ins.)	5			5
Total Other Expenditure	16			16
Imputed Rent				
41.Imputed Rent		388		388

'Eua				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	777	77	550	1,404
02.Alcohol&Tobacco	68	3	0	72
03.Clothing&Footwear	33	1		34
04.Housing&Utilities	206	5		211
05.Household Furnishings & Equip.	154	45		200
06.Medical&Health	10			10
07.Transport	142	41		183
08.Communication	95	8		103
09.Recreation	41	26		67
10.Education	45	8		53
11.Restaurants&Hotels	17	1	5	23
12.Miscellaneous Gds&Ser.	82	3		85
13.Remittances - Received in kind		145		145
Total Consumption Expenditure	1,670	364	555	2,589
Non-Consumption Expenditure				
21.Special Events	277			277
22.Contributions to Church	320			320
23.Contributions to Village	26			26
24.Contributions to School	30	0		30
25.Other Cash Gifts	147			147
26.Cash Remittances	37			37
Total Non-Consumption Expenditure	837	0		837
Other Expenditure				
31.House Construction	104			104
32.Home Loan-Capital Payments	44			44
33.Savings (Credit Union, Life Ins.)	5			5
Total Other Expenditure	153			153
Imputed Rent				
41.Imputed Rent		525		525

Ongo Niua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	1,096	84	1,301	2,481
02.Alcohol&Tobacco	287	15	1	302
03.Clothing&Footwear	70	2		72
04.Housing&Utilities	74	17		91
05.Household Furnishings & Equip.	170	23		192
06.Medical&Health	0	1		1
07.Transport	206	19		225
08.Communication	97	2		99
09.Recreation	29	9		37
10.Education	20	1		21
11.Restaurants&Hotels	1	2	8	11
12.Miscellaneous Gds&Ser.	117	4		121
13.Remittances - Received in kind		170		170
Total Consumption Expenditure	2,167	348	1,310	3,824
Non-Consumption Expenditure				
21.Special Events	90			90
22.Contributions to Church	187			187
23.Contributions to Village	39			39
24.Contributions to School	19	0		19
25.Other Cash Gifts	377			377
26.Cash Remittances	153			153
Total Non-Consumption Expenditure	866	0		866
Other Expenditure				
31.House Construction				
32.Home Loan-Capital Payments				
33.Savings (Credit Union, Life Ins.)	11			11
Total Other Expenditure	11			11
Imputed Rent				
41.Imputed Rent		363		363

Section 4: Total Annual Household Expenditure by Island Division ('000s)

Tongatapu				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	89,444	5,914	23,277	118,636
02.Alcohol&Tobacco	8,220	149	89	8,459
03.Clothing&Footwear	5,643	615		6,258
04.Housing&Utilities	24,732	1,527	242	26,501
05.Household Furnishings & Equip.	7,920	1,529	1,027	10,476
06.Medical&Health	1,054	203	4	1,261
07.Transport	24,160	4,101		28,261
08.Communication	9,733	847		10,580
09.Recreation	3,305	631		3,936
10.Education	4,183	457		4,640
11.Restaurants&Hotels	4,178	648	108	4,933
12.Miscellaneous Gds&Ser.	11,149	527	1	11,677
13.Remittances - Received in kind		9,610		9,610
Total Consumption Expenditure	193,722	26,759	24,748	245,229
Non-Consumption Expenditure				
21.Special Events	15,714			15,714
22.Contributions to Church	23,529			23,529
23.Contributions to Village	876			876
24.Contributions to School	2,019	61		2,080
25.Other Cash Gifts	29,057			29,057
26.Cash Remittances	2,113			2,113
Total Non-Consumption Expenditure	73,307	61		73,368
Other Expenditure				
31.House Construction	4,029			4,029
32.Home Loan-Capital Payments	3,830			3,830
33.Savings (Credit Union, Life Ins.)	729			729
Total Other Expenditure	8,588			8,588
Imputed Rent				
41.Imputed Rent		47,612		47,612
<hr/>				
Vava'u				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	18,088	1,376	9,518	28,982
02.Alcohol&Tobacco	2,252	34	59	2,345
03.Clothing&Footwear	1,009	191		1,200
04.Housing&Utilities	4,019	118	270	4,407
05.Household Furnishings & Equip.	1,571	604	38	2,213
06.Medical&Health	132	38		170
07.Transport	4,246	1,043		5,288
08.Communication	905	27		932
09.Recreation	795	192	5	991
10.Education	720	49		769
11.Restaurants&Hotels	560	33	104	697
12.Miscellaneous Gds&Ser.	1,735	195		1,931
13.Remittances - Received in kind		1,311		1,311
Total Consumption Expenditure	36,031	5,213	9,994	51,237
Non-Consumption Expenditure				
21.Special Events	3,590			3,590
22.Contributions to Church	3,139			3,139
23.Contributions to Village	231			231
24.Contributions to School	425	7		432
25.Other Cash Gifts	7,616			7,616
26.Cash Remittances	187			187
Total Non-Consumption Expenditure	15,188	7		15,195
Other Expenditure				
31.House Construction	149			149
32.Home Loan-Capital Payments	641			641
33.Savings (Credit Union, Life Ins.)	15			15
Total Other Expenditure	806			806
Imputed Rent				
41.Imputed Rent		10,093		10,093

Ha'apai

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	5,089	478	3,919	9,485
02.Alcohol&Tobacco	657	8		665
03.Clothing&Footwear	116	18		135
04.Housing&Utilities	1,364	126		1,489
05.Household Furnishings & Equip.	364	103	165	631
06.Medical&Health	11	5		16
07.Transport	1,308	300		1,608
08.Communication	871	64		935
09.Recreation	90	63		154
10.Education	240	106		346
11.Restaurants&Hotels	79	16	21	115
12.Miscellaneous Gds&Ser.	539	10		548
13.Remittances - Received in kind		707		707
Total Consumption Expenditure	10,728	2,003	4,104	16,835
Non-Consumption Expenditure				
21.Special Events	615			615
22.Contributions to Church	1,123			1,123
23.Contributions to Village	79			79
24.Contributions to School	323	6		329
25.Other Cash Gifts	2,211			2,211
26.Cash Remittances	108			108
Total Non-Consumption Expenditure	4,459	6		4,465
Other Expenditure				
31.House Construction	14			14
32.Home Loan-Capital Payments	69			69
33.Savings (Credit Union, Life Ins.)	34			34
Total Other Expenditure	117			117
Imputed Rent				
41.Imputed Rent		2,882		2,882

'Eua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	4,099	407	2,905	7,411
02.Alcohol&Tobacco	361	17	1	379
03.Clothing&Footwear	173	6		179
04.Housing&Utilities	1,086	26		1,112
05.Household Furnishings & Equip.	815	238		1,054
06.Medical&Health	55	-		55
07.Transport	751	216		967
08.Communication	499	43		543
09.Recreation	215	138		353
10.Education	240	40		280
11.Restaurants&Hotels	88	7	26	121
12.Miscellaneous Gds&Ser.	431	16		447
13.Remittances - Received in kind		767		767
Total Consumption Expenditure	8,814	1,922	2,932	13,668
Non-Consumption Expenditure				
21.Special Events	1,460			1,460
22.Contributions to Church	1,691			1,691
23.Contributions to Village	137			137
24.Contributions to School	158	0		158
25.Other Cash Gifts	778			778
26.Cash Remittances	197			197
Total Non-Consumption Expenditure	4,419	0		4,420
Other Expenditure				
31.House Construction	550			550
32.Home Loan-Capital Payments	232			232
33.Savings (Credit Union, Life Ins.)	24			24
Total Other Expenditure	806			806
Imputed Rent				
41.Imputed Rent		2,769		2,769

Ongo Niua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	1,736	133	2,060	3,929
02.Alcohol&Tobacco	454	23	1	479
03.Clothing&Footwear	112	3		115
04.Housing&Utilities	117	27		144
05.Household Furnishings & Equip.	269	36		305
06.Medical&Health	0	2		2
07.Transport	326	30		356
08.Communication	153	4		157
09.Recreation	45	14		59
10.Education	32	1		33
11.Restaurants&Hotels	2	3	13	18
12.Miscellaneous Gds&Ser.	186	6		192
13.Remittances - Received in kind		270		270
Total Consumption Expenditure	3,432	550	2,075	6,057
Non-Consumption Expenditure				
21.Special Events	142			142
22.Contributions to Church	296			296
23.Contributions to Village	62			62
24.Contributions to School	31	0		31
25.Other Cash Gifts	598			598
26.Cash Remittances	242			242
Total Non-Consumption Expenditure	1,371	0		1,371
Other Expenditure				
31.House Construction				
32.Home Loan-Capital Payments				
33.Savings (Credit Union, Life Ins.)	17			17
Total Other Expenditure	17			17
Imputed Rent				
41.Imputed Rent		575		575

Section 5: Distribution of Expenditure by Island Division (%)

