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# Niue 2015/2016

Household Income & Expenditure Survey

# HIES full report



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February 2018

**Compiled by:**

Niue Statistics Office

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# Foreword

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Fakaalofa lahi atu.

It gives me great pleasure to present this Full Report on the Household Income and Expenditure Survey (HIES) that was conducted in 2015/2016. This report is based on the second survey of this kind to be done in Niue. The very first survey was conducted way back in 2002. Therefore I would like to commend on the concerted efforts of everyone who has contributed to this achievement.

The 'NIUE 2015/2016 HIES: Full Report' provides an overwhelming amount of information based on Income and Expenditure patterns of Niuean Households. The information contained herein I hope will be invaluable to policy makers, planners, administrators and researchers in the public and private sectors, in formulating policies and programmes for the improvement of the lives of Niuean families. The information also be useful in guiding assistance from regional and international development partners.

I would like to gratefully acknowledged the invaluable support and assistance from the Statistics for Development Division (SDD) of the Pacific Community (SPC) especially in providing the technical assistance required and the most wanted funding to implement the HIES. Lastly but not the least, a big sincere FAKAAUE LAHI to the staff in the Statistics Niue Office (NSO), the enumerators who painstakingly visited the homes and all the participating respondents for the untold commitment and dedication hence making this undertaking a success.

May the outcomes of this HIES report assist us all in realising our vision and our mission for Niue ke Monuina, A Prosperous Niue.

Fakaaue lahi mahaki.

Hon Premier Sir Toke Talagi KNZM

Minister for Statistics

Government of Niue.



## Acknowledgements from the Government Statistician

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Fakaalofa lahi atu.

The 'NIUE 2015/2016 HIES: Full Report' is another milestone achievement of Statistics Niue Office. It has taken the office and Government more than 10 years to accomplish this milestone.

As said by the Honourable Minister of Statistics, the 'NIUE 2015/2016 HIES: Full Report' is the second survey of its kind to be conducted in Niue and the first one was done in 2002, thirteen years was a long wait. Herefore I would like to mirror his commendations and also acknowledged and congratulate everyone concerned for the invaluable support and assistance in making this a success. From the SDD of the SPC in providing the necessary technical assistance and the most wanted funding to implement the HIES; to the team in the NSO, the in-house officers the field enumerators and all the participating respondents for the untold commitment and dedication throughout the survey. Fakaau lahi mahaki, Thank you very much.

This report is the main outcome of 2015/2016 HIES. It predominantly highlights the income and expenditure patterns of households in Niue. In knowing these patterns and other information it will enable other expected statistical outcomes to be realised. These include the rebasing of the consumer price index basket, the rebasing of the national accounts and the revision of the national poverty analysis of Niue. Other outcomes of the report will be revisiting of related decisions and policies of Government and appropriately amend them. Even in formulating new policies fit for purpose. The use of such report is endless.

In conclusion I would like to reiterate the wisdom in saying, "may the information contained herein in this report be used by all to help realise our vision and our mission in making Niue prosperous – Niue ke Monuina".

Oue tulutulou.

Kimray Vaha

Government Statistician

Statistics Niue

Finance and Planning.

Government of Niue.

## Acronyms

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BMI	Body mass index
COICOP	Classification of individual consumption according to purpose
CPI	Consumer price index
CSPRO	Census and survey processing program
GDP	Gross Domestic Product
HH	Household
HIES	Household Income and Expenditure Survey
ISCO	International standard classification of occupations
ISIC	International standard industrial classification of all economic activities
NA	National accounts
NEC	Not elsewhere classified
NGO	Non Governmental Organisation
NSO	Niue Statistics Office
OA	Own account
OO	Owner occupied
PACCOI	Pacific classification of income
PAPI	Paper-based personal interview
PHC	Population and housing census
PPS	Probability proportional to size
PSU	Primary sampling unit
RSE	Relative sampling error
RSE	Recognised seasonal employee (New Zealand)
SE	Standard error
SPC	Pacific Community
SDG	Sustainable Development Goal
SWP	Seasonal Worker Programme (NZDtralia)
TA	Technical assistance
NZD	New Zealand dollar
UN	United Nations

# Key results and executive summary

## 1. Key results table

*Table 1: Sample, population estimates and average annual household (HH) expenditure and income*

Niue National	
<b>Sampling information</b>	
HHs	156
Persons	490
<b>Population estimates</b>	
HHs	513
Persons	1,611
<b>Average annual HH expenditure, by category (NZD)</b>	
Food & non-alcoholic beverages	9,980
Alcohol, tobacco and kava	3,420
Clothing & footwear	1,040
Housing & utilities	6,400
Furniture & HH maintenance	1,860
Health	30
Transport	5,290
Communication	1,470
Recreation & culture	820
Education	120
Restaurant & hotel	1,050
Miscellaneous	1,310
Non-consumption expenditure	3,070
Investment expenditure	1,710
<b>Total</b>	<b>37,600</b>
<b>Average annual HH expenditure, by type (NZD)</b>	
Cash	27,700
Subsistence	1,840
Cash - gifts	3,970
Home produced - gifts	880
Imputed rents	3,190
In kind (employer)	10
<b>Total</b>	<b>37,600</b>
<b>Average annual HH net income, by category (NZD)</b>	
Wages & salaries	28,320
Business	2,380
Primary	520
Subsistence (net total)	1,570
Capital	1,570
Transfer	6,890
Casual receipts	1,360
Imputed rents	3,190
<b>Total</b>	<b>45,800</b>
<b>Average annual HH income, by category (NZD)</b>	
Cash	40,150
In-kind (employer)	10
Subsistence (net)	1,570
Home production gifted	880
Imputed rents	3,190
<b>Total</b>	<b>45,800</b>

## 2. Executive summary

Niue 2015/2016 HIES was implemented from October 2015 to October 2016 and this survey report provides an overview of the survey, a summary of the aggregated income and expenditure estimates and a brief population and income and expenditure distribution analysis. This report is the first analytical output of the survey, however there's a multitude of opportunity for more in-depth thematic analysis and other uses of HIES data for which the survey was implemented, including:

- i. deriving expenditure weights for the revision of the consumer price index (CPI);
- ii. supplementing the data available for use in compiling official estimates of various components in the System of National Accounts (NA); and
- iii. gathering information on poverty lines and the incidence of poverty in Niue.

This summary provides an overview of the survey sample and a summary of HH expenditure, income and the population structure and distribution.

### Sample

The Niue 2015/2016 HIES was designed to provide statistically significant results at the National level only (no further disaggregation will be possible).

In total 224 households (HH)s were randomly selected in all the villages of Niue, 160 HHs to Interview on priority and 64 to be used as replacement (in case of unavailability or refusal). In total 156 were interviewed (30.4 percent of the HHs in Niue) with amount to a survey completion of 97 percent.

The results presented herein are the extrapolated estimates from the Niue 2015/2016 HIES sample presented above.

### Household expenditure

Total annual HH expenditure in 2016 in Niue is estimated to be NZD 19.2 million (average of NZD 37,600 and median of NZD 12,000 per annum). 87 percent of HH expenditure is consumption expenditure (expenditure-related to goods and services that are consumed by HHs), 8 percent is non-consumption expenditure and the remainder being investment expenditure (4.5 percent).

In terms of expenditure type, 74 percent is cash based (cash purchased goods and services), 10 percent is cash purchased gifts (goods and services purchased for the benefit of another HH), 8 percent imputed rents (the value of services that an owner occupier derives from residing in their dwelling), 5 percent is subsistence (the value of home produced and consumed foods) and the remainder being home produced and gifted items and in-kind items received from the employer and consumed by the HH.

Consumption expenditure – the main expenditure category – is mainly dedicated to food and non-alcoholic beverages (30 percent of expenditure within this category), followed by housing and utilities (19 percent and mainly consisting of imputed rents) and transport (14 percent).

The distribution of HH expenditure is not even and there's a degree of inequality – in terms of total HH expenditure – across Niue. The 20 percent HHs who have the highest amount of HH expenditure spend on average NZD 20,480 per capita per year, while the lowest 20 percent spend on average NZD 7,900 per capita per year.

### Household income

Total annual HH income in Niue is estimated to be NZD 23.5 million (average of 45,800 and median of NZD 38,900 per annum). 72 percent of total HH income is generated from employment income (income associated with employment activities, such as wages and salaries, business profit distribution (incl. primary industry profits) and subsistence (the net value of home produced and consumed items)). Following employment income, transfer income account for 15 percent of total income (mainly pension) and imputed rent amount to 7 percent of total HH income. The remainder is made up of income from property (mainly home rentals), remittances and gifts and casual income.

In terms of income type, 88 percent of total HH income is cash-based income, 7 percent is imputed rents (as mentioned above) and 3.4 percent is subsistence income. In-kind income (in-kind contributions from the employer) and home produced items received as gifts) makes up the remainder.

Within the employment income category, wages and salaries make up 86 percent of income in this category. Following this is income from non subsistence business (7 percent), home production (5 percent). The cash income generated from primary production activities (agriculture, fishing, livestock or handicraft activities) make up the remainder within this category (1.6 percent).

Similarly to expenditure, the distribution of HH income is not even and there's a degree of inequality – in terms of total HH income – across Niue. The 20 percent HHs that have the higher per capita income generate a total income of NZD 29,960 per capita per year while the 20 percent poorest earn NZD 6,900 per capita per year.

## Population

From the 2015/2016 HIES, Niue is estimated to have 513 HHs with a resident HH population of 1,611 persons. Average HH size is 3.1 persons and Niue has a sex ratio of 90, meaning that there are 90 males for every 100 females. The median age of the population is 33 and 23 percent of the population is aged less than 15 years old. Niue's dependency ratio is estimated to be 64 percent, meaning that for every 100 working-aged persons, there are 64 dependents.

The main activity in the past 7 days for the population aged 15 years and older, was "employed in public sector" (40 percent of the population aged 15 and above), followed by "employed in private sector" (15 percent). Following this, 12 percent of the adult population is retired, which explains the importance of wages and salaries and pensions as main income.

71 percent of HHs participate in agriculture, 45 percent in livestock, 38 percent in fishing activities and 26 percent in handicraft (and home processed foods). Those primary production activities are mainly undertaken for subsistence purposes, as only 11 percent of the HHs sell some agriculture items, 11 percent sell some handicraft items and only 5 percent and 3 percent sell respectively some fishing items and livestock items.



## SECTION 1: INTRODUCTION

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This report is the first official output from the Niue 2015/2016 HIES. The objective of the report is to present the main statistical tables, focusing on HH income and expenditure, and to provide a summary of the survey procedures and results.

The report provides an overview of the 2015/2016 HIES, including the sampling strategy (Section 2), and the economic context of Niue (Section 3). Following this is a series of chapters reporting the statistical tables, with a brief synopsis that summarises the tables and highlights main areas for policy formation. The chapters include:

- Section 4: Household expenditure
- Section 5: Household income
- Section 6: Population profile and Household characteristics
- Section 7: Additional analysis

In addition to these chapters, a number of appendices complement the body of the report.

Appendix 1 provides a detailed description of the formation of the expenditure and income aggregates, various classifications for which the data are coded and some technical notes and definitions to assist with understanding and interpretation of the main statistical tables in this report.

Appendix 2 presents the error measurements (relative standard errors), which are provided to assist the reader to understand the statistical significance of the results presented herein. A brief discussion on non-sampling errors is also provided in Section 2.

Appendix 3 provides links to various resources, including the HIES questionnaire, which can also be used to help to understand the data sources when interpreting the results presented herein.

It is important to note this report is not the sole output from the HIES as the data have many applications. For example, in the rebasing of the CPI, updating the HH consumption component of Gross Domestic Product, to assess the incidence of poverty in Niue and in thematic research to guide policy formation.