Tongatapu				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	46.2	22.1	94.1	48.4
02.Alcohol&Tobacco	4.2	0.6	0.4	3.4
03.Clothing&Footwear	2.9	2.3	0.0	2.6
04.Housing&Utilities	12.8	5.7	1.0	10.8
05.Household Furnishings & Equip.	4.1	5.7	4.1	4.3
06.Medical&Health	0.5	0.8	0.0	0.5
07.Transport	12.5	15.3	0.0	11.5
08.Communication	5.0	3.2	0.0	4.3
09.Recreation	1.7	2.4	0.0	1.6
10.Education	2.2	1.7	0.0	1.9
11.Restaurants&Hotels	2.2	2.4	0.4	2.0
12.Miscellaneous Gds&Ser.	5.8	2.0	0.0	4.8
13.Remittances - Received in kind	0.0	35.9	0.0	3.9
Total Consumption Expenditure	100.0	100.0	100.0	100.0
Non-Consumption Expenditure				
21.Special Events	21.4			21.4
22.Contributions to Church	32.1			32.1
23.Contributions to Village	1.2			1.2
24.Contributions to School	2.8	100.0		2.8
25.Other Cash Gifts	39.6			39.6
26.Cash Remittances	2.9			2.9
Total Non-Consumption Expenditure	100.0	100.0		100.0
Other Expenditure				
31.House Construction	46.9			46.9
32.Home Loan-Capital Payments	44.6			44.6
33.Savings (Credit Union, Life Ins.)	8.5			8.5
Total Other Expenditure	100.0			100.0
Imputed Rent				
41.Imputed Rent		100.0		100.0

Vava'u				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	50.2	26.4	95.2	56.6
02.Alcohol&Tobacco	6.2	0.7	0.6	4.6
03.Clothing&Footwear	2.8	3.7	0.0	2.3
04.Housing&Utilities	11.2	2.3	2.7	8.6
05.Household Furnishings & Equip.	4.4	11.6	0.4	4.3
06.Medical&Health	0.4	0.7	0.0	0.3
07.Transport	11.8	20.0	0.0	10.3
08.Communication	2.5	0.5	0.0	1.8
09.Recreation	2.2	3.7	0.0	1.9
10.Education	2.0	0.9	0.0	1.5
11.Restaurants&Hotels	1.6	0.6	1.0	1.4
12.Miscellaneous Gds&Ser.	4.8	3.7	0.0	3.8
13.Remittances - Received in kind	0.0	25.1	0.0	2.6
Total Consumption Expenditure	100.0	100.0	100.0	100.0
Non-Consumption Expenditure				
21.Special Events	23.6			23.6
22.Contributions to Church	20.7			20.7
23.Contributions to Village	1.5			1.5
24.Contributions to School	2.8	100.0		2.8
25.Other Cash Gifts	50.1			50.1
26.Cash Remittances	1.2			1.2
Total Non-Consumption Expenditure	100.0	100.0		100.0
Other Expenditure				
31.House Construction	18.5			18.5
32.Home Loan-Capital Payments	79.6			79.6
33.Savings (Credit Union, Life Ins.)	1.8			1.8
Total Other Expenditure	100.0			100.0
Imputed Rent				
41.Imputed Rent		100.0		100.0

Ha'apai				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	47.4	23.8	95.5	56.3
02.Alcohol&Tobacco	6.1	0.4	0.0	4.0
03.Clothing&Footwear	1.1	0.9	0.0	0.8
04.Housing&Utilities	12.7	6.3	0.0	8.8
05.Household Furnishings & Equip.	3.4	5.1	4.0	3.7
06.Medical&Health	0.1	0.2	0.0	0.1
07.Transport	12.2	15.0	0.0	9.6
08.Communication	8.1	3.2	0.0	5.6
09.Recreation	0.8	3.2	0.0	0.9
10.Education	2.2	5.3	0.0	2.1
11.Restaurants&Hotels	0.7	0.8	0.5	0.7
12.Miscellaneous Gds&Ser.	5.0	0.5	0.0	3.3
13.Remittances - Received in kind	0.0	35.3	0.0	4.2
Total Consumption Expenditure	100.0	100.0	100.0	100.0
Non-Consumption Expenditure				
21.Special Events	13.8			13.8
22.Contributions to Church	25.2			25.1
23.Contributions to Village	1.8			1.8
24.Contributions to School	7.3	100.0		7.4
25.Other Cash Gifts	49.6			49.5
26.Cash Remittances	2.4			2.4
Total Non-Consumption Expenditure	100.0	100.0		100.0
Other Expenditure				
31.House Construction	11.8			11.8
32.Home Loan-Capital Payments	58.9			58.9
33.Savings (Credit Union, Life Ins.)	29.3			29.3
Total Other Expenditure	100.0			100.0
Imputed Rent				
41.Imputed Rent		100.0		100.0

'Eua				
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	46.5	21.2	99.1	54.2
02.Alcohol&Tobacco	4.1	0.9	0.0	2.8
03.Clothing&Footwear	2.0	0.3	0.0	1.3
04.Housing&Utilities	12.3	1.4	0.0	8.1
05.Household Furnishings & Equip.	9.3	12.4	0.0	7.7
06.Medical&Health	0.6	0.0	0.0	0.4
07.Transport	8.5	11.2	0.0	7.1
08.Communication	5.7	2.2	0.0	4.0
09.Recreation	2.4	7.2	0.0	2.6
10.Education	2.7	2.1	0.0	2.0
11.Restaurants&Hotels	1.0	0.4	0.9	0.9
12.Miscellaneous Gds&Ser.	4.9	0.8	0.0	3.3
13.Remittances - Received in kind	0.0	39.9	0.0	5.6
Total Consumption Expenditure	100.0	100.0	100.0	100.0
Non-Consumption Expenditure				
21.Special Events	33.0			33.0
22.Contributions to Church	38.3			38.2
23.Contributions to Village	3.1			3.1
24.Contributions to School	3.6	100.0		3.6
25.Other Cash Gifts	17.6			17.6
26.Cash Remittances	4.5			4.4
Total Non-Consumption Expenditure	100.0	100.0		100.0
Other Expenditure				
31.House Construction	68.2			68.2
32.Home Loan-Capital Payments	28.8			28.8
33.Savings (Credit Union, Life Ins.)	3.0			3.0
Total Other Expenditure	100.0			100.0
Imputed Rent				
41.Imputed Rent		100.0		100.0

Ongo Niua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.	TOTAL
Consumption Expenditure				
01.Food	50.6	24.1	99.3	64.9
02.Alcohol&Tobacco	13.2	4.2	0.1	7.9
03.Clothing&Footwear	3.2	0.5	0.0	1.9
04.Housing&Utilities	3.4	4.8	0.0	2.4
05.Household Furnishings & Equip.	7.8	6.5	0.0	5.0
06.Medical&Health	0.0	0.3	0.0	0.0
07.Transport	9.5	5.4	0.0	5.9
08.Communication	4.5	0.7	0.0	2.6
09.Recreation	1.3	2.5	0.0	1.0
10.Education	0.9	0.2	0.0	0.5
11.Restaurants&Hotels	0.1	0.5	0.6	0.3
12.Miscellaneous Gds&Ser.	5.4	1.0	0.0	3.2
13.Remittances - Received in kind	0.0	49.0	0.0	4.5
Total Consumption Expenditure	100.0	100.0	100.0	100.0
Non-Consumption Expenditure				
21.Special Events	10.4			10.4
22.Contributions to Church	21.6			21.6
23.Contributions to Village	4.6			4.6
24.Contributions to School	2.2	100.0		2.2
25.Other Cash Gifts	43.6			43.6
26.Cash Remittances	17.7			17.7
Total Non-Consumption Expenditure	100.0	100.0		100.0
Other Expenditure				
31.House Construction				-
32.Home Loan-Capital Payments				-
33.Savings (Credit Union, Life Ins.)	100.0			100.0
Total Other Expenditure	100.0			100.0
Imputed Rent				
41.Imputed Rent		100.0		100.0

Section 6: Percentage of Households with Respective Expenditure by Island Division

Tongatapu			
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.
Consumption Expenditure			
01.Food	100	24	74
02.Alcohol&Tobacco	53	2	0
03.Clothing&Footwear	67	9	
04.Housing&Utilities	93	8	4
05.Household Furnishings & Equip.	84	10	1
06.Medical&Health	25	3	0
07.Transport	74	15	
08.Communication	82	7	
09.Recreation	67	10	
10.Education	48	6	
11.Restaurants&Hotels	42	6	2
12.Miscellaneous Gds&Ser.	91	4	0
13.Remittances - Received in kind		31	
Non-Consumption Expenditure			
21.Special Events	63		
22.Contributions to Church	89		
23.Contributions to Village	32		
24.Contributions to School	52	3	
25.Other Cash Gifts	50		
26.Cash Remittances	13		
Other Expenditure			
31.House Construction	4		
32.Home Loan-Capital Payments	6		
33.Savings (Credit Union, Life Ins.)	8		
Imputed Rent			
41.Imputed Rent		97	
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Vava'u			
EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.
Consumption Expenditure			
01.Food	100	27	98
02.Alcohol&Tobacco	63	4	1
03.Clothing&Footwear	77	5	
04.Housing&Utilities	96	4	17
05.Household Furnishings & Equip.	84	26	1
06.Medical&Health	26	5	
07.Transport	62	18	
08.Communication	50	4	
09.Recreation	78	16	0
10.Education	54	5	
11.Restaurants&Hotels	44	4	12
12.Miscellaneous Gds&Ser.	88	3	
13.Remittances - Received in kind		28	
Non-Consumption Expenditure			
21.Special Events	87		
22.Contributions to Church	91		
23.Contributions to Village	62		
24.Contributions to School	71	4	
25.Other Cash Gifts	61		
26.Cash Remittances	13		
Other Expenditure			
31.House Construction	2		
32.Home Loan-Capital Payments	6		
33.Savings (Credit Union, Life Ins.)	9		
Imputed Rent			
41.Imputed Rent		98	
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Ha'apai