## SECTION 2: SURVEY OVERVIEW

---

The 2015/2016 HIES is the second HIES to be implemented in Niue; the first was in 2002. Niue Statistics Office (NSO) conducted a population and housing census (PHC) in 2016; the previous PHC were conducted in 2011 (every 5 years)

This section provides a brief overview of the survey objectives and methodology, its scope and coverage, sample design, survey procedures, questionnaire, response rate, sampling weights, data processing and error measurements. The methodological report provides more detail on these areas, however below is a brief summary to aid interpretation of the results in this report.

### 1. Survey objectives

HIES collects a wealth of information on HH income and expenditure, such as source of income by industry, HH expenditure on goods and services, and income and expenditure associated with subsistence production and consumption. In addition to this, HIES collects information on sectoral and thematic areas, such as education, health, labour force, primary activities, transport, information and communication, transfers and remittances, food expenditure (acquisition) and gender.

The Pacific Islands regionally standardized HIES instruments and procedures were adopted by NSO for the 2015/2016 HIES. These standards, were designed to feed high-quality data to HIES data end users for:

- deriving expenditure weights and other useful data for the revision of the CPI;
- supplementing the data available for use in compiling official estimates of various components in the System of NA;
- supplementing the data available for production of the balance of payments; and
- gathering information on poverty lines and the incidence of poverty in Niue.

The data allow for the production of useful indicators and information on the industries covered in the survey, including providing data to inform indicators under the United Nations Sustainable Development Goals (SDGs). This report, the above listed outputs, and additional thematic analyses, collectively provide information to assist with multisector planning and policy formation.

The 2015/2016 HIES was conducted to update the 2002 HIES data and aimed to estimate the total amount HH spent and earned over the past 12 months at the national level (total expenditure and income).

### 2. HIES methodology

NSO adopted the Pacific standard HIES methodology developed by the Statistic for Development Division (SDD) of the Pacific Community (SPC) in 2011. This harmonized method consists of:

- The use of a common questionnaire:
  - 4 modules to collect socio-demographic information, and expenditure and income; and
  - a two-week diary to collect daily expenditure, gifts received and home produced items.
- A field collection spread over a 12 month period in order to cover seasonality of income and expenditure.
- Field staff organised in teams where each team is made of two enumerators and one supervisors.

### 3. Survey scope and coverage

The scope of the 2015/2016 HIES was all occupied HHs in Niue. Households are the sampling unit, defined as a group of people (related or not) who pool their money, and cook and eat together. It is not the physical structure (dwelling) in which people live. HIES covered all persons who were considered to be usual residents of private dwellings (must have been living in Niue for a period of 12-months, or have intention to live in Niue for a period of 12-months in order to be included in the survey).

HH members covered in the survey include:

- usual residents currently living in the HH;
- usual residents who are temporarily away (e.g., for work or a holiday);
- usual residents who are away for an extended period, but are financially dependent on, or supporting the HH (e.g., students living in school dormitories outside Niue, or a provider working overseas who hasn't formed or joined another HH in the host country) and plan to return;
- persons who frequently come and go from the HH, but consider the HH being interviewed as their main place of stay;

- any person who lives with the HH and is employed (paid or in-kind) as a domestic worker and who shares accommodation and eats with the host HH; and
- visitors currently living with the HH for a period of 6-months, or more.

The head of HH is the person commonly regarded by the HH members as their head. The head will often be the main income-earner and decision-maker. Despite this guideline, the head is independently nominated by HH members and it could be based on age, gender, or other factors. The only firm guideline is that the HH head must be an adult (aged more than 15 years old) and that there is to be one and only one head.

In addition to the current HH members, members who met the above criteria, but had left the HH within the last 12-months (e.g., passed away or moved into another HH) are covered and their income and expenditure for the period of their stay included.

Households outside of Niue (e.g., in NZDtralia or New Zealand) and commercial, government or non-government organisations (NGO) in Niue are outside the scope of HIES.

## 4. Sample design

### Sample size

The sample frame used for the selection was the latest HH listing available in 2015. In total 513 resident HHs were listed, and 224 HHs were randomly selected out of this updated list. This sample of 224 HHs is divided in 2 different lists, a first list (list A) of 160 HHs to interview in priority, and an extra list (list B) of 64 HHs to use in case of replacement required (unavailability of the HHs to respond to the interview, or refusal).

**Table 2: Sample size by village**

Village		Total HHs listed	List		Total HHs selected	Sample fraction
Code	Name		A	B		
50	Alofi South	132	42	16	58	31.8%
51	Alofi North	53	16	7	23	30.2%
52	Makefu	22	7	2	9	31.8%
53	Tuapa	35	11	5	16	31.4%
54	Namukulu	6	2	1	3	33.3%
55	Hikutavake	18	5	2	7	27.8%
56	Toi	9	3	1	4	33.3%
57	Mutalau	37	12	4	16	32.4%
58	Lakepa	21	6	3	9	28.6%
59	Liku	26	8	3	11	30.8%
60	Hakupu	52	17	7	24	32.7%
61	Vaiea	17	5	2	7	29.4%
62	Avatele	44	14	5	19	31.8%
63	Tamakautoga	41	12	6	18	29.3%
<b>Total</b>		<b>513</b>	<b>160</b>	<b>64</b>	<b>224</b>	<b>31.2%</b>

Private occupied dwellings were the statistical unit for the 2015/2016 HIES. Institutions and vacant dwellings were removed from the sampling frame.

The Niue 2015/2016 HIES targeted a sample size of 160 HHs which represents 31 percent of the HHs in Niue.








### Sample distribution over time

In order to capture the seasonality of events the sample was spread over a period of 12 month, meaning that the 160 HHs were not interviewed all at the same period of the year.

In order to proceed, the field operation consisted in 8 rounds, each round happened at different period of the year. A round is a 3 week period that allows the field staff to complete 20 HHs.

**Table 3: HIES field operation schedule**

Round id

Year	Month	Week starting	1	2	3	4	5	6	7	8
2015	November	2								
		9								
		16								
		23								
		30								
	December	7								
		14								
		21								
28										
2016	January	4								
		11								
		18								
		25								
	February	1								
		8								
		15								
		22								
	March	7								
		14								
		21								
		28								
	April	4								
		11								
		18								
		25								
	May	2								
		9								
		16								
		23								
	June	6								
		13								
		20								
		27								
	July	4								
		11								
		18								
		25								
	August	1								
		8								
		15								
		22								
		29								

**Table 4: Round of HIES survey**

Round day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Visit Day	Visit 1 Mon Tue		Visit 2 Wed Thu		Visit 3 Fri Sat		Rest Sun	Visit 4 Mon Tue		Visit 5 Wed Thu		Visit 6 Fri Sat		Rest Sun	Visit 7 Mon Tue		Final checks Wed Thu Fri Sat			
Diary day	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	2.6	2.7						
Diary day		1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	2.6	2.7					
Households (HHs) to visit	HH1 HH2 HH3	HH4 HH5	HH1 HH2 HH3	HH4 HH5	HH1 HH2 HH3	HH4 HH5	Rest	HH1 HH2 HH3	HH4 HH5	HH1 HH2 HH3	HH4 HH5	HH1 HH2 HH3	HH4 HH5	Rest	HH1 HH2 HH3	HH4 HH5	Final checks, correct all errors reported by the system, extra visits if required			

Interviewer	Module 1 Drop diary 1 Fill in diary day 1	Module 2 Diary check	Module 3 Diary check	Rest	Module 4 Diary check Pick up Diary 1 Drop diary 2	Data editing Module 1 to 4 Diary check	Rest	Data editing Module 1 to 4 Diary check Pick up Diary 2	1. Clear all the forms 2. Make sure all forms are fully complete 3. Extra visits if required
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Supervisor	HH1 HH2 HH3 All visits with interviewer	HH4 HH5	HH1 HH2 HH3 Visit 2 HHs with interviewer	HH4 HH5	HH2 HH3 Visit 2 HHs with interviewer	HH5	Rest	HH3 HH? Visit 2 HHs with interviewer	HH? HH? Visit 2 HHs with interviewer	HH? HH? Visit 2 HHs with interviewer	HH? HH? Visit 2 HHs with interviewer	Rest	HH1 HH2 HH3 All visits with interviewer	HH4 HH5	1. Help to complete all data entry 2. Complete all data editing 3. Correct all errors / inconsistencies
------------	--	------------	---	------------	--	-----	------	--	--	--	--	------	--	------------	---

The field operation started in November 2015 and finished in August 2016. Within this period 8 rounds of HIES were implemented, and each round 20 selected HHs had to be interviewed. The round is a period of 3 weeks that allows the completion and checking of 20 HHs, given that 1 HH required 7 visit in total (table 4).

## 5. Survey questionnaire

Four modules are completed by paper-based personal interview, including:

1. Demographic information – characteristics of HH members, including activity and education profile;
2. HH characteristics and expenditure;
3. Individual expenditure; and
4. Individual and HH income.

Depending on the information being collected, a recall period (ranging from the last 7 days to the last 12 months) is applied to various sections of the questionnaire.

The forms were completed by face-to-face interview, usually with the HH head providing most of the information, with other HH members being interviewed when necessary. The interviews took place over a 2-week period such that the HH diary, which is completed by the HH on a daily basis for 2 weeks, can be monitored while the module interviews take place.

The HH diary collects information on the HH's daily expenditure on goods and services; and the harvest, capture, collection or slaughter of primary produce (fruit, vegetables and animals) by intended purpose (home consumption, sale or to give away).

The income and expenditure data from the modules and the diary are concatenated (ensuring that double counting does not occur), annualised, and extrapolated to form the income and expenditure aggregates presented herein.

## 6. Response rate

The table below presents the response rate by village.

**Table 5: Number of HHs interviewed by list**

		HHs interviewed and valid			Response rate
		List A	List B	Total	
Total	160	118	38	156	98%

On the overall 156 HHs were successfully interviewed (98 per cent of the sample), and 118 (74 percent) come from the list A (original list of HHs to interview). 38 HHs come from the replacement list (replacements occurred in 24 percent of the cases). Finally, it is interesting to note that 4 HHs are missing (interview incomplete or poor data quality) and were dropped from the final dataset.

## 7. Data processing

Data entry occurred after the 3 week period of the round.

The data entry system used system-controlled entry, interactive coding and validity and consistency checks. Despite the validity and consistency checks put in place, the data still required cleaning. The cleaning was a 2-stage process, which included manual cleaning while referencing the questionnaire, whereas the second stage involved computer-assisted code verification and, in some cases, imputation.

Once the data were clean, verified and consistent, they were recoded to form a final aggregated database, consisting of:

1. Person level record – characteristics of every HH member, including activity and education profile;
2. HH level record – characteristics of the dwelling and access to services;
3. Final aggregated income – all HH income streams, by category and type;
4. Final aggregated expenditure – all HH expenditure items, by category and type.

An additional poverty file was also generated.

## 8. Error measurements

RSEs for the aggregated income and expenditure data are presented in Appendix 2. Non-sampling errors cannot be readily measured, however it is worth noting the issues associated with non-sampling errors, including:

- both respondents and interviewers may not entirely understand the information required from the survey, which can result in misinterpretation of the question being asked and the incorrect response;

- enumerator and respondent fatigue, resulting in underreporting, especially in completion of the HH diary;
- unwillingness to fully disclose information – especially in a small-island context - such as income and expenditure on some items (e.g., alcohol, tobacco and cash donations);
- the questionnaire being in English, which could be a second language for both the interviewers and respondents, and the need to complete a written diary (noting that: three-quarters of diaries were in Niuean; HHs were given the opportunity to complete a Niuean written diary; and enumerators could mostly converse in Niuean when required); and
- the inability to interview HHs members living abroad but remain dependent on the HH (e.g., students living in school dormitories) or are working to support the HH (e.g., seamen living on a ship), but who have not formed another HH outside of Niue.