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.
Consumption Expenditure			
01.Food	100	29	100
02.Alcohol&Tobacco	63	2	
03.Clothing&Footwear	41	11	
04.Housing&Utilities	93	6	
05.Household Furnishings & Equip.	67	6	5
06.Medical&Health	6	0	
07.Transport	38	12	
08.Communication	84	6	
09.Recreation	42	15	
10.Education	36	16	
11.Restaurants&Hotels	20	3	8
12.Miscellaneous Gds&Ser.	88	2	
13.Remittances - Received in kind		46	
Non-Consumption Expenditure			
21.Special Events	72		
22.Contributions to Church	79		
23.Contributions to Village	61		
24.Contributions to School	56	8	
25.Other Cash Gifts	75		
26.Cash Remittances	11		
Other Expenditure			
31.House Construction	2		
32.Home Loan-Capital Payments	1		
33.Savings (Credit Union, Life Ins.)	1		
Imputed Rent			
41.Imputed Rent		100	

'Eua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.
Consumption Expenditure			
01.Food	100	40	98
02.Alcohol&Tobacco	43	2	1
03.Clothing&Footwear	70	8	
04.Housing&Utilities	98	3	
05.Household Furnishings & Equip.	84	25	
06.Medical&Health	17		
07.Transport	76	19	
08.Communication	94	10	
09.Recreation	74	22	
10.Education	58	11	
11.Restaurants&Hotels	24	3	10
12.Miscellaneous Gds&Ser.	83	4	
13.Remittances - Received in kind		30	
Non-Consumption Expenditure			
21.Special Events	74		
22.Contributions to Church	94		
23.Contributions to Village	85		
24.Contributions to School	75	1	
25.Other Cash Gifts	48		
26.Cash Remittances	25		
Other Expenditure			
31.House Construction	4		
32.Home Loan-Capital Payments	9		
33.Savings (Credit Union, Life Ins.)	26		
Imputed Rent			
41.Imputed Rent		100	

Ongo Niua

EXPENDITURE TYPE	PURCHASES	GIFTS	HOME PROD.
Consumption Expenditure			
01.Food	100	50	100
02.Alcohol&Tobacco	77	6	2
03.Clothing&Footwear	69	13	
04.Housing&Utilities	81	10	
05.Household Furnishings & Equip.	85	27	
06.Medical&Health	2	6	
07.Transport	44	23	
08.Communication	69	4	
09.Recreation	63	10	
10.Education	65	8	
11.Restaurants&Hotels	2	4	17
12.Miscellaneous Gds&Ser.	90	6	
13.Remittances - Received in kind		31	
Non-Consumption Expenditure			
21.Special Events	63		
22.Contributions to Church	98		
23.Contributions to Village	48		
24.Contributions to School	65	2	
25.Other Cash Gifts	90		
26.Cash Remittances	52		
Other Expenditure			
31.House Construction			
32.Home Loan-Capital Payments			
33.Savings (Credit Union, Life Ins.)	8		
Imputed Rent			
41.Imputed Rent		100	

Appendix 2: Additional Income Analysis

Section 1: Average Monthly Household Income by Island Division

Tongatapu

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	775	26	801
12.Wage & Salary - Previous Job	31		31
13.Wage & Salary - Casual Jobs	15	3	18
14.Business Income	68	13	80
15.Subsistence Income	224		224
16.Home Produce Consumed		138	138
Property Income			
17.Property Income	28		28
Transfer Income			
18.Welfare, NPF & Child Support	15		15
19.Remittances	348	65	413
Total Household Income	1,504	245	1,749
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	206		206
22.Home Produce - Received		29	29
23.Bought Goods - Received		116	116
Total Irregular Gifts	206	145	350
Other Receipts	64		64
Imputed Rent		321	321

Vava'u

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	448	4	452
12.Wage & Salary - Previous Job	5		5
13.Wage & Salary - Casual Jobs	38	4	43
14.Business Income	32	6	38
15.Subsistence Income	495		495
16.Home Produce Consumed		251	251
Property Income			
17.Property Income	17		17
Transfer Income			
18.Welfare, NPF & Child Support	20		20
19.Remittances	184	37	221
Total Household Income	1,239	303	1,542
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	130		130
22.Home Produce - Received		33	33
23.Bought Goods - Received		112	112
Total Irregular Gifts	130	145	275
Other Receipts	14		14
Imputed Rent		287	287

Ha'apai

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	249	6	255
12.Wage & Salary - Previous Job	9		9
13.Wage & Salary - Casual Jobs	36	3	39
14.Business Income	35	1	37
15.Subsistence Income	611		611
16.Home Produce Consumed		224	224
Property Income			
17.Property Income	3		3
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	93	44	136
Total Household Income	1,037	277	1,315
Irregular Gifts Received			
21.Irregular Cash Gifts	298		298
22.Home Produce - Received		28	28
23.Bought Goods - Received		80	80
Total Irregular Gifts	298	108	407
Other Receipts	34		34
Imputed Rent		177	177

'Eua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	294	3	297
12.Wage & Salary - Previous Job	33		33
13.Wage & Salary - Casual Jobs	18	3	20
14.Business Income	7	3	10
15.Subsistence Income	450		450
16.Home Produce Consumed		235	235
Property Income			
17.Property Income	22		22
Transfer Income			
18.Welfare, NPF & Child Support	10		10
19.Remittances	148	69	217
Total Household Income	981	313	1,294
Irregular Gifts Received			
21.Irregular Cash Gifts	105		105
22.Home Produce - Received		28	28
23.Bought Goods - Received		104	104
Total Irregular Gifts	105	132	238
Other Receipts	20		20
Imputed Rent		249	249

Ongo Niua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	559	17	576
12.Wage & Salary - Previous Job	19		19
13.Wage & Salary - Casual Jobs	21	14	35
14.Business Income	3	1	4
15.Subsistence Income	303		303
16.Home Produce Consumed		452	452
Property Income			
17.Property Income	20		20
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	172	66	237
Total Household Income	1,097	551	1,647
Irregular Gifts Received			
21.Irregular Cash Gifts	162		162
22.Home Produce - Received		53	53
23.Bought Goods - Received		68	68
Total Irregular Gifts	162	122	283
Other Receipts	28		28
Imputed Rent		140	140

Section 2: Average Annual Household Income by Island Division

Tongatapu

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	9,305	311	9,616
12.Wage & Salary - Previous Job	375		375
13.Wage & Salary - Casual Jobs	175	35	210
14.Business Income	810	151	961
15.Subsistence Income	2,694		2,694
16.Home Produce Consumed		1,659	1,659
Property Income			
17.Property Income	338		338
Transfer Income			
18.Welfare, NPF & Child Support	175		175
19.Remittances	4,180	778	4,959
Total Household Income	18,054	2,934	20,988
Irregular Gifts Received			
21.Irregular Cash Gifts	2,467		2,467
22.Home Produce - Received		345	345
23.Bought Goods - Received		1,394	1,394
Total Irregular Gifts	2,467	1,739	4,206
Other Receipts	767		767
Imputed Rent		3,856	3,856

Vava'u

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	5,376	44	5,419
12.Wage & Salary - Previous Job	61		61
13.Wage & Salary - Casual Jobs	458	53	511
14.Business Income	387	69	456
15.Subsistence Income	5,939		5,939
16.Home Produce Consumed		3,018	3,018
Property Income			
17.Property Income	206		206
Transfer Income			
18.Welfare, NPF & Child Support	237		237
19.Remittances	2,208	448	2,656
Total Household Income	14,872	3,631	18,503
Irregular Gifts Received			
21.Irregular Cash Gifts	1,556		1,556
22.Home Produce - Received		396	396
23.Bought Goods - Received		1,341	1,341
Total Irregular Gifts	1,556	1,738	3,294
Other Receipts	171		171
Imputed Rent		3,448	3,448

Ha'apai

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	2,991	67	3,057
12.Wage & Salary - Previous Job	112		112
13.Wage & Salary - Casual Jobs	436	34	470
14.Business Income	425	15	440
15.Subsistence Income	7,335		7,335
16.Home Produce Consumed		2,691	2,691
Property Income			
17.Property Income	36		36
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	1,115	522	1,637
Total Household Income	12,448	3,329	15,778
Irregular Gifts Received			
21.Irregular Cash Gifts	3,578		3,578
22.Home Produce - Received		340	340
23.Bought Goods - Received		962	962
Total Irregular Gifts	3,578	1,302	4,880
Other Receipts	413		413
Imputed Rent		2,129	2,129