## SECTION 3: ECONOMIC CONTEXT



### 1. Country Profile

Niue is a single coral outcrop stand alone in the South Pacific Ocean situated 169° West (longitude) and 19° South (latitude) with Tonga situated 480 km to the west, Samoa 560 km to the north, and Cook Islands 980 km to the east.

Pict/Map: Rona.h

### 2. Economy

Head of State	o Her Majesty Queen Elizabeth II represented by the Governor General of Niue and New Zealand.
Head of Government	o Honourable Sir Toke Talagi
Governance and Legal Status	o Self-Governing in free association with New Zealand under the Niue Constitutional Act 1974. o Parliament-20 members elected by universal suffrage under the Niue Constitution : 14 Village Constituencies and 6 from the common roll
Population and location	o Total population of Niue at the time of census in the 2011 Census of Population and HHs stood at 1,611 persons living in 14 villages. o Niueans are New Zealand citizens and hold New Zealand passports
Land Area	o 259 square kilometres. One single raised coral atoll.
Exclusive Economic Zone (EEZ)	o 390,000 square kilometres
Average Rainfall	o 2000 mm/year
Gross Domestic Product (000)	o \$35,383 (NZD) (2016)
Visitors	o 8,920 (2016)
Annual inflation (CPI)	o 2.5% (2016)
Merchandise Trade	o Imports: \$19.2M Exports: 1.7M (2016)
Average Temperature ranges	o 21°C - 28°C
Official Language	o Niuean and English
Nationalities	o Niueans, New Zealanders, Australians, Samoans, Tongans, Tuvaluans, Fijians and others.
Main Currency	o New Zealand Dollar (NZ\$)
Religions	o Ekalesia Kerisiano, Niue, Latter Day Saints, Roman Catholics, Seven Day Adventist, Apostolic, Jehovah Witnesses



## SECTION 4: HOUSEHOLD EXPENDITURE

In this section, we provide a summary of the main components of HH expenditure in Niue. The first subsection highlights some of the important facts relating to HH expenditure and a second section provided a set of expenditure tables.

### 1. Household expenditure summary

This summary highlights the main elements of HH expenditure and aims to present the main findings from the HIES. There is a multitude of opportunity for more in-depth analysis, including cross tabulation for more thematic studies, however this is beyond the scope of this report. Below we present the total, average and median annual HH and per capita expenditure; the composition of HH expenditure, by expenditure category and type; and we provide a more in-depth analysis of the composition of main expenditure categories.

### 2. Average and median expenditure

Total HH expenditure in Niue amounts to around NZD 19.2 million per annum. It results in an average annual HH expenditure of NZD 37,590 (Table 6). To give a better understanding of the distribution of expenditure among the HH, the median expenditure – the expenditure of the 50<sup>th</sup> percentile HH – is provided. The annual national median HH expenditure is NZD 31,550 per annum (half of the HHs spend less than NZD 31,550 per annum).

On average an individual spend NZD 11,960 per annum in Niue and half of the population spend less than NZD 10,120 per annum.

**Table 6: Total, average and median annual HH and per capita expenditure (NZD)**

	Total	HHs		Per capita	
		Average	Median	Average	Median
Niue	19,282,670	37,590	31,550	11,960	10,120

### 3. Composition of household expenditure

Household expenditure is made up of different categories and types of expenditure.

Expenditure categories are broadly made up of: i) consumption expenditure; ii) non-consumption expenditure; and iii) investment expenditure. A detailed description of these expenditure categories is provided in Appendix 1, however, they are briefly described below.

Consumption expenditure follows the United Nations Statistical Division's Classification of Individual Consumption According to Purpose (COICOP), consisting of 12 expenditure divisions (Table 10). This expenditure category can generally be defined as expenditure that the HH incurs with the objective of consuming a good or service. Non-consumption expenditure is usually a significant component of Pacific HH expenditure, which is why it is reported, however it is not used for CPI rebasing, in estimating the HH component of NA, nor for poverty analysis. Non-consumption expenditure is expenditure that the HH incurs, but it does not receive a good or service in return for the expenditure. Examples include cash donations to another HH, the Church or other institutions, such as schools. Investment expenditure refers to HH accumulation of capital, such as through the purchase of a house or a major asset.

In consideration of the Pacific context where subsistence and communal sharing are usual elements of HH economics, expenditure is further classified by type. Expenditure types consist of: i) cash; ii) subsistence; iii) cash gifts; iv) home produced gifts; v) imputed rents; and vi) in-kind income consumed. Again, these are defined in Appendix 1, however a brief definition is provided below.

Cash expenditure refers to expenditure incurred through a cash-based transaction where a good or service is acquired. Subsistence expenditure refers to the value of a home-produced primary product (e.g., agriculture, fish or livestock) for consumption by the HH. A cash gift refers the cash purchase of a good or service for the beneficiary of another HH and, similarly, a home-produced gift refers the value of a home produced item that is gifted to another HH. Imputed rents are the value of the services that an owner occupied HH derives from living in that dwelling. In-kind income consumed refers to income provided by an employer that is in the form of a good or service that is consumed by the HH.

Next, we provide a breakdown of the composition of HH expenditure by category and type.

## Expenditure category

By broad expenditure category, consumption expenditure makes up majority of total HH expenditure. Nationally, it accounts for 87 percent of the total expenditure. Non-consumption expenditure makes up 8 percent and investment the remaining 4 percent of the total expenditure.

In Niue 26 percent of total HH expenditure is on food and non-alcoholic beverages (COICOP division 1), followed by housing (division 4) with 17 percent and transport (division 7) 14 percent.

Other significant COICOP divisions include division 2 (alcohol and tobacco) and division 5 (Furnishing and HH equipment) making up respectively 9 and 5 percent of total HH expenditure.

Nationally, the three main expenditure divisions (food, housing and transport) make up 58 percent of total HH expenditure.

**Table 7: Composition of HH expenditure, by expenditure category**

<b>Consumption expenditure (COICOP)</b>	<b>National</b>
1 - Food And Non-Alcoholic Beverages	26.5%
2 - Alcoholic Beverages, Tobacco	9.1%
3 - Clothing And Footwear	2.8%
4 - Housing, Water, Electricity, Gas	17.0%
5 - Furnishings, HH Equipment	5.0%
6 - Health	0.1%
7 - Transport	14.1%
8 - Communication	3.9%
9 - Recreation And Culture	2.2%
10 - Education	0.3%
11 - Restaurants And Hotels	2.8%
12 - Miscellaneous Goods And Services	3.5%
<b>Total consumption expenditure</b>	<b>87.3%</b>
<b>Non-consumption expenditure</b>	
Donation to other hh	3.2%
Donation to Church	3.3%
Other donation	1.5%
Taxes & fines	0.3%
<b>Total non-consumption expenditure</b>	<b>8.2%</b>
<b>Investment expenditure</b>	
Land & house	4.3%
Plant	0.3%
<b>Total investment expenditure</b>	<b>4.6%</b>
<b>Total annual HH expenditure</b>	<b>100.0%</b>

## Expenditure type

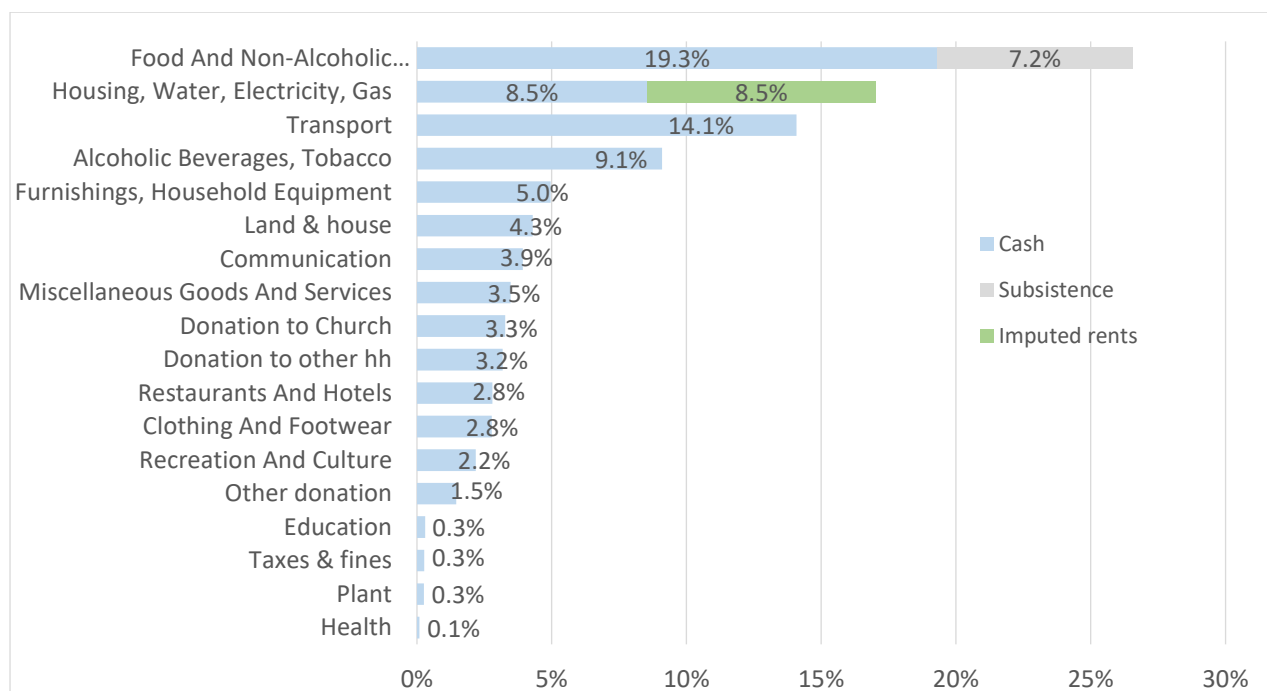
Almost 85 percent of the total HH expenditure is cash-based (cash and cash for gifts). Imputed rents represent the second main expenditure type (estimation of the rent for non tenant HHs) followed by the sum of the subsistence and the subsistence items gifted (estimated value of all food items HHs get from agriculture, fishing or livestock activities).

**Table 8: Composition of HH expenditure, by expenditure type**

	<b>National</b>
Cash	73.7%
Subsistence	4.9%
Cash - gifts	10.6%
Home produced - gifts	2.3%
Imputed rents	8.5%
In kind (employer)	0.0%
<b>Total</b>	<b>100.0%</b>

## Expenditure composition by category and type

Constructing HH expenditure by category and type allows us to understand the composition of each expenditure category, by type. The below figures present this information. In summary, and as specified above, majority of expenditure is cash based. Except in division 1 (food and non alcoholic beverages) and division 4 (housing, water, electricity and gas) the HH expenditure is a combination of subsistence and cash (food) and imputed rents and cash (housing).



**Figure 1: Composition of HH expenditure, by expenditure category and type**

## Composition of expenditure on food and non-alcoholic beverages (COICOP division 1)

Food and non-alcoholic beverages is the main expenditure division and it accounts for a quarter of the total HH expenditure. On average HHs spend NZD 9,980 on food (cash and subsistence combined) and half of them spend less than NZD 8,190 per annum. At the individual level, the expenditure on food amounts NZD 3,180 per annum, and half of the population spend less than NZD 2,650 per annum (median), (Table 9).