'Eua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	3,529	40	3,570
12.Wage & Salary - Previous Job	390		390
13.Wage & Salary - Casual Jobs	211	32	243
14.Business Income	80	39	119
15.Subsistence Income	5,400		5,400
16.Home Produce Consumed		2,818	2,818
Property Income			
17.Property Income	262		262
Transfer Income			
18.Welfare, NPF & Child Support	123		123
19.Remittances	1,781	826	2,607
Total Household Income	11,776	3,755	15,531
Irregular Gifts Received			
21.Irregular Cash Gifts	1,265		1,265
22.Home Produce - Received		342	342
23.Bought Goods - Received		1,245	1,245
Total Irregular Gifts	1,265	1,587	2,852
Other Receipts	242		242
Imputed Rent		2,984	2,984

Ongo Niua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	6,705	208	6,913
12.Wage & Salary - Previous Job	231		231
13.Wage & Salary - Casual Jobs	254	170	424
14.Business Income	37	13	50
15.Subsistence Income	3,636		3,636
16.Home Produce Consumed		5,428	5,428
Property Income			
17.Property Income	238		238
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	2,059	789	2,849
Total Household Income	13,160	6,608	19,768
Irregular Gifts Received			
21.Irregular Cash Gifts	1,942		1,942
22.Home Produce - Received		639	639
23.Bought Goods - Received		820	820
Total Irregular Gifts	1,942	1,459	3,401
Other Receipts	335		335
Imputed Rent		1,683	1,683

Section 3: Average Annual Per Capita Income by Island Division

Tongatapu

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	1,565	52	1,617
12.Wage & Salary - Previous Job	63		63
13.Wage & Salary - Casual Jobs	30	6	35
14.Business Income	136	25	162
15.Subsistence Income	453		453
16.Home Produce Consumed		279	279
Property Income			
17.Property Income	57		57
Transfer Income			
18.Welfare, NPF & Child Support	30		30
19.Remittances	703	131	834
Total Household Income	3,036	494	3,530
Irregular Gifts Received			
21.Irregular Cash Gifts	415		415
22.Home Produce - Received		58	58
23.Bought Goods - Received		234	234
Total Irregular Gifts	415	292	707
Other Receipts	129		129
Imputed Rent		649	649

Vava'u

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	1,018	8	1,027
12.Wage & Salary - Previous Job	11		11
13.Wage & Salary - Casual Jobs	87	10	97
14.Business Income	73	13	86
15.Subsistence Income	1,125		1,125
16.Home Produce Consumed		572	572
Property Income			
17.Property Income	39		39
Transfer Income			
18.Welfare, NPF & Child Support	45		45
19.Remittances	418	85	503
Total Household Income	2,817	688	3,505
Irregular Gifts Received			
21.Irregular Cash Gifts	295		295
22.Home Produce - Received		75	75
23.Bought Goods - Received		254	254
Total Irregular Gifts	295	329	624
Other Receipts	32		32
Imputed Rent		653	653

Ha'apai

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	545	12	557
12.Wage & Salary - Previous Job	20		20
13.Wage & Salary - Casual Jobs	79	6	86
14.Business Income	77	3	80
15.Subsistence Income	1,337		1,337
16.Home Produce Consumed		490	490
Property Income			
17.Property Income	7		7
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	203	95	298
Total Household Income	2,268	607	2,875
Irregular Gifts Received			
21.Irregular Cash Gifts	652		652
22.Home Produce - Received		62	62
23.Bought Goods - Received		175	175
Total Irregular Gifts	652	237	889
Other Receipts	75		75
Imputed Rent		388	388

'Eua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	620	7	628
12.Wage & Salary - Previous Job	69		69
13.Wage & Salary - Casual Jobs	37	6	43
14.Business Income	14	7	21
15.Subsistence Income	949		949
16.Home Produce Consumed		495	495
Property Income			
17.Property Income	46		46
Transfer Income			
18.Welfare, NPF & Child Support	22		22
19.Remittances	313	145	458
Total Household Income	2,070	660	2,730
Irregular Gifts Received			
21.Irregular Cash Gifts	222		222
22.Home Produce - Received		60	60
23.Bought Goods - Received		219	219
Total Irregular Gifts	222	279	501
Other Receipts	43		43
Imputed Rent		525	525

Ongo Niua

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	1,448	45	1,493
12.Wage & Salary - Previous Job	50		50
13.Wage & Salary - Casual Jobs	55	37	92
14.Business Income	8	3	11
15.Subsistence Income	785		785
16.Home Produce Consumed		1,172	1,172
Property Income			
17.Property Income	51		51
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	445	170	615
<i>Total Household Income</i>	<i>2,841</i>	<i>1,427</i>	<i>4,268</i>
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	419		419
22.Home Produce - Received		138	138
23.Bought Goods - Received		177	177
<i>Total Irregular Gifts</i>	<i>419</i>	<i>315</i>	<i>734</i>
<i>Other Receipts</i>	<i>72</i>		<i>72</i>
<i>Imputed Rent</i>		<i>363</i>	<i>363</i>

Section 4: Total Annual Household Income by Island Division ('000s)

Tongatapu

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	114,900	3,844	118,744
12.Wage & Salary - Previous Job	4,634		4,634
13.Wage & Salary - Casual Jobs	2,166	433	2,599
14.Business Income	10,003	1,861	11,864
15.Subsistence Income	33,264		33,264
16.Home Produce Consumed		20,486	20,486
Property Income			
17.Property Income	4,177		4,177
Transfer Income			
18.Welfare, NPF & Child Support	2,166		2,166
19.Remittances	51,618	9,610	61,228
Total Household Income	222,928	36,234	259,162
Irregular Gifts Received			
21.Irregular Cash Gifts	30,460		30,460
22.Home Produce - Received		4,262	4,262
23.Bought Goods - Received		17,210	17,210
Total Irregular Gifts	30,460	21,472	51,932
Other Receipts	9,473		9,473
Imputed Rent		47,612	47,612

Vava'u

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	15,734	128	15,863
12.Wage & Salary - Previous Job	177		177
13.Wage & Salary - Casual Jobs	1,341	154	1,495
14.Business Income	1,134	201	1,335
15.Subsistence Income	17,384		17,384
16.Home Produce Consumed		8,833	8,833
Property Income			
17.Property Income	604		604
Transfer Income			
18.Welfare, NPF & Child Support	693		693
19.Remittances	6,463	1,311	7,774
Total Household Income	43,530	10,628	54,158
Irregular Gifts Received			
21.Irregular Cash Gifts	4,555		4,555
22.Home Produce - Received		1,160	1,160
23.Bought Goods - Received		3,926	3,926
Total Irregular Gifts	4,555	5,086	9,642
Other Receipts	500		500
Imputed Rent		10,093	10,093

Ha'apai

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	4,049	91	4,140
12.Wage & Salary - Previous Job	151		151
13.Wage & Salary - Casual Jobs	590	46	636
14.Business Income	575	21	596
15.Subsistence Income	9,931		9,931
16.Home Produce Consumed		3,643	3,643
Property Income			
17.Property Income	49		49
Transfer Income			
18.Welfare, NPF & Child Support	-		-
19.Remittances	1,509	707	2,217
Total Household Income	16,855	4,508	21,363
Irregular Gifts Received			
21.Irregular Cash Gifts	4,845		4,845
22.Home Produce - Received		461	461
23.Bought Goods - Received		1,302	1,302
Total Irregular Gifts	4,845	1,763	6,608
Other Receipts	559		559
Imputed Rent		2,882	2,882

'Eua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	3,275	37	3,313
12.Wage & Salary - Previous Job	362		362
13.Wage & Salary - Casual Jobs	195	30	225
14.Business Income	74	36	110
15.Subsistence Income	5,011		5,011
16.Home Produce Consumed		2,615	2,615
Property Income			
17.Property Income	243		243
Transfer Income			
18.Welfare, NPF & Child Support	114		114
19.Remittances	1,652	767	2,419
Total Household Income	10,928	3,485	14,413
Irregular Gifts Received			
21.Irregular Cash Gifts	1,174		1,174
22.Home Produce - Received		317	317
23.Bought Goods - Received		1,156	1,156
Total Irregular Gifts	1,174	1,473	2,647
Other Receipts	225		225
Imputed Rent		2,769	2,769

Ongo Niua

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	2,293	71	2,364
12.Wage & Salary - Previous Job	79		79
13.Wage & Salary - Casual Jobs	87	58	145
14.Business Income	13	4	17
15.Subsistence Income	1,244		1,244
16.Home Produce Consumed		1,856	1,856
Property Income			
17.Property Income	81		81
Transfer Income			
18.Welfare, NPF & Child Support	-		-
19.Remittances	704	270	974
<i>Total Household Income</i>	<i>4,501</i>	<i>2,260</i>	<i>6,761</i>
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	664		664
22.Home Produce - Received		219	219
23.Bought Goods - Received		281	281
<i>Total Irregular Gifts</i>	<i>664</i>	<i>499</i>	<i>1,163</i>
<i>Other Receipts</i>	<i>115</i>		<i>115</i>
<i>Imputed Rent</i>		<i>575</i>	<i>575</i>

Section 5: Distribution of Income by Island Division (%)

Tongatapu

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	52	11	46
12.Wage & Salary - Previous Job	2		2
13.Wage & Salary - Casual Jobs	1	1	1
14.Business Income	4	5	5
15.Subsistence Income	15		13
16.Home Produce Consumed		57	8
Property Income			
17.Property Income	2		2
Transfer Income			
18.Welfare, NPF & Child Support	1		1
19.Remittances	23	27	24
Total Household Income	100	100	100
Irregular Gifts Received			
21.Irregular Cash Gifts	100		59
22.Home Produce - Received		20	8
23.Bought Goods - Received		80	33
Total Irregular Gifts	100	100	100
Other Receipts	100		100
Imputed Rent		100	100

Vava'u

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	36	1	29
12.Wage & Salary - Previous Job	0		0
13.Wage & Salary - Casual Jobs	3	1	3
14.Business Income	3	2	2
15.Subsistence Income	40		32
16.Home Produce Consumed		83	16
Property Income			
17.Property Income	1		1
Transfer Income			
18.Welfare, NPF & Child Support	2		1
19.Remittances	15	12	14
Total Household Income	100	100	100
Irregular Gifts Received			
21.Irregular Cash Gifts	100		47
22.Home Produce - Received		23	12
23.Bought Goods - Received		77	41
Total Irregular Gifts	100	100	100
Other Receipts	100		100
Imputed Rent		100	100

Ha'apai

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	24	2	19
12.Wage & Salary - Previous Job	1		1
13.Wage & Salary - Casual Jobs	3	1	3
14.Business Income	3	0	3
15.Subsistence Income	59		46
16.Home Produce Consumed		81	17
Property Income			
17.Property Income	0		0
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	9	16	10
<i>Total Household Income</i>	100	100	100
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	100		73
22.Home Produce - Received		26	7
23.Bought Goods - Received		74	20
<i>Total Irregular Gifts</i>	100	100	100
<i>Other Receipts</i>	100		100
<i>Imputed Rent</i>		100	100

'Eua

INCOME TYPE	CASH	IN-KIND	TOTAL
<i>Household Income</i>			
Income from Employment			
11.Wage & Salary - Current Job	30	1	23
12.Wage & Salary - Previous Job	3		3
13.Wage & Salary - Casual Jobs	2	1	2
14.Business Income	1	1	1
15.Subsistence Income	46		35
16.Home Produce Consumed		75	18
Property Income			
17.Property Income	2		2
Transfer Income			
18.Welfare, NPF & Child Support	1		1
19.Remittances	15	22	17
<i>Total Household Income</i>	100	100	100
<i>Irregular Gifts Received</i>			
21.Irregular Cash Gifts	100		44
22.Home Produce - Received		22	12
23.Bought Goods - Received		78	44
<i>Total Irregular Gifts</i>	100	100	100
<i>Other Receipts</i>	100		100
<i>Imputed Rent</i>		100	100

Ongo Niua

INCOME TYPE	CASH	IN-KIND	TOTAL
Household Income			
Income from Employment			
11.Wage & Salary - Current Job	51	3	35
12.Wage & Salary - Previous Job	2		1
13.Wage & Salary - Casual Jobs	2	3	2
14.Business Income	0	0	0
15.Subsistence Income	28		18
16.Home Produce Consumed		82	27
Property Income			
17.Property Income	2		1
Transfer Income			
18.Welfare, NPF & Child Support			
19.Remittances	16	12	14
Total Household Income	100	100	100
Irregular Gifts Received			
21.Irregular Cash Gifts	100		57
22.Home Produce - Received		44	19
23.Bought Goods - Received		56	24
Total Irregular Gifts	100	100	100
Other Receipts	100		100
Imputed Rent		100	100

Section 6: Percentage of Households with Respective Income by Island Division

Tongatapu

INCOME TYPE	CASH	IN-KIND
Household Income		
Income from Employment		
111.Wage & Salary - Current Job	59	9
112.Wage & Salary - Previous Job	6	
113.Wage & Salary - Casual Jobs	13	4
114.Business Income	9	6
115.Subsistence Income	26	
116.Home Produce Consumed		71
Property Income		
117.Property Income	4	
Transfer Income		
122.Welfare, NPF & Child Support	2	
123.Remittances	84	31
Irregular Gifts Received		
211.Irregular Cash Gifts	35	
212.Home Produce - Received		26
213.Bought Goods - Received		62
Other Receipts	4	
Imputed Rent		97

Vava'u

INCOME TYPE	CASH	IN-KIND
Household Income		
Income from Employment		
111.Wage & Salary - Current Job	43	6
112.Wage & Salary - Previous Job	2	
113.Wage & Salary - Casual Jobs	42	22
114.Business Income	9	6
115.Subsistence Income	47	
116.Home Produce Consumed		96
Property Income		
117.Property Income	3	
Transfer Income		
122.Welfare, NPF & Child Support	2	
123.Remittances	80	28
Irregular Gifts Received		
211.Irregular Cash Gifts	30	
212.Home Produce - Received		48
213.Bought Goods - Received		81
Other Receipts	3	
Imputed Rent		98

Ha'apai

INCOME TYPE	CASH	IN-KIND
Household Income		
Income from Employment		
111.Wage & Salary - Current Job	37	5
112.Wage & Salary - Previous Job	1	
113.Wage & Salary - Casual Jobs	38	14
114.Business Income	10	4
115.Subsistence Income	68	
116.Home Produce Consumed		98
Property Income		
117.Property Income	3	
Transfer Income		
122.Welfare, NPF & Child Support		
123.Remittances	76	46
Irregular Gifts Received		
211.Irregular Cash Gifts	81	
212.Home Produce - Received		53
213.Bought Goods - Received		76
Other Receipts		
	12	
Imputed Rent		
		100

'Eua

INCOME TYPE	CASH	IN-KIND
Household Income		
Income from Employment		
111.Wage & Salary - Current Job	34	2
112.Wage & Salary - Previous Job	5	
113.Wage & Salary - Casual Jobs	28	8
114.Business Income	3	3
115.Subsistence Income	55	
116.Home Produce Consumed		97
Property Income		
117.Property Income	1	
Transfer Income		
122.Welfare, NPF & Child Support	1	
123.Remittances	60	30
Irregular Gifts Received		
211.Irregular Cash Gifts	32	
212.Home Produce - Received		48
213.Bought Goods - Received		95
Other Receipts		
	7	
Imputed Rent		
		100

Ongo Niua

INCOME TYPE	CASH	IN-KIND
<i>Household Income</i>		
Income from Employment		
111.Wage & Salary - Current Job	58	8
112.Wage & Salary - Previous Job	6	
113.Wage & Salary - Casual Jobs	19	6
114.Business Income	6	4
115.Subsistence Income	60	
116.Home Produce Consumed		100
Property Income		
117.Property Income	4	
Transfer Income		
122.Welfare, NPF & Child Support		
123.Remittances	63	31
<i>Irregular Gifts Received</i>		
211.Irregular Cash Gifts	50	
212.Home Produce - Received		54
213.Bought Goods - Received		100
<i>Other Receipts</i>	2	
<i>Imputed Rent</i>		100

Appendix 3: COICOP Classification - Detailed Structure and Explanatory Notes

1) FOOD AND NON-ALCOHOLIC BEVERAGES

- Food
 - Bread and cereals (ND)
 - Meat (ND)
 - Fish and seafood (ND)
 - Milk, cheese and eggs (ND)
 - Oils and fats (ND)
 - Fruit (ND)
 - Vegetables (ND)
 - Sugar, jam, honey, chocolate and confectionery (ND)
 - Food products n.e.c. (ND)
- Non-alcoholic beverages
 - Coffee, tea and cocoa (ND)
 - Mineral waters, soft drinks, fruit and vegetable juices (ND)

2) ALCOHOLIC BEVERAGES, TOBACCO AND NARCOTICS

- Alcoholic beverages
 - Spirits (ND)
 - Wine (ND)
 - Beer (ND)
- Tobacco
 - Tobacco (ND)
- Narcotics
 - Narcotics (ND)

3) CLOTHING AND FOOTWEAR

- Clothing
 - Clothing materials (SD)
 - Garments (SD)
 - Other articles of clothing and clothing accessories (SD)
 - Cleaning, repair and hire of clothing (S)
- Footwear
 - Shoes and other footwear (SD)
 - Repair and hire of footwear (S)

4) HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS

- Actual rentals for housing
 - Actual rentals paid by tenants (S)
 - Other actual rentals (S)
- Imputed rentals for housing
 - Imputed rentals of owner-occupiers (S)
 - Other imputed rentals (S)
- Maintenance and repair of the dwelling
 - Materials for the maintenance and repair of the dwelling (ND)
 - Services for the maintenance and repair of the dwelling (S)
- Water supply and miscellaneous services relating to the dwelling
 - Water supply (ND)
 - Refuse collection (S)
 - Sewage collection (S)
 - Other services relating to the dwelling n.e.c. (S)
- Electricity, gas and other fuels
 - Electricity (ND)
 - Gas (ND)
 - Liquid fuels (ND)
 - Solid fuels (ND)
 - Heat energy (ND)

5) FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE

- Furniture and furnishings, carpets and other floor coverings
 - Furniture and furnishings (D)
 - Carpets and other floor coverings (D)
 - Repair of furniture, furnishings and floor coverings (S)
- Household textiles
 - Household textiles (SD)
- Household appliances
 - Major household appliances whether electric or not (D)
 - Small electric household appliances (SD)
 - Repair of household appliances (S)
- Glassware, tableware and household utensils
 - Glassware, tableware and household utensils (SD)

- Tools and equipment for house and garden
 - Major tools and equipment (D)
 - Small tools and miscellaneous accessories (SD)
- Goods and services for routine household maintenance
 - Non-durable household goods (ND)
 - Domestic services and household services (S)

6) HEALTH

- Medical products, appliances and equipment
 - Pharmaceutical products (ND)
 - Other medical products (ND)
 - Therapeutic appliances and equipment (D)
- Outpatient services
 - Medical services (S)
 - Dental services (S)
 - Paramedical services (S)
- Hospital services
 - Hospital services (S)

7) TRANSPORT

- Purchase of vehicles
 - Motor cars (D)
 - Motor cycles (D)
 - Bicycles (D)
 - Animal drawn vehicles (D)
- Operation of personal transport equipment
 - Spare parts and accessories for personal transport equipment (SD)
 - Fuels and lubricants for personal transport equipment (ND)
 - Maintenance and repair of personal transport equipment (S)
 - Other services in respect of personal transport equipment (S)
- Transport services
 - Passenger transport by railway (S)
 - Passenger transport by road (S)
 - Passenger transport by air (S)
 - Passenger transport by sea and inland waterway (S)
 - Combined passenger transport (S)
 - Other purchased transport services (S)

8) COMMUNICATION

- Postal services
 - Postal services (S)
- Telephone and telefax equipment
 - Telephone and telefax equipment (D)
- Telephone and telefax services
 - Telephone and telefax services (S)

9) RECREATION AND CULTURE

- Audio-visual, photographic and information processing equipment
 - Equipment for the reception, recording and reproduction of sound and pictures (D)
 - Photographic and cinematographic equipment and optical instruments (D)
 - Information processing equipment (D)
 - Recording media (SD)
 - Repair of audio-visual, photographic and information processing equipment (S)
- Other major durables for recreation and culture
 - Major durables for outdoor recreation (D)
 - Musical instruments and major durables for indoor recreation (D)
 - Maintenance and repair of other major durables for recreation and culture (S)
- Other recreational items and equipment, gardens and pets
 - Games, toys and hobbies (SD)
 - Equipment for sport, camping and open-air recreation (SD)
 - Gardens, plants and flowers (ND)
 - Pets and related products (ND)
 - Veterinary and other services for pets (S)
- Recreational and cultural services
 - Recreational and sporting services (S)
 - Cultural services (S)
 - Games of chance (S)
- Newspapers, books and stationery
 - Books (SD)
 - Newspapers and periodicals (ND)
 - Miscellaneous printed matter (ND)
 - Stationery and drawing materials (ND)
- Package holidays
 - Package holidays (S)

10) EDUCATION

- Pre-primary and primary education
 - Pre-primary and primary education (S)
- Secondary education
 - Secondary education (S)
- Post-secondary non-tertiary education
 - Post-secondary non-tertiary education (S)
- Tertiary education
 - Tertiary education (S)
- Education not definable by level
 - Education not definable by level (S)

11) RESTAURANTS AND HOTELS

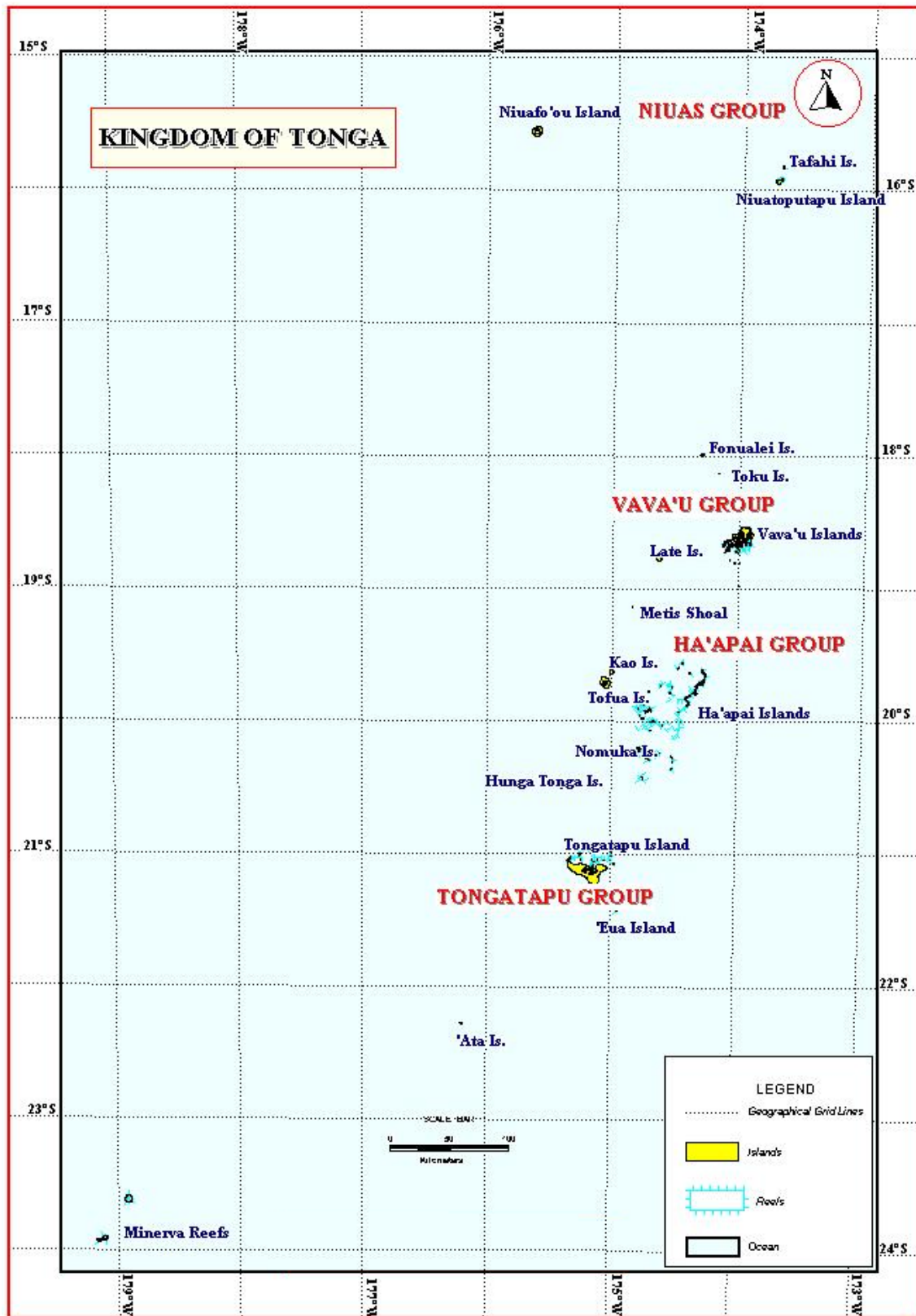
- Catering services
 - Restaurants, cafés and the like (S)
 - Canteens (S)
- Accommodation services
 - Accommodation services (S)

12) MISCELLANEOUS GOODS AND SERVICES

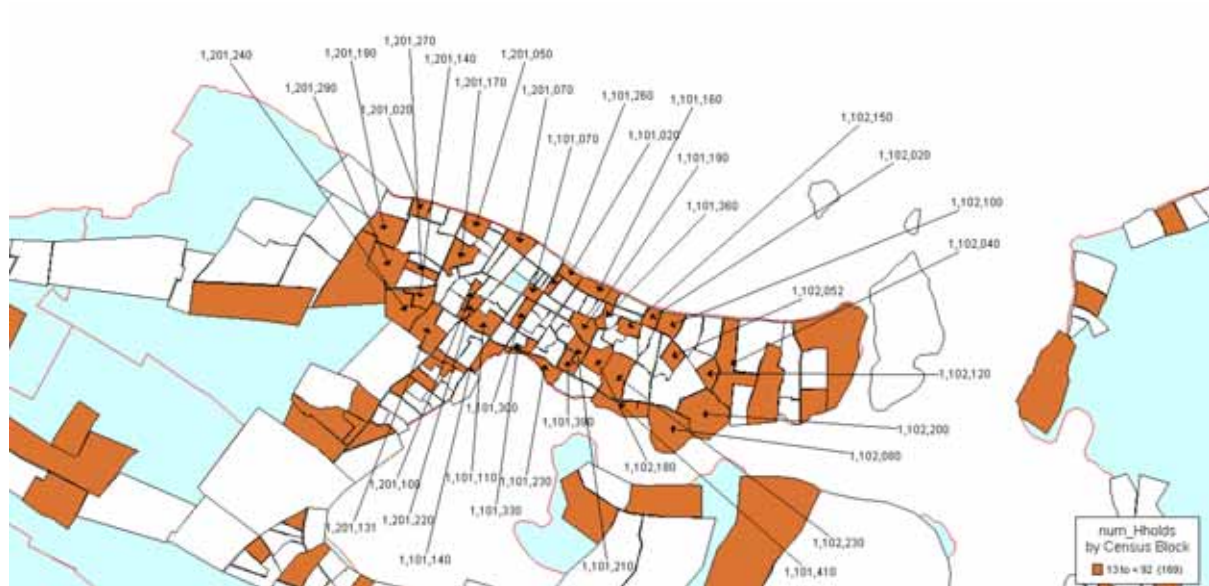
- Personal care
 - Hairdressing salons and personal grooming establishments (S)
 - Electric appliances for personal care (SD)
 - Other appliances, articles and products for personal care (ND)
- Prostitution
 - Prostitution (S)
- Personal effects n.e.c.
 - Jewellery, clocks and watches (D)
 - Other personal effects (SD)
- Social protection
 - Social protection (S)