**Table 9: Total, average and median annual HH and per capita expenditure on COICOP division 1 (NZD)**

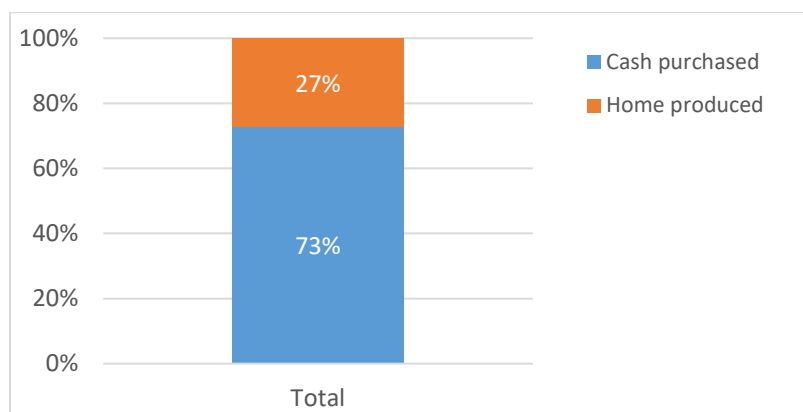
	Total	HHs		Per capita	
		Average	Median	Average	Median
<b>National</b>	5,118,690	9,980	8,190	3,180	2,650

HH expenditure on food and non-alcoholic beverages (COICOP division 1) is concentrated around meat, vegetables, bread and cereals and fish and seafood, with these classes making up almost 75 percent of total HH expenditure within this division (Table 10).

**Table 10: Composition of HH expenditure on COICOP division 1, by COICOP class**

	<b>National</b>
Bread and cereals	15%
Meat	24%
Fish and seafood	12%
Milk, cheese and eggs	5%
Oils and fats	1%
Fruit	7%
Vegetables	21%
Sugar, jam, honey, chocolate	3%
Food products N.E.C.	2%
Coffee, tea and cocoa	1%
Mineral water, soft drinks, juices	8%
<b>Total</b>	<b>100%</b>

Expenditure with COICOP division 1 is not solely cash based. In Niue, 27 percent of the value of the food consumed by the HHs is home produced (Figure 2).

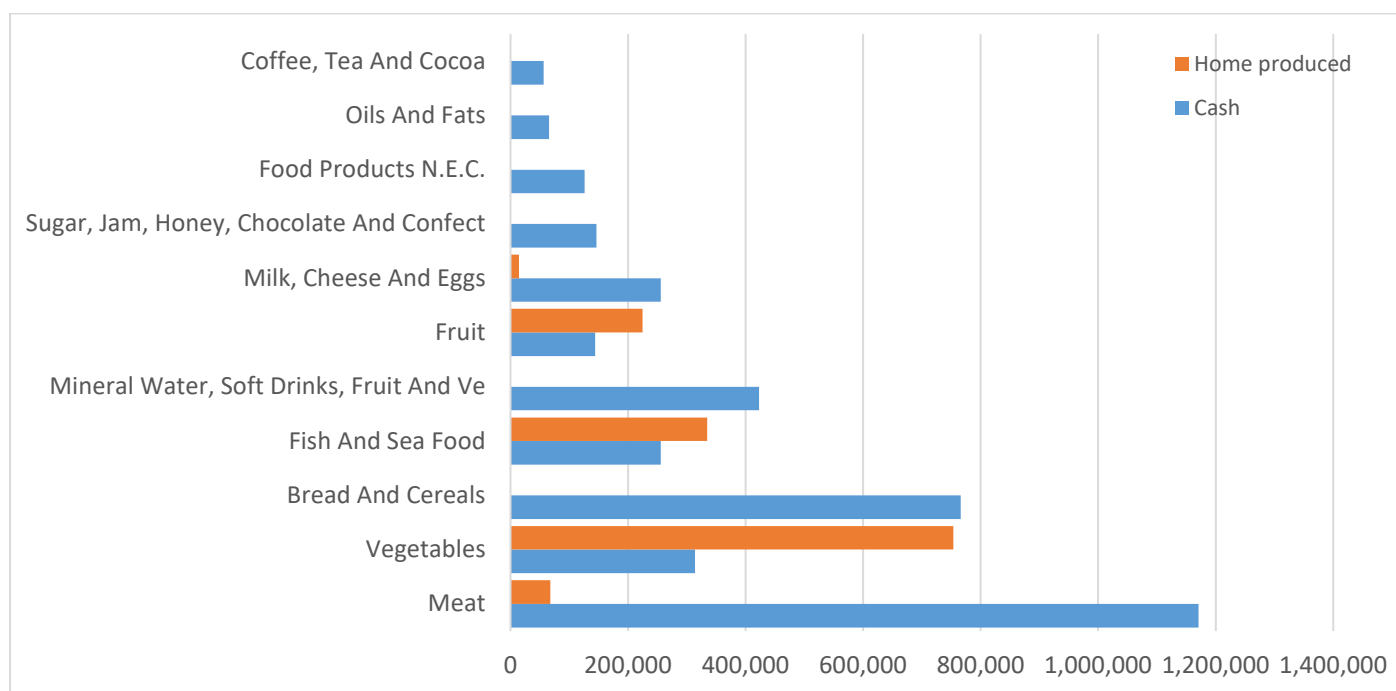


**Figure 2: Distribution of HH expenditure on COICOP division 1, by expenditure type**

The detail by COICOP class for food consumption shows the difference in food consumption and origin of the food (type of expenditure) in Niue.

Home production occurs mainly for vegetables (61 percent of the consumption is home produced), fish and seafood (27 percent home produced) and fruit (18 percent home produced). At a lower level a small proportion of the meat consumed is home produced (5.5 percent).

Home produced vegetables are mainly tuber (89 percent of the value of tuber consumed by HHs in Niue is home produced: yam, taro, sweet potatoes and manioc). 79 percent of the fish and sea food consumed by HHs in Niue is home produced. Looking at the fruit, 65 percent of the consumption is home produced (bananas and pawpaw are 95 percent home produced, and 100 percent for breadfruit). The home production of meat items consists in pork meat, half of the value of the pork meat consumed is home produced.



**Figure 3: Distribution of HH expenditure on COICOP division 1, by expenditure type and COICOP class**

The below table shows the top 12 ranked items by national total expenditure on food and non-alcoholic beverages (COICOP division 1). These 12 food sub-classes make up 73 percent of total expenditure on COICOP division 1 – a fairly concentrated food basket, with 12 items making up almost three quarters of total expenditure on food and beverage.

These items are ranked by total national expenditure both in the form of cash and subsistence. The highest on “Tuber” (amounting to 15 percent of total HH expenditure within COICOP division 1, followed by chicken (10 percent), fruit and fish (7 percent each).

**Table 11: Distribution of total HH expenditure on food and non-alcoholic beverages, by the top 12 food items**

Code	Subclass COICOP	Total
117046	Tuber	15%
112015	Chicken	10%
116042	Fruit	7%
113022	Fresh fish	7%
111003	Bread	7%
122072	Soft drinks	6%
112020	Canned meat	5%
112019	Dried & salted meat (sNZDages, bacon)	4%
117045	Vegetables	4%
113025	Canned seafood	3%
114026	Dairy milk	3%
111005	Biscuits	3%
<b>Total</b>		<b>73%</b>

In Niue more than half of the HHs consume taro (mainly home produced), and a quarter consume manio, and chicken is even more popular with 75 percent of the HHs that consume it on a regular base.

**Table 12: Distribution of total HH expenditure on food and non-alcoholic beverages, by the top 12 food items and expenditure type**

	Total		
	Cash	Home produced	Total
Tuber	11%	89%	100%
Chicken	96%	4%	100%
Fruit	35%	65%	100%
Fresh fish	21%	79%	100%
Bread	100%	0%	100%
Soft drinks	100%	0%	100%
Canned meat	100%	0%	100%
Dried & salted meat (sNZDages, bacon)	100%	0%	100%
Vegetables cultivated for their leaves & stalks (carrots, beans)	65%	35%	100%
Canned seafood	100%	0%	100%
Dairy milk	100%	0%	100%
Biscuits	100%	0%	100%
<b>Total</b>	<b>66%</b>	<b>34%</b>	<b>100%</b>

## Composition of expenditure on housing, water, electricity, gas and other fuels (COICOP division 4)

Housing, water, electricity, gas and other fuels is the second most significant expenditure division and it accounts for 16 percent of total HH expenditure. Average HH expenditure within this division amounts to NZD 6,400 per annum (median NZD 5,010), which translates into an average annual per capita expenditure of NZD 2,040 (median NZD 1,610). All expenditure within this division is cash-based, or imputed rents.

**Table 13: Total, average and median annual HH and per capita expenditure on COICOP division 4 (NZD)**

	Total	HHs		Per capita	
		Average	Median	Average	Median
<b>Total</b>	<b>3,282,510</b>	<b>6,400</b>	<b>5,010</b>	<b>2,040</b>	<b>1,610</b>

The majority of expenditure within this division is made up of imputed rents – the estimated value of services that the owner occupier (or people living in the house for free) derives from living in their dwelling (Table 14). Imputed rents are made of rents declared by owners occupied (67 percent of the HHs) and HHs who live in the house free rent (23 percent), the rest are the tenants (10 percent) and pay an actual rent. More than 39 percent of the imputed rents declared by owners occupied added to 10 percent of imputed rents declared by the HHs who live in the house for free (provided by family or employer) amount to 50 percent of the total expenditure within this division. Electricity makes up 23 percent within this division and represents the second main expenditure.

**Table 14: Composition of HH expenditure on COICOP division 4**

	<b>Total</b>
Imputed Rentals Of Owner Occupiers	39.4%
Electricity	23.4%
Other Imputed Rentals	10.4%
Materials For The Maintenance And Repair	9.3%
Actual Rentals Paid By Tenants	8.0%
Gas	4.3%
Liquid Fuels	3.0%
Services For The Maintenance And Repair	1.6%
Heat Energy	0.3%
Sewer Collection And Disposal	0.1%
Other Actual Rentals	0.0%
Water Supply	0.0%
<b>Total</b>	<b>100%</b>

### Composition of expenditure on transport (COICOP division 7)

Transport is the third most significant expenditure division and it accounts for 13 percent of total HH expenditure in Niue. Average HH expenditure within this division amounts to NZD 5,290 per annum (median NZD 4,160), which translates into an average annual per capita expenditure of NZD 1,690 (median NZD 1,450). All expenditure within this division is cash-based.

**Table 15: Total, average and median annual HH and per capita expenditure on COICOP division 7 (NZD)**

	<b>Total</b>	<b>HHs</b>		<b>Per capita</b>	
		<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
<b>Total</b>	<b>2,715,590</b>	<b>5,290</b>	<b>4,160</b>	<b>1,690</b>	<b>1,450</b>

Fuel represents the main expenditure within this division, followed by the air fare and the purchase of cars (Table 16).

**Table 16: Composition of HH expenditure on COICOP division 7**

	<b>Total</b>
Fuels And Lubricants For Personal Transport equipment	48.8%
Passenger Transport By Air	19.8%
Motor Cars	19.7%
Other Services In Respect Of Personal Transport equipment	3.6%
Maintenance And Repair Of Personal Transport equipment	3.6%
Other Purchased Transport Services	2.7%
Passenger Transport By Road	0.9%
Motor Cycles, Scooters, Mopeds	0.4%
Spare Parts And Accessories For Personal Transport equipment	0.3%
Bicycles	0.1%
<b>Total</b>	<b>100.0%</b>

## 4. Main expenditure items (total, cash and non-cash)

The following tables show the proportion of total expenditure (Table 17) cash-based expenditure (Table 18) and subsistence expenditure (Table 19) that the top HH expenditure items account for.

In terms of total expenditure (cash, subsistence and imputed rents), it can be seen that fuel is the most significant expenditure item, by COICOP sub-class, making up 6.9 percent of total national HH expenditure. Following this is imputed rents for owners (6.7 percent), land and house (which consists in acquisition, construction or major alteration of the dwelling – HH investment). Overall, almost 65 percent the total HH expenditure is allocated to the below 22 items across all domains in Niue.