- Insurance
 - Life insurance (S)
 - Insurance connected with the dwelling (S)
 - Insurance connected with health (S)
 - Insurance connected with transport (S)
 - Other insurance (S)
- Financial services n.e.c.
 - FISIM (S)
 - Other financial services n.e.c. (S)
- Other services n.e.c.
 - Other services n.e.c. (S)

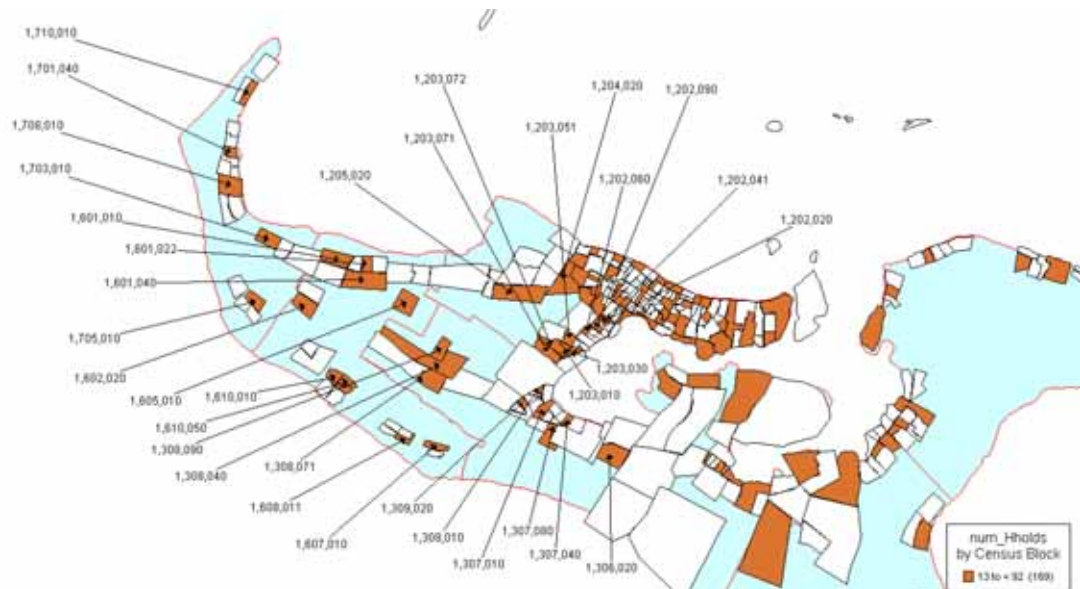
Appendix 4: Tonga Maps



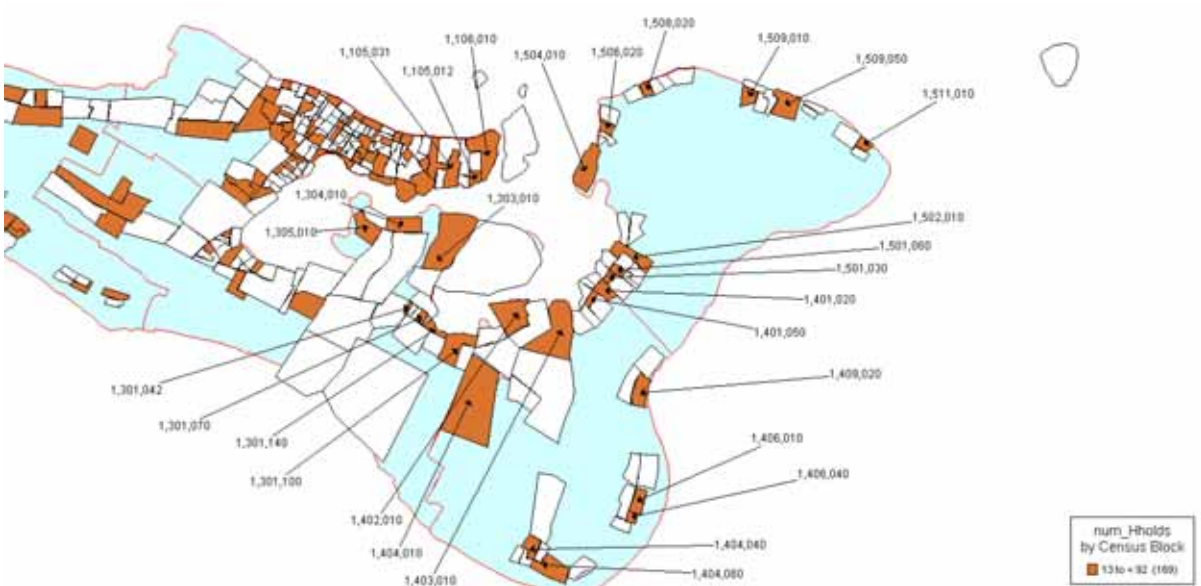
Tongatapu Urban - Selections



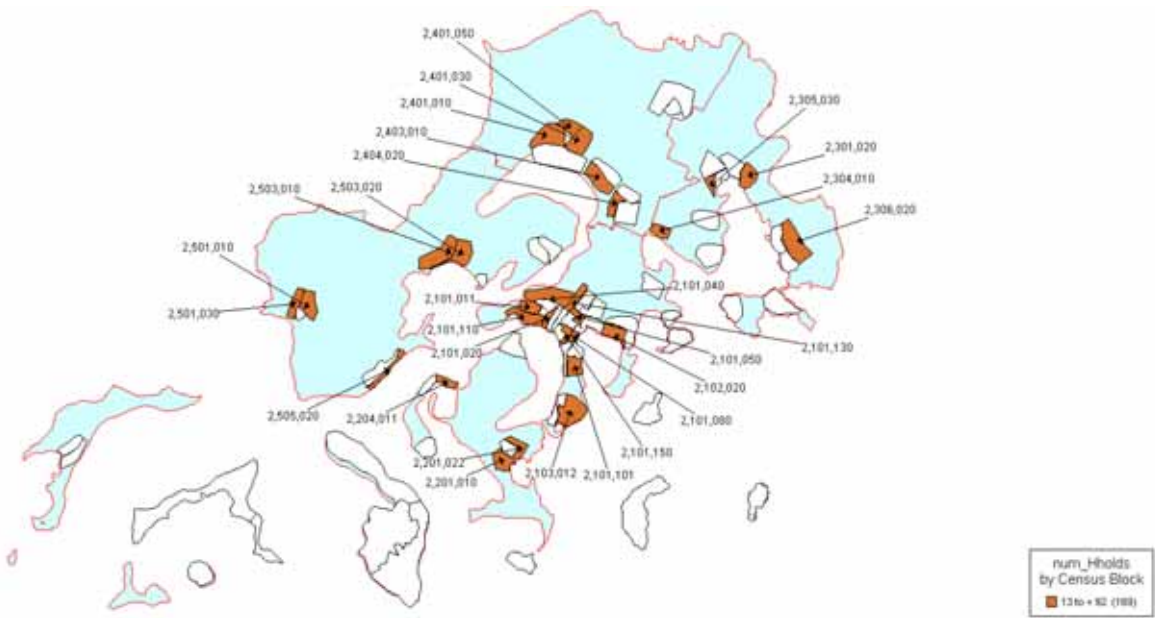