**Table 17: Proportion of total expenditure that top 22 items account for**

	<b>Subclass</b>	<b>Total</b>
1	Fuels	6.9%
2	Imputed rentals of owner occupying their main house	6.7%
3	land & house	4.3%
4	Tuber	4.0%
5	Electricity charges	4.0%
6	Telephone services	3.7%
7	Beer	3.6%
8	Current Cash transfer to Church	3.3%
9	Current cash transfer to another HH	3.2%
10	Air fare	2.8%
11	Purchase of motor cars	2.8%
12	Chicken	2.5%
13	Spirits	2.4%
14	Cigarettes	1.9%
15	Fruit	1.8%
16	Imputed rentals of HHs paying a reduced rental or housed free	1.8%
17	Fish	1.8%
18	Bread	1.8%
19	Soft drinks	1.5%
20	Tinned meat	1.4%
21	Rentals actually paid by tenants	1.4%
22	Take away food	1.3%
	<b>Total</b>	<b>64.8%</b>

Looking at cash expenditure only (i.e., excluding subsistence and imputed rents), the main items (and their proportion of total cash expenditure) are: fuel, HH investment (land and house), electricity, telephone services (cell phone top up) and beer. Those 5 items account for almost 27 percent of the HH cash expenditure (Table 18). On the overall the 22 items that HHs spend the most on account for 65 percent of the HH cash budget.

**Table 18: Proportion of total cash expenditure that top 22 cash items account for**

	<b>Subclass</b>	<b>Total</b>
1	Fuels	8.2%
2	Land & house	5.1%
3	Electricity charges	4.7%
4	Telephone services	4.4%
5	Beer	4.3%
6	Current Cash transfer to Church	3.9%
7	Current cash transfer to another HH	3.8%
8	Air fare	3.3%
9	Purchase of motor cars	3.3%
10	Chicken	2.9%
11	Spirits	2.9%
12	Cigarettes	2.3%
13	Bread	2.1%
14	Soft drinks	1.8%
15	Tinned meat	1.6%
16	Rentals actually paid by tenants	1.6%
17	Take away food	1.6%
18	Cleaning and maintenance products eg soaps	1.6%
19	Catering services	1.5%
20	Other products eg toilet paper	1.4%
21	Sausages	1.3%
22	Current cash transfer to the village / community	1.3%
	<b>Total</b>	<b>64.8%</b>



In terms of subsistence expenditure (i.e., excluding cash and imputed rents), it can be seen that tuber represents almost half of the value of the total food home produced by HHs in Niue. Fish and fruit represent a significant proportion of the home production as well (Table 19).

**Table 19: Proportion of total subsistence items (home production expenditure)**

	Total
1 Tuber	49.4%
2 Fish	19.3%
3 Fruit	16.1%
4 Seafood eg crustaceans, molluscs	4.7%
5 Vegetable	4.6%
6 Swine	3.4%
7 Chicken	1.4%
8 Eggs	1.0%
9 Meat	0.1%
<b>Total</b>	<b>100.0%</b>

## 5. Expenditure tables

### Annual household expenditure

**Table 20: Total annual HH expenditure (NZD)**

	Cash	Subsistence	Cash - gifts	Home produced	Imputed rents	Income in kind consumed	Total
<b>Consumption expenditure</b>							
Food And Non-Alcoholic Beverages	3,524,870	944,280	198,670	450,880	0	0	5,118,690
Alcoholic Beverages, Tobacco	1,649,200	0	103,740	0	0	0	1,752,940
Clothing And Footwear	505,660	0	28,960	0	0	0	534,620
Housing, Water, Electricity, Gas	1,596,450	0	49,200	0	1,636,870	0	3,282,510
Furnishings, HH Equipment	953,670	0	2,330	0	0	0	956,000
Health	16,850	0	0	0	0	0	16,850
Transport	2,699,790	0	15,800	0	0	0	2,715,590
Communication	756,190	0	0	0	0	0	756,190
Recreation And Culture	395,340	0	26,190	0	0	0	421,530
Education	59,320	0	0	0	0	0	59,320
Restaurants And Hotels	522,850	0	16,230	0	0	0	539,080
Miscellaneous Goods And Services	652,110	0	17,500	0	0	4,340	673,950
<b>Total consumption expenditure</b>	<b>13,332,300</b>	<b>944,280</b>	<b>458,620</b>	<b>450,880</b>	<b>1,636,870</b>	<b>4,340</b>	<b>16,827,270</b>
<b>Non-consumption expenditure</b>							
Donation to other hh	0	0	612,540	0	0	0	612,540
Donation to Church	0	0	630,860	0	0	0	630,860
Other donation	0	0	281,350	0	0	0	281,350
Taxes & fines	0	0	51,280	0	0	0	51,280
<b>Total non-consumption expenditure</b>	<b>0</b>	<b>0</b>	<b>1,576,030</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,576,030</b>
<b>Investment expenditure</b>							
Land & house	829,090	0	0	0	0	0	829,090
Plant	50,300	0	0	0	0	0	50,300
<b>Total investment expenditure</b>	<b>879,390</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>879,390</b>
<b>TOTAL EXPENDITURE</b>	<b>14,211,690</b>	<b>944,280</b>	<b>2,034,650</b>	<b>450,880</b>	<b>1,636,870</b>	<b>4,340</b>	<b>19,282,690</b>

**Table 21: Aveage annual HH expenditure (NZD)**

	Cash	Subsistence	Cash - gifts	Home produced	Imputed rents	Income in kind consumed	Total
<b>Consumption expenditure</b>							
Food And Non-Alcoholic Beverages	6,870	1,840	390	880	0	0	9,980
Alcoholic Beverages, Tobacco	3,210	0	200	0	0	0	3,420
Clothing And Footwear	990	0	60	0	0	0	1,040
Housing, Water, Electricity, Gas	3,110	0	100	0	3,190	0	6,400
Furnishings, HH Equipment	1,860	0	0	0	0	0	1,860
Health	30	0	0	0	0	0	30
Transport	5,260	0	30	0	0	0	5,290
Communication	1,470	0	0	0	0	0	1,470
Recreation And Culture	770	0	50	0	0	0	820
Education	120	0	0	0	0	0	120
Restaurants And Hotels	1,020	0	30	0	0	0	1,050
Miscellaneous Goods And Services	1,270	0	30	0	0	10	1,310
<b>Total consumption expenditure</b>	<b>25,990</b>	<b>1,840</b>	<b>890</b>	<b>880</b>	<b>3,190</b>	<b>10</b>	<b>32,800</b>
<b>Non-consumption expenditure</b>							
Donation to other hh	0	0	1,190	0	0	0	1,190
Donation to Church	0	0	1,230	0	0	0	1,230
Other donation	0	0	550	0	0	0	550
Taxes & fines	0	0	100	0	0	0	100
<b>Total non-consumption expenditure</b>	<b>0</b>	<b>0</b>	<b>3,070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,070</b>
<b>Investment expenditure</b>							
Land & house	1,620	0	0	0	0	0	1,620
Plant	100	0	0	0	0	0	100
<b>Total investment expenditure</b>	<b>1,710</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,710</b>
<b>TOTAL EXPENDITURE</b>	<b>27,700</b>	<b>1,840</b>	<b>3,970</b>	<b>880</b>	<b>3,190</b>	<b>10</b>	<b>37,590</b>

**Table 22: Average annual per capita expenditure (NZD)**

	Cash	Subsistence	Cash - gifts	Home produced	Imputed rents	Income in kind consumed	Total
<b>Consumption expenditure</b>							
Food And Non-Alcoholic Beverages	2,190	590	120	280	0	0	3,180
Alcoholic Beverages, Tobacco	1,020	0	60	0	0	0	1,090
Clothing And Footwear	310	0	20	0	0	0	330
Housing, Water, Electricity, Gas	990	0	30	0	1,020	0	2,040
Furnishings, HH Equipment	590	0	0	0	0	0	590
Health	10	0	0	0	0	0	10
Transport	1,680	0	10	0	0	0	1,690
Communication	470	0	0	0	0	0	470
Recreation And Culture	250	0	20	0	0	0	260
Education	40	0	0	0	0	0	40
Restaurants And Hotels	320	0	10	0	0	0	330
Miscellaneous Goods And Services	400	0	10	0	0	0	420
<b>Total consumption expenditure</b>	<b>8,280</b>	<b>590</b>	<b>280</b>	<b>280</b>	<b>1,020</b>	<b>0</b>	<b>10,450</b>
<b>Non-consumption expenditure</b>							
Donation to other hh	0	0	380	0	0	0	380
Donation to Church	0	0	390	0	0	0	390
Other donation	0	0	170	0	0	0	170
Taxes & fines	0	0	30	0	0	0	30
<b>Total non-consumption expenditure</b>	<b>0</b>	<b>0</b>	<b>980</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>980</b>
<b>Investment expenditure</b>							
Land & house	510	0	0	0	0	0	510
Plant	30	0	0	0	0	0	30
<b>Total investment expenditure</b>	<b>550</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>550</b>
<b>TOTAL EXPENDITURE</b>	<b>8,820</b>	<b>590</b>	<b>1,260</b>	<b>280</b>	<b>1,020</b>	<b>0</b>	<b>11,970</b>

**Table 23: National HH total expenditure, by COICOP division and class (NZD)**

	Cash	Subsistence	Cash - gifts	Home produced - gifts	Imputed rents	Income in kind	Total
<b>Food and non-alcoholic beverages</b>							
Bread and cereals	749,850	0	16,200	0	0	0	766,060
Meat	1,030,330	3,430	140,560	64,300	0	0	1,238,620
Fish and sea food	252,400	196,980	3,090	137,600	0	0	590,060
Milk, cheese and eggs	252,410	7,290	3,520	7,030	0	0	270,240
Oils and fats	65,370	0	0	0	0	0	65,370
Fruit	138,230	152,350	5,960	72,450	0	0	368,990
Vegetables	303,860	584,230	10,250	169,500	0	0	1,067,840
Sugar, jam, honey, chocolate and confectionary	146,030	0	330	0	0	0	146,370
Food products N.E.C.	125,050	0	1,030	0	0	0	126,080
Coffee, tea and cocoa	55,370	0	970	0	0	0	56,340
Mineral water, soft drinks	405,960	0	16,760	0	0	0	422,720
<b>Sub-total</b>	<b>3,524,870</b>	<b>944,280</b>	<b>198,660</b>	<b>450,880</b>	<b>0</b>	<b>0</b>	<b>5,118,690</b>
<b>Alcoholic beverages, tobacco</b>							
Spirits	410,670	0	56,590	0	0	0	467,260
Wine	155,700	0	12,000	0	0	0	167,700
Beer	670,280	0	32,580	0	0	0	702,850
Tobacco	398,840	0	2,570	0	0	0	401,410
Narcotics	13,720	0	0	0	0	0	13,720
<b>Sub-total</b>	<b>1,649,200</b>	<b>0</b>	<b>103,740</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,752,940</b>
<b>Clothing and footwear</b>							
Clothing materials	23,680	0	0	0	0	0	23,680
Garments	370,280	0	18,640	0	0	0	388,920
Other articles of clothing	20,430	0	9,000	0	0	0	29,430
Cleaning, repair and hire of clothing	2,630	0	1,320	0	0	0	3,950
Shoes and other footwear	88,650	0	0	0	0	0	88,650
<b>Sub-total</b>	<b>505,660</b>	<b>0</b>	<b>28,960</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>534,620</b>
<b>Housing, water, electricity, gas</b>							
Actual Rentals Paid By Tenants	258,320	0	4,740	0	0	0	263,050
Other Actual Rentals	330	0	0	0	0	0	330
Imputed Rentals Of Owner Occupiers	0	0	0	0	1,294,340	0	1,294,340
Other Imputed Rentals	0	0	0	0	342,530	0	342,530
Materials For The Maintenance And Repair	270,520	0	35,960	0	0	0	306,470
Services For The Maintenance And Repair	51,840	0	0	0	0	0	51,840
Water Supply	330	0	0	0	0	0	330
Sewer Collection And Disposal	2,860	0	0	0	0	0	2,860
Electricity	763,210	0	5,090	0	0	0	768,300
Gas	139,950	0	1,360	0	0	0	141,310
Liquid Fuels	99,880	0	0	0	0	0	99,880
Heat Energy	9,230	0	2,060	0	0	0	11,280
<b>Sub-total</b>	<b>1,596,450</b>	<b>0</b>	<b>49,200</b>	<b>0</b>	<b>1,636,860</b>	<b>0</b>	<b>3,282,510</b>
<b>Furnishings, HH equipment</b>							
Furniture And Furnishings	175,420	0	0	0	0	0	175,420
Carpets And Other Floor Coverings	3,510	0	330	0	0	0	3,840
Repair Of Furniture, Furnishings And Flo	2,630	0	0	0	0	0	2,630

	Cash	Subsistence	Cash - gifts	Home produced - gifts	Imputed rents	Income in kind	Total
Household Textiles	42,270	0	320	0	0	0	42,580
Major HH Appliances Whether Elect	212,580	0	0	0	0	0	212,580
Small Electric HH Appliances	7,710	0	840	0	0	0	8,550
Glassware, Tableware And HH Utens	1,600	0	0	0	0	0	1,600
Major Tools And Equipment	80,620	0	0	0	0	0	80,620
Small Tools And Miscellaneous Accessorie	40,830	0	0	0	0	0	40,830
Non Durable HH Goods	362,670	0	840	0	0	0	363,510
Domestic Services And HH Services	23,840	0	0	0	0	0	23,840
<b>Sub-total</b>	<b>953,670</b>	<b>0</b>	<b>2,330</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>956,000</b>
<b>Health</b>							
Pharmaceutical Products	6,170	0	0	0	0	0	6,170
Medical Services	10,220	0	0	0	0	0	10,220
Dental Services	460	0	0	0	0	0	460
<b>Sub-total</b>	<b>16,850</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,850</b>
<b>Transport</b>							
Motor Cars	534,380	0	0	0	0	0	534,380
Motor Cycles, Scooters, Mopeds	11,510	0	0	0	0	0	11,510
Bicycles	3,820	0	0	0	0	0	3,820
Spare Parts And Accessories For Personal	7,740	0	0	0	0	0	7,740
Fuels And Lubricants For Personal Transp	1,325,740	0	0	0	0	0	1,325,740
Maintenance And Repair Of Personal Trans	98,280	0	0	0	0	0	98,280
Other Services In Respect Of Personal Tr	98,280	0	400	0	0	0	98,680
Passenger Transport By Road	24,800	0	0	0	0	0	24,800
Passenger Transport By Air	525,000	0	13,430	0	0	0	538,430
Other Purchased Transport Services	70,240	0	1,970	0	0	0	72,220
<b>Sub-total</b>	<b>2,699,790</b>	<b>0</b>	<b>15,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,715,590</b>
<b>Communication</b>							
Postal Services	1,580	0	0	0	0	0	1,580
Telephone And Telefax Equipment	37,970	0	0	0	0	0	37,970
Telephone And Telefax Services	716,640	0	0	0	0	0	716,640
<b>Sub-total</b>	<b>756,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>756,190</b>
<b>Recreation and culture</b>							
Equipment For The Reception, Recording A	71,540	0	0	0	0	0	71,540
Photographic And Cinematographic Equipme	6,770	0	0	0	0	0	6,770
Information Processing Equipment	44,230	0	0	0	0	0	44,230
Recording Media	860	0	0	0	0	0	860
Games, Toys And Hobbies	12,120	0	0	0	0	0	12,120
Equipment For Sport, Camping And Open Ai	260	0	0	0	0	0	260
Gardens, Plants And Flowers	860	0	0	0	0	0	860
Pets And Related Products	47,310	0	940	0	0	0	48,250
Recreational And Sporting Services	61,630	0	2,570	0	0	0	64,200
Cultural Services	65,650	0	0	0	0	0	65,650
Games Of Chance	73,650	0	22,290	0	0	0	95,940
Books	3,190	0	0	0	0	0	3,190

	Cash	Subsistence	Cash - gifts	Home produced - gifts	Imputed rents	Income in kind	Total
Newspapers And Periodicals	260	0	0	0	0	0	260
Stationery And Drawing Materials	7,020	0	390	0	0	0	7,400
<b>Sub-total</b>	<b>395,340</b>	<b>0</b>	<b>26,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>421,530</b>
<b>Education</b>							
Post- Secondary Non-Tertiary Education	6,580	0	0	0	0	0	6,580
Tertiary Education	50,220	0	0	0	0	0	50,220
Educational program for adults	2,530	0	0	0	0	0	2,530
<b>Sub-total</b>	<b>59,320</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>59,320</b>
<b>Restaurants and hotels</b>							
Restaurants, Cafes And The Like	479,510	0	14,580	0	0	0	494,090
Accommodation Services	43,340	0	1,640	0	0	0	44,990
<b>Sub-total</b>	<b>522,850</b>	<b>0</b>	<b>16,230</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>539,080</b>
<b>Miscellaneous goods and services</b>							
Hairdressing Salons And Personal Groomin	11,100	0	480	0	0	0	11,580
Other Appliances, Articles And Products	414,490	0	13,150	0	0	0	427,630
Jewellery, Clocks And Watches	14,410	0	0	0	0	0	14,410
Other Personal Effects	3,500	0	590	0	0	0	4,090
Life Insurance	27,970	0	0	0	0	0	27,970
Insurance Connected With The Dwelling	6,580	0	0	0	0	0	6,580
Insurance Connected With Transport	1,320	0	0	0	0	0	1,320
Other Insurance	17,530	0	0	0	0	0	17,530
Fisim	121,040	0	0	0	0	0	121,040
Other Financial Services N.E.C.	13,250	0	3,290	0	0	0	16,540
Other Services N.E.C.	20,940	0	0	0	0	0	20,940
Income in kind from employer	0	0	0	0	0	4,340	4,340
<b>Sub-total</b>	<b>652,110</b>	<b>0</b>	<b>17,500</b>	<b>0</b>	<b>0</b>	<b>4,340</b>	<b>673,950</b>
<b>Non-Consumption &amp; investment expenditure</b>							
Current Transfers In Cash	0	0	1,524,750	0	0	0	1,524,750
Taxes and fines	0	0	51,280	0	0	0	51,280
HH investment - land and home	829,090	0	0	0	0	0	829,090
HH investment - equipment	50,300	0	0	0	0	0	50,300
<b>Sub-total</b>	<b>879,380</b>	<b>0</b>	<b>1,576,020</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,455,410</b>
<b>Total</b>	<b>14,211,680</b>	<b>944,280</b>	<b>2,034,630</b>	<b>450,880</b>	<b>1,636,860</b>	<b>4,340</b>	<b>19,282,680</b>

## Proportion of households incurring expenditure, by expenditure category and type

**Table 24: Proportion of HHs incurring expenditure by expenditure category and type**

	Cash	Subsistence	Cash - gifts	Home produced - gifts	Imputed rents	Income in kind consumed	Total
<b>Consumption expenditure</b>							
Food and non-alcoholic beverages	100.0%	58.3%	10.3%	22.4%	0.0%	0.0%	100.0%
Alcoholic beverages, Tobacco	55.8%	0.0%	3.9%	0.0%	0.0%	0.0%	57.7%
Clothing and footwear	48.7%	0.0%	4.5%	0.0%	0.0%	0.0%	48.7%
Housing, water, electricity, gas	100.0%	0.0%	3.1%	0.0%	89.7%	0.0%	100.0%
Furnishings, HH equipment	91.6%	0.0%	1.9%	0.0%	0.0%	0.0%	91.6%
Health	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%
Transport	90.4%	0.0%	4.5%	0.0%	0.0%	0.0%	90.4%
Communication	94.9%	0.0%	0.0%	0.0%	0.0%	0.0%	94.9%
Recreation and culture	44.8%	0.0%	3.1%	0.0%	0.0%	0.0%	45.4%
Education	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	5.8%
Restaurants and hotels	55.2%	0.0%	4.5%	0.0%	0.0%	0.0%	55.2%
Miscellaneous goods and services	95.5%	0.0%	4.5%	0.0%	0.0%	1.3%	95.5%
<b>Total consumption expenditure</b>	<b>100.0%</b>	<b>58.3%</b>	<b>23.8%</b>	<b>22.4%</b>	<b>89.7%</b>	<b>1.4%</b>	<b>100.0%</b>
<b>Non-consumption expenditure</b>							
Donation to other HH	0.0%	0.0%	86.0%	0.0%	0.0%	0.0%	86.0%
Donation to church	0.0%	0.0%	73.7%	0.0%	0.0%	0.0%	73.7%
Other donation	0.0%	0.0%	60.8%	0.0%	0.0%	0.0%	60.8%
Taxes and fines	0.0%	0.0%	12.1%	0.0%	0.0%	0.0%	12.1%
<b>Total non-consumption expenditure</b>	<b>0.0%</b>	<b>0.0%</b>	<b>91.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>91.6%</b>
<b>Investment expenditure</b>							
Land and house	14.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.0%
Plant	17.3%	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%
<b>Total investment expenditure</b>	<b>25.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>TOTAL EXPENDITURE</b>	<b>100.0%</b>	<b>58.3%</b>	<b>94.2%</b>	<b>22.4%</b>	<b>89.7%</b>	<b>1.4%</b>	<b>100.0%</b>



## SECTION 5: HOUSEHOLD INCOME

In this section, we provide a summary of the main components of HH income in Niue. The first subsection highlights some of the important facts relating to HH income that might otherwise be lost in the tabulations – the second subsection. The tabulations provide a set of agreed regionally standardised income tables.

### 1. Household income summary

This summary highlights the main elements of HH income and aims to present the main findings from the HIES. There is a multitude of opportunity for more in-depth analysis, including cross tabulation for more thematic studies, however it is beyond the scope of this report. Below we present the total, average and median annual HH and per capita income; the composition of HH income, by income category and type; and we provide a more in-depth analysis of the composition of main income categories.

### 2. Average and median income

National average annual HH income amounts to around NZD 45,800 (Table 25) and half of HHs get less than NZD 38,950 per annum. Per capita annual income averages around NZD 14,580 with a median of NZD 12,480.

The difference between the average and the median is indicative of a degree of income inequality among the HHs, with higher earning HHs skewing the income distribution. This is discussed in more detail in Section 7.

**Table 25: Total, average and median annual HH and per capita income (NZD)**

	Total	HH		Per capita	
		Average	Median	Average	Median
National	23,495,010	45,800	38,950	14,580	12,480

Total HH income in Niue amounts to around NZD 23.4 million per annum.

### 3. Composition of household income

HH income is made up of different categories and types of income.

Income categories are broadly made up of: i) employment income; ii) capital income; iii) transfer income; iv) casual receipts; v) remittances and gifts; and vi) imputed rents. A detailed description of these income categories is provided in Appendix 1, however, they are briefly described below. The remittances mentioned in the HIES refer only to the cash remittances.

Employment income consists of employee related income (wages and salaries, bonuses, overtime and in-kind employee income, such as housing allowances, electricity, food and clothing), income associated with ownership of a HH managed business (e.g., profit sharing, or dividend), income from cash generating primary activities (agriculture, fisheries, livestock, handicrafts and selling home-processed foods) and income from the consumption of home produced and consumed goods (subsistence).

Capital income relates to the generation of income from assets that the HH owns, which are categorised as home rental (receiving rent from dwellings that the HH owns) or land lease (receiving payments for the use of land that the HH owns) and other general capital income (interest on deposits or loans, and dividend from non-managed businesses).

Transfer income refers to receipts through social security, pension, superannuation or provident funds, child support (alimony), grants or scholarships, insurance claims and other.

Casual receipts refers to income from the sale of assets (e.g., motor vehicle), inheritance and gambling winnings.