Tongatapu Rural (West) - Selections



Tongatapu Rural (East) - Selections



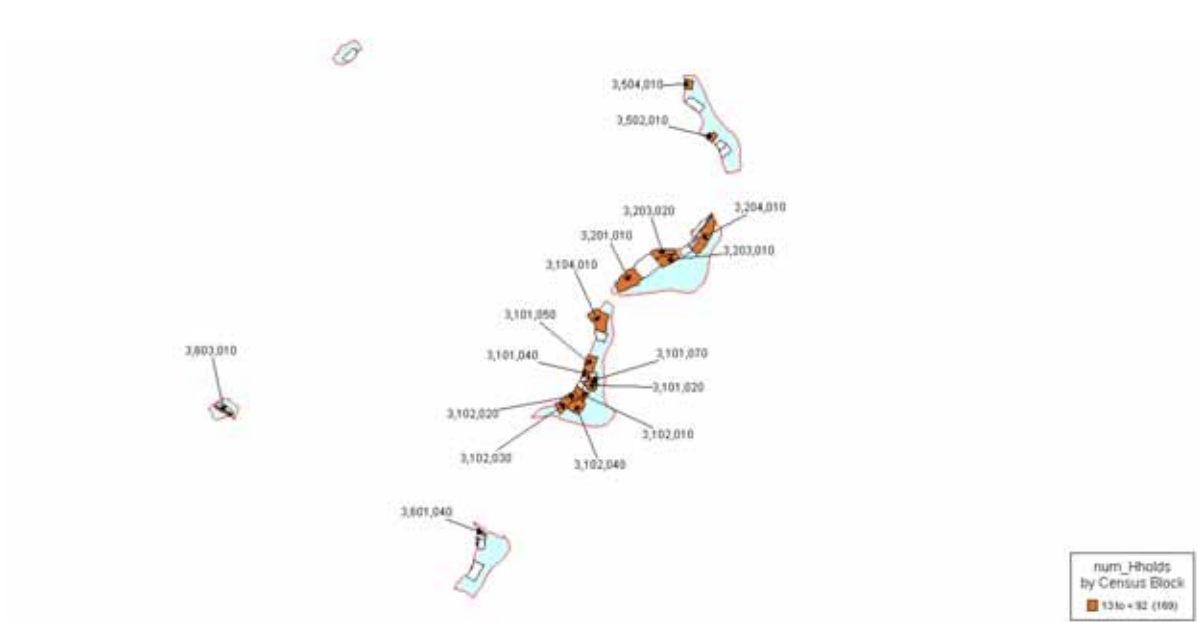
Vava'u - Selections



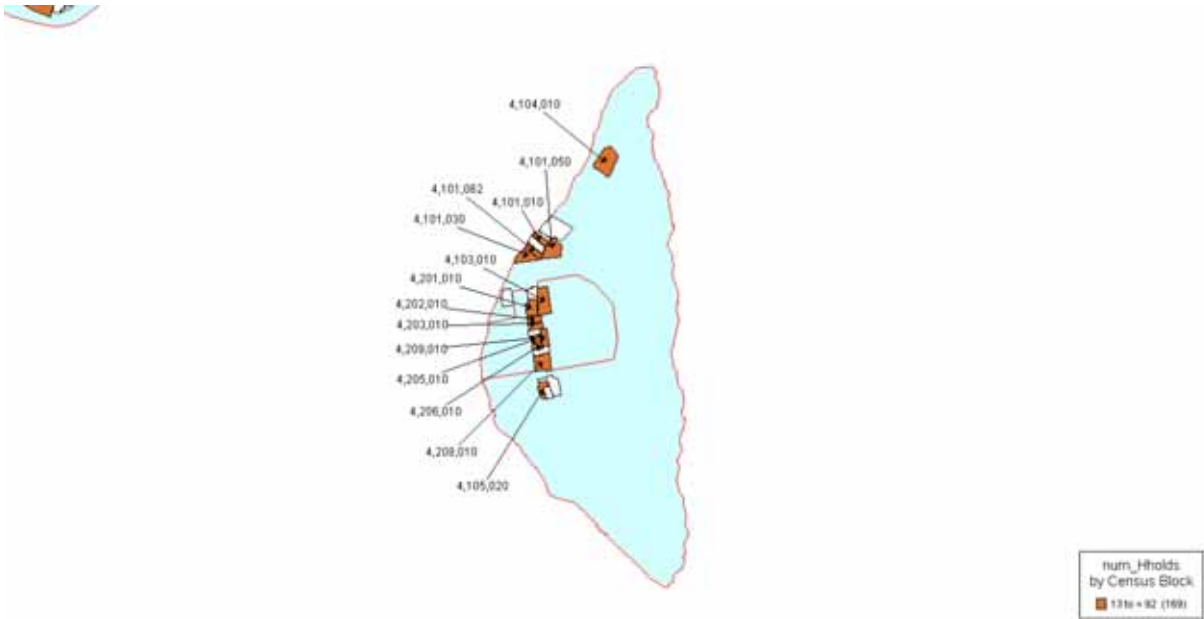
Ha'apai (Outer Island) - Selections



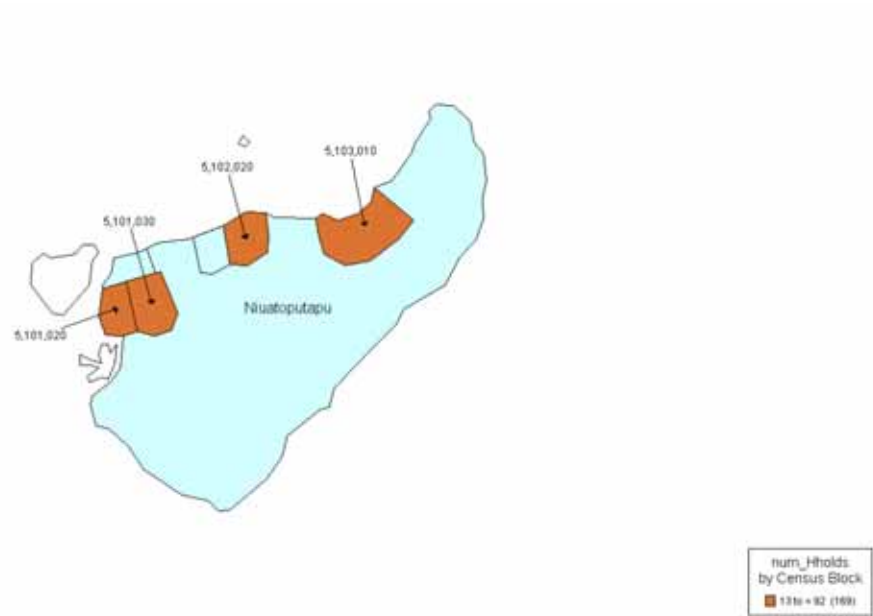
Ha'apai Other - Selections



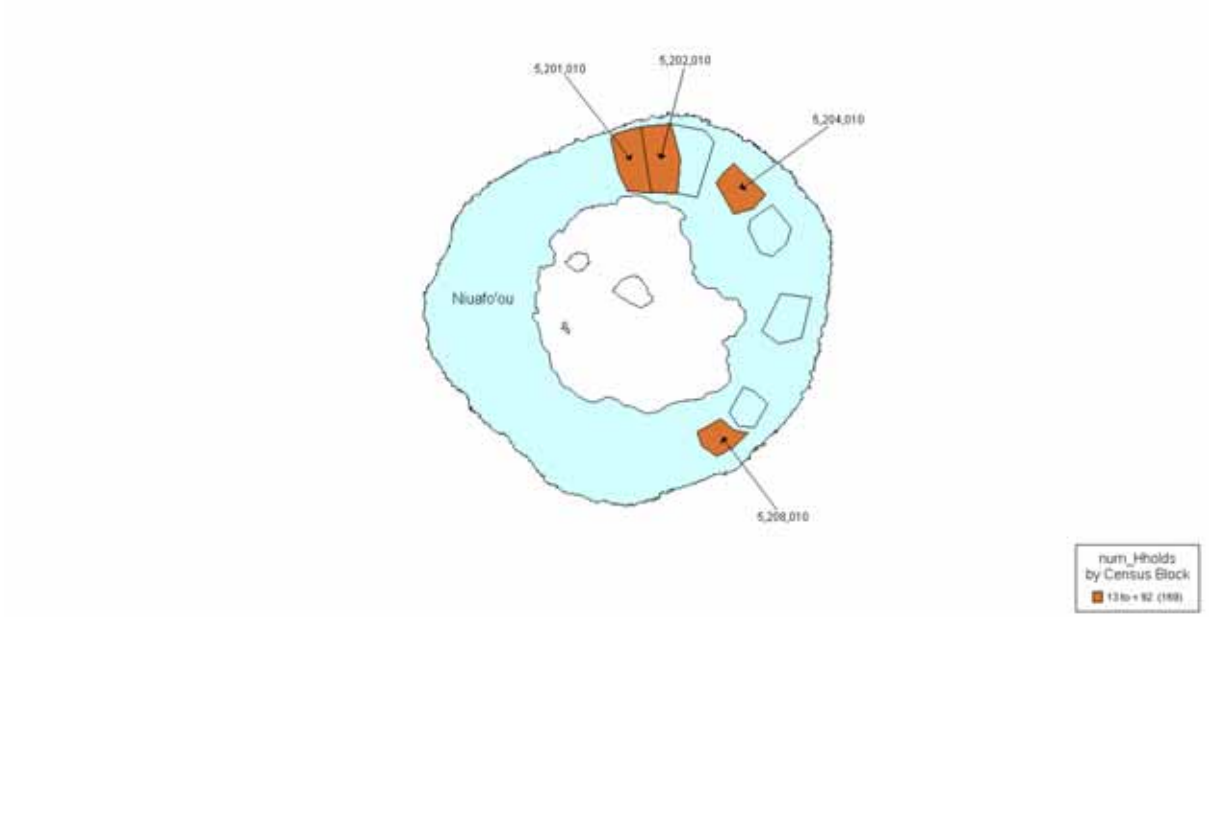
Eua - Selections



Niutoputapu - Selections



Niuafo'ou - Selections



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