Remittances and gifts refer to the receipt of cash gifts from domestic or foreign HHs and the receipt of home-produced food items.

Imputed rents mirror those that are reported in expenditure and are the income from the value of the services that an owner occupied HH derives.

Income types include: i) cash; ii) in-kind; iii) subsistence; iv) home produced gift; and imputed rents.

Cash income refers to income derived through a cash-based transaction where cash is received by the HH. The cash could be in exchange for a good or service that the HH (or individuals within the HH) provides (e.g., wages and salaries), but it could be a cash receipt in exchange for no good or service (e.g., remittances). As long as the receipt is in the form of cash, the income type is cash.

In-kind income refers to income where a good or service is acquired in exchange for employee related services. Examples of this refer to when an employee is provided transportation or communication facilities under their employment arrangement, or where they receive free lunch at work.

Subsistence income is the net (as opposed to the gross, reported in expenditure) value of home produced and consumed goods. This is the value of the goods acquired (through harvest, catch, collection, etc.) and consumed by the HH less the intermediate expenses associated with their production.

Home produced gifts refer to the value of items that are home produced and gifted to another HH. This balances on the expenditure aggregates.

Imputed rents have already been defined above.

Below, we provide a breakdown of the composition of HH income by category and type.

### Income category

At the National level by broad income category, employment income makes up 72 percent of total HH income. Following this, pensions (12 percent), imputed rents (7 percent) make up the large remainder of HH income.

By income category, wages and salaries make up the large proportion of HH employment, accounting for 86 percent of this category followed by the non subsistence business (any business not related to agriculture, fisheries, livestock and handicraft).

The "Capital income" category is almost exclusively made of home rental and land lease.

**Table 26: Composition of HH income, by income category**

<b>National</b>	
<b>Employment income</b>	
Wages & salaries	61.6%
Bonus overtime	0.1%
Housing allowance	0.1%
Income in kind	0.0%
Non subsistence business	5.2%
Agriculture activities	0.7%
Fishing activities	0.2%
Livestock activities	0.0%
Handicraft activities	0.2%
Home production	3.4%
<b>Sub-total</b>	<b>71.6%</b>
<b>Capital income</b>	
Home rental & land lease	3.4%
Other income from capital	0.0%
<b>Sub-total</b>	<b>3.4%</b>
<b>Transfer income</b>	
Pension & social benefit	12.2%
other transfer income (scholarship...)	2.9%
<b>Sub-total</b>	<b>15.0%</b>
<b>Casual receipts</b>	
Sale of assets	0.1%
Other casual income	0.3%
<b>Sub-total</b>	<b>0.4%</b>
<b>Remittances and gifts</b>	
Remittances	0.7%
Home produced gifts	1.9%
<b>Sub-total</b>	<b>2.6%</b>
<b>Imputed rents</b>	
imputed rents	7.0%
<b>Sub-total</b>	<b>7.0%</b>
<b>Total</b>	<b>100.0%</b>

## Income type

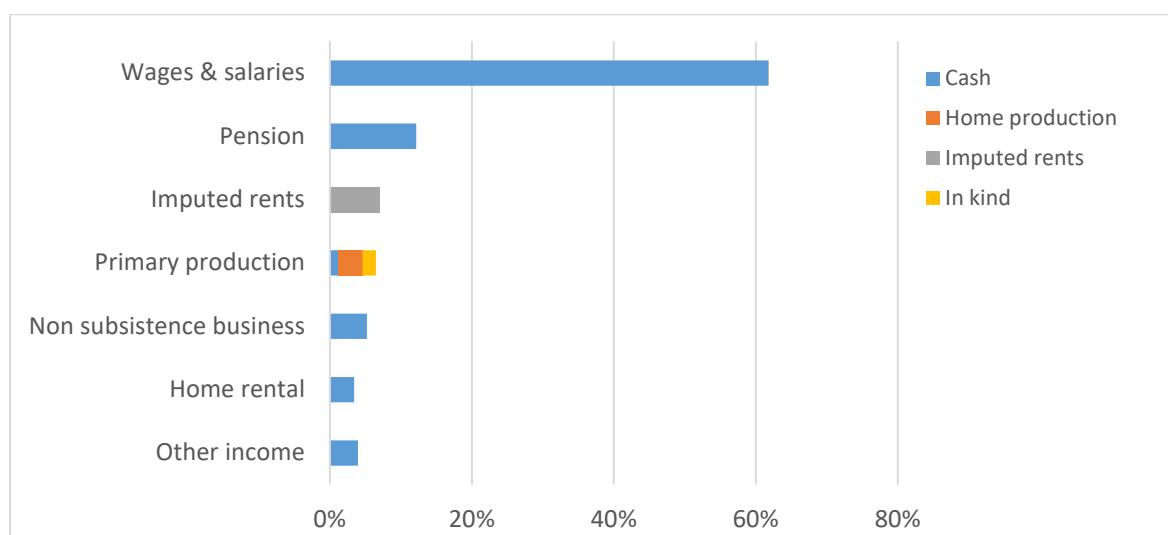
Cash income makes up 88 percent of total HH income, followed by imputed rents (7 percent) and subsistence (3.4 percent).

**Table 27: Composition of HH income, by income type**

	NZD	%
Cash	20,597,470	87.7%
In kind from employer	4,340	0.0%
Home production	805,460	3.4%
Home production gifted	450,880	1.9%
Imputed rents	1,636,870	7.0%
<b>Total</b>	<b>23,495,010</b>	<b>100.0%</b>

## Income composition by category and type

The below figure presents the composition of income, by the highest contributing categories to total national income categories, and income type. The results are fairly intuitive and it can be seen that wages and salaries is dominant, followed by pension and imputed rents. The primary production category is made of cash income (from the sale of agriculture, fisheries, livestock and handicraft items) and home production consumed or given away. This broad category represents the fourth source of total income but remains negligible in terms of cash income.



**Figure 4: Composition of HH income, by income category and type**

## 4. Income from wages and salaries

Wages and salaries (including bonuses and overtime, housing allowances and in-kind income) account for more than 60 percent of total HH income in Niue.

Overall 75 percent of the HHs in Niue had at least one member who were involved in wages and salaries at the time of the interview (Table 28). In terms of wages and salaries, the public sector is predominant in Niue as it generates almost 80 percent of the total wage.

**Table 28: HHs involved in wages and salaries by sector**

	National		
	Public	Private	Total
# HHs	316	191	385
% HHs	62%	37%	75%

The public sector is the major contributor to employment in Niue, two third of the HHs in Niue have at least 1 member involved in a wage job in public sector at the time of the interview.

More than 70 percent of the HHs in Niue have wages and salaries as their main source of income and 17 percent as their unique source of income (Table 29).

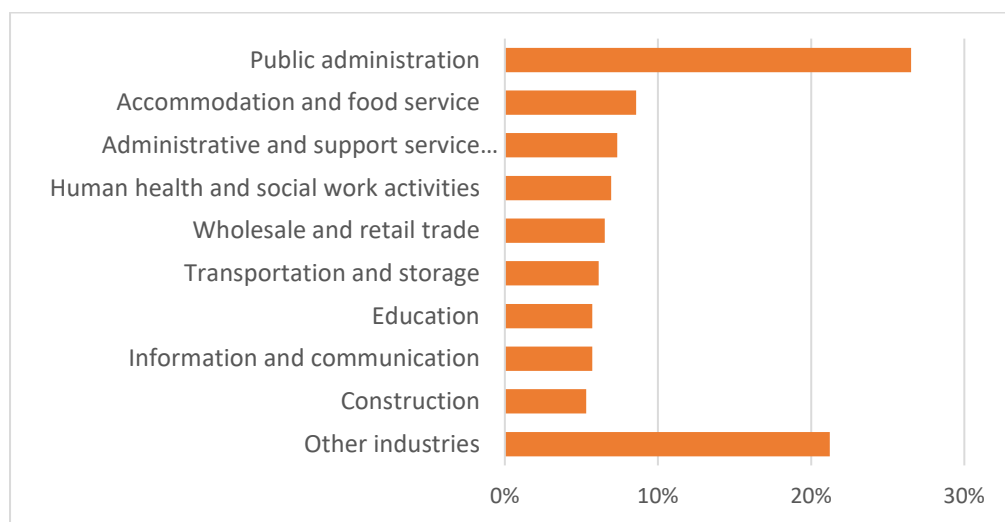
**Table 29: HHs involved in wages and salaries as unique and main source of cash income**

	Main source	Unique source
# HHs	362	89
% HHs	71%	17%

All together, the average wage amounts to NZD 1,500 per month (NZD 1,750 in public sector and 1,010 in private sector).

Income from wages and salaries is classified according to the International Standard Industrial Classification of All Economic Activities (ISIC. Rev.4) and the International Standard Classification of Occupations (ISCO-08). The figures below present the proportion of total income derived from wages and salaries by ISIC Section (Figure 5) and ISCO Major Group (Figure 5).

At a national level, the highest proportion of total income from salaries and wages – by industry – is derived from the Public administration (27 percent of wages and salaries income). Other industries represent less than 10 percent of the total wage (accommodation and food services, administrative support...).



**Figure 5: Proportion of total wages and salaries income, by industry**

## 5. Income from pension and social benefits

Nationally pension and social benefits represent the second main source of HH income (after wages and salaries). 43 percent of the HHs received pensions.

**Table 30: Proportion of HHs who received pension and social benefits in Niue and amount received**

	% HHs	Amount received (NZD)	
		annual total	Av. annual
<b>Total</b>	<b>43%</b>	<b>2,858,000</b>	<b>12,820</b>

On average pensions amount NZD 1,050 monthly and they represent the only source of income for 12 percent of the HHs.

**Table 31: HHs with pension as main and only source of cash income**

	Main source of income	Only source of income
# HHs	223	62
% HHs	43.5%	12.1%

## 6. Income from primary activities and subsistence

Primary activities consist in agriculture, fishing, livestock and handicraft. Handicraft includes the preparation of processed food items or dishes for sale. Those activities all together amounts more than NZD 1.5 million in the HH income and represents the fourth main source of income (after wages, pension, and imputed rents). The income from primary production if made of cash income (from the sale of agriculture, fisheries livestock or handicraft products), subsistence income (from the consumption of such products) and in kind gifted (from gifts).

On the overall more than 80 percent of the HHs are involved in subsistence activities (agriculture, fishing, livestock or handicraft) for their subsistence or for cash income generation.

**Table 32: HH participation in primary production activities (agriculture, fisheries, livestock, handicraft)**

		# HHs	% HHs
Primary activities	Cash & subsistence	411	80.1%
Agriculture	Cash & subsistence	362	70.6%
Fishing	Cash & subsistence	194	37.8%
Livestock	Cash & subsistence	230	44.8%
Handicraft	Cash & subsistence	131	25.5%
Agriculture	Cash	56	10.9%
	Subsistence	355	69.2%
Fishing	Cash	26	5.1%
	Subsistence	181	35.3%
Livestock	Cash	16	3.1%
	Subsistence	214	41.7%
Handicraft	Cash	59	11.5%
	Subsistence	72	14.0%

Agriculture is the most popular primary production activity, followed by livestock, but looking at cash income, handicraft is the most popular activity (more than 11 percent of the HHs in Niue are involved in handicraft for cash purposes) .

Table 33 illustrates the fact that primary production activities are not major in the composition of HH income, and they come as an additional income and not as a main income.

**Table 33: HHs with primary production for cash as main cash income source**

	Main source of cash	Unique source of cash
# HHs	3	0
% HHs	0.6%	0.0%

The following tables report the proportion of total cash income derived from the top 10 contributing agricultural, fisheries, livestock, home processed food and livelihood income. These industries collectively make up 1.6 percent of total HH income.

Sweet potatoes is the primary production items that generates the main cash income, followed by yam and mango. Looking at the handicraft sector, the wood carving is the main source of cash income, followed by the basket. On the fishing activities sector, the sale of crabs

**Table 34: Proportion of total cash income from top 10 agriculture, fisheries, livestock and handicraft products**

	Total
1 Sweet Potato	10.2%
2 Yam	9.9%
3 Mango	9.1%
4 Coconut	8.9%
5 Wood carvings/wall/ceiling hangings	4.6%
6 Other handicraft items	4.6%
7 Baskets	4.0%
8 Other crabs (land crab, coconut crab, other)	3.8%
9 Papaya	3.5%
10 Brooms	3.2%
<b>Total</b>	<b>61.7%</b>

Looking at the proportion of subsistence income (accounting for 5 percent of total income) the below table lists the top 10 items and ranks them by contribution to total national income from subsistence. It can be seen that taro is the main items

that HHs home produce for their own consumption, followed by fish. Pork are raised mainly for home production and not for cash business, similar to fish which are more home produced than sold.

**Table 35: Proportion of total subsistence income from top 10 products**

		<b>Total</b>
1	Taro	39.3%
2	Fish - Fresh Or Frozen Without Any Detail	12.0%
3	Banana (Green) - Fresh	8.5%
4	Cassava / Manioc	5.9%
5	Pork - Leg (Fresh Or Frozen)	3.4%
6	Coconuts (Green) - Fresh	2.8%
7	Yam	2.6%
8	Reef Fish (Frozen Or Fresh) - String Of Fish	2.2%
9	Other Shell Fish (Clam, Vasuva, Cockles, Pipis-Kaloa'A...) - Fresh Or Frozen	2.0%
10	Other Large Ocean Fish (Rainbow, Runner, Marlin, Bill Fish...) (Frozen Or Fresh)	1.8%
<b>Total</b>		<b>80.5%</b>

## 7. Income tables

### Annual household income

**Table 36: Annual national HH income (NZD)**

	<b>Cash</b>	<b>In Kind</b>	<b>Subsistence</b>	<b>Home produced - gifts</b>	<b>Imputed rents</b>	<b>Total</b>
<b>Employment income</b>						
Wages & salaries	14,468,350	0	0	0	0	14,468,350
Bonus overtime	20,420	0	0	0	0	20,420
Housing allow	34,850	0	0	0	0	34,850
Income in kind	0	4,340	0	0	0	4,340
Non subsistence business	1,221,940	0	0	0	0	1,221,940
Agriculture activities	167,010	0	0	0	0	167,010
Fishing activities	41,730	0	0	0	0	41,730
Livestock activities	20	0	0	0	0	20
Handicraft activities	58,600	0	0	0	0	58,600
Home production	0	0	805,460	0	0	805,460
<b>Total employment income</b>	<b>16,012,920</b>	<b>4,340</b>	<b>805,460</b>	<b>0</b>	<b>0</b>	<b>16,822,720</b>
<b>Capital income</b>						
Home rental & land lease	802,780	0	0	0	0	802,780
Other income from capital	2,140	0	0	0	0	2,140
<b>Total capital income</b>	<b>804,920</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>804,920</b>
<b>Transfer income</b>						
Pension & social benefit	2,857,990	0	0	0	0	2,857,990
Other transfer income	675,160	0	0	0	0	675,160
<b>Total transfer income</b>	<b>3,533,150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,533,150</b>
<b>Casual receipts</b>						
Sale of assets	26,310	0	0	0	0	26,310
Other casual income	62,000	0	0	0	0	62,000
<b>Total casual receipts</b>	<b>88,310</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88,310</b>
<b>Remittances and gifts</b>						
Remittances	158,180	0	0	0	0	158,180
Home produced gifts	0	0	0	450,880	0	450,880
<b>Total remittances and gifts</b>	<b>158,180</b>	<b>0</b>	<b>0</b>	<b>450,880</b>	<b>0</b>	<b>697,370</b>
<b>Imputed rents</b>						
Imputed rents	0	0	0	0	1,636,870	1,636,870
<b>Total imputed rents</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,636,870</b>	<b>1,636,870</b>
<b>Total</b>	<b>20,597,480</b>	<b>4,340</b>	<b>805,460</b>	<b>450,880</b>	<b>1,636,870</b>	<b>23,495,020</b>

## Average annual household income

**Table 37: Average annual HH income (NZD)**

	Cash	In Kind	Subsistence	Home produced - gifts	Imputed rents	Total
<b>Employment income</b>						
Wages & salaries	28,200	0	0	0	0	28,200
Bonus overtime	40	0	0	0	0	40
Housing allow	70	0	0	0	0	70
Income in kind	0	10	0	0	0	10
Non subsistence business	2,380	0	0	0	0	2,380
Agriculture activities	330	0	0	0	0	330
Fishing activities	80	0	0	0	0	80
Livestock activities	0	0	0	0	0	0
Handicraft activities	110	0	0	0	0	110
Home production	0	0	1,570	0	0	1,570
<b>Total employment income</b>	<b>31,210</b>	<b>10</b>	<b>1,570</b>	<b>0</b>	<b>0</b>	<b>32,790</b>
<b>Capital income</b>						
Home rental & land lease	1,560	0	0	0	0	1,560
Other income from capital	0	0	0	0	0	0
<b>Total capital income</b>	<b>1,570</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,570</b>
<b>Transfer income</b>						
Pension & social benefit	5,570	0	0	0	0	5,570
Other transfer income	1,320	0	0	0	0	1,320
<b>Total transfer income</b>	<b>6,890</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,890</b>
<b>Casual receipts</b>						
Sale of assets	50	0	0	0	0	50
Other casual income	120	0	0	0	0	120
<b>Total casual receipts</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>170</b>
<b>Remittances and gifts</b>						
Remittances	310	0	0	0	0	310
Home produced gifts	0	0	0	880	0	880
<b>Total casual receipts</b>	<b>310</b>	<b>0</b>	<b>0</b>	<b>880</b>	<b>0</b>	<b>1,360</b>
<b>Imputed rents</b>						
Imputed rents	0	0	0	0	3,190	3,190
<b>Total imputed rents</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,190</b>	<b>3,190</b>
<b>Total</b>	<b>40,150</b>	<b>10</b>	<b>1,570</b>	<b>880</b>	<b>3,190</b>	<b>45,800</b>

## Average annual per capita income

**Table 38: Average annual per capita income (NZD)**

	Cash	In Kind	Subsistence	Home produced - gifts	Imputed rents	Total
<b>Employment income</b>						
Wages & salaries	8,980	0	0	0	0	8,980
Bonus overtime	10	0	0	0	0	10
Housing allow	20	0	0	0	0	20
Income in kind	0	0	0	0	0	0
Non subsistence business	760	0	0	0	0	760
Agriculture activities	100	0	0	0	0	100
Fishing activities	30	0	0	0	0	30
Livestock activities	0	0	0	0	0	0
Handicraft activities	40	0	0	0	0	40
Home production	0	0	500	0	0	500
<b>Total employment income</b>	<b>9,940</b>	<b>0</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>10,440</b>
<b>Capital income</b>						
Home rental & land lease	500	0	0	0	0	500
Other income from capital	0	0	0	0	0	0
<b>Total capital income</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>500</b>
<b>Transfer income</b>						
Pension & social benefit	1,770	0	0	0	0	1,770
Other transfer income	420	0	0	0	0	420
<b>Total transfer income</b>	<b>2,190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,190</b>
<b>Casual receipts</b>						
Sale of assets	20	0	0	0	0	20
Other casual income	40	0	0	0	0	40
<b>Total casual receipts</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>
<b>Remittances and gifts</b>						
Remittances	100	0	0	0	0	100
Home produced gifts	0	0	0	280	0	280
<b>Total casual receipts</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>280</b>	<b>0</b>	<b>430</b>
<b>Imputed rents</b>						
Imputed rents	0	0	0	0	1,020	1,020
<b>Total imputed rents</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,020</b>	<b>1,020</b>
<b>Total</b>	<b>12,790</b>	<b>0</b>	<b>500</b>	<b>280</b>	<b>1,020</b>	<b>14,580</b>



## Proportion of households receiving income, by income category and type

**Table 39: Proportion of HHs receiving income, by category and type**

	Cash	In Kind	Subsistence	Home produced - gifts	Imputed rents	Total
<b>Employment income</b>						
Wages & salaries	75%	0%	0%	0%	0%	75%
Bonus overtime	5%	0%	0%	0%	0%	5%
Housing allow	1%	0%	0%	0%	0%	1%
Income in kind	0%	1%	0%	0%	0%	1%
Non subsistence business	9%	0%	0%	0%	0%	9%
Agriculture activities	11%	0%	0%	0%	0%	11%
Fishing activities	5%	0%	0%	0%	0%	5%
Livestock activities	3%	0%	0%	0%	0%	3%
Handicraft activities	12%	0%	0%	0%	0%	12%
Home production	0%	0%	62%	0%	0%	62%
<b>Total employment income</b>	<b>85%</b>	<b>1%</b>	<b>62%</b>	<b>0%</b>	<b>0%</b>	<b>92%</b>
<b>Capital income</b>						
Home rental & land lease	6%	0%	0%	0%	0%	6%
Other income from capital	2%	0%	0%	0%	0%	2%
<b>Total capital income</b>	<b>8%</b>					<b>8%</b>
<b>Transfer income</b>						
Pension & social benefit	44%	0%	0%	0%	0%	44%
Other transfer income	38%	0%	0%	0%	0%	38%
<b>Total transfer income</b>	<b>70%</b>					<b>70%</b>
<b>Casual receipts</b>						
Sale of assets	1%	0%	0%	0%	0%	1%
Other casual income	7%	0%	0%	0%	0%	7%
<b>Total casual receipts</b>	<b>8%</b>					<b>8%</b>
<b>Remittances and gifts</b>						
Remittances	13%	0%	0%	0%	0%	13%
Home produced gifts	0%	0%	0%	22%	0%	22%
<b>Total casual receipts</b>	<b>13%</b>	<b>0%</b>	<b>0%</b>	<b>22%</b>	<b>0%</b>	<b>31%</b>
<b>Imputed rents</b>						
Imputed rents	0%	0%	0%	90%	0%	90%
<b>Total imputed rents</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>90%</b>	<b>0%</b>	<b>90%</b>
<b>Total</b>	<b>100%</b>	<b>1%</b>	<b>62%</b>	<b>22%</b>	<b>90%</b>	<b>100%</b>

## SECTION 6: POPULATION PROFILE AND DWELLING CHARACTERISTICS

In this section, we present selected characteristics of the population of Niue and dwellings in which HHs inhabit. Niue conducts 5-yearly population and housing census (PHC) – the most recent was in 2011<sup>1</sup> – and the objective of HIES is not to collect comprehensive demographic and dwelling information. As such, this section is intended to be brief and serves to compare the HIES results with the 2011 census results so as to provide support for the robustness of the HIES data and to provide information that is relevant to HH income and expenditure.

### 1. Population profile

Table 39 below presents the main population aggregates derived from the 2015/2016 HIES and compares them with the population figures obtained from the 2011 census.

**Table 40: 2015/2016 HIES and 2012 population census comparison, National Niue**

	2011 census	2016 HIES	Difference %
<b>Number of HHs</b>	<b>477</b>	<b>513</b>	<b>7.5%</b>
<b>Total population</b>	<b>1,607</b>	<b>1,611</b>	<b>0.2%</b>
Male	795	763	-4.0%
Female	812	848	4.4%
Av HH size	3.4	3.1	-6.8%

The population remains stable over time, the increase of the number of HHs leads to a decrease of the HH size. All those population indicators have to be confirmed by the 2016 population census.

Looking at the number of HHs and the average HH size, the HIES provides some reasonable estimates which suggests consistency in HIES estimates. The HIES population estimates presented in the above table is the population that were used in the computation of all per capita income and expenditure estimates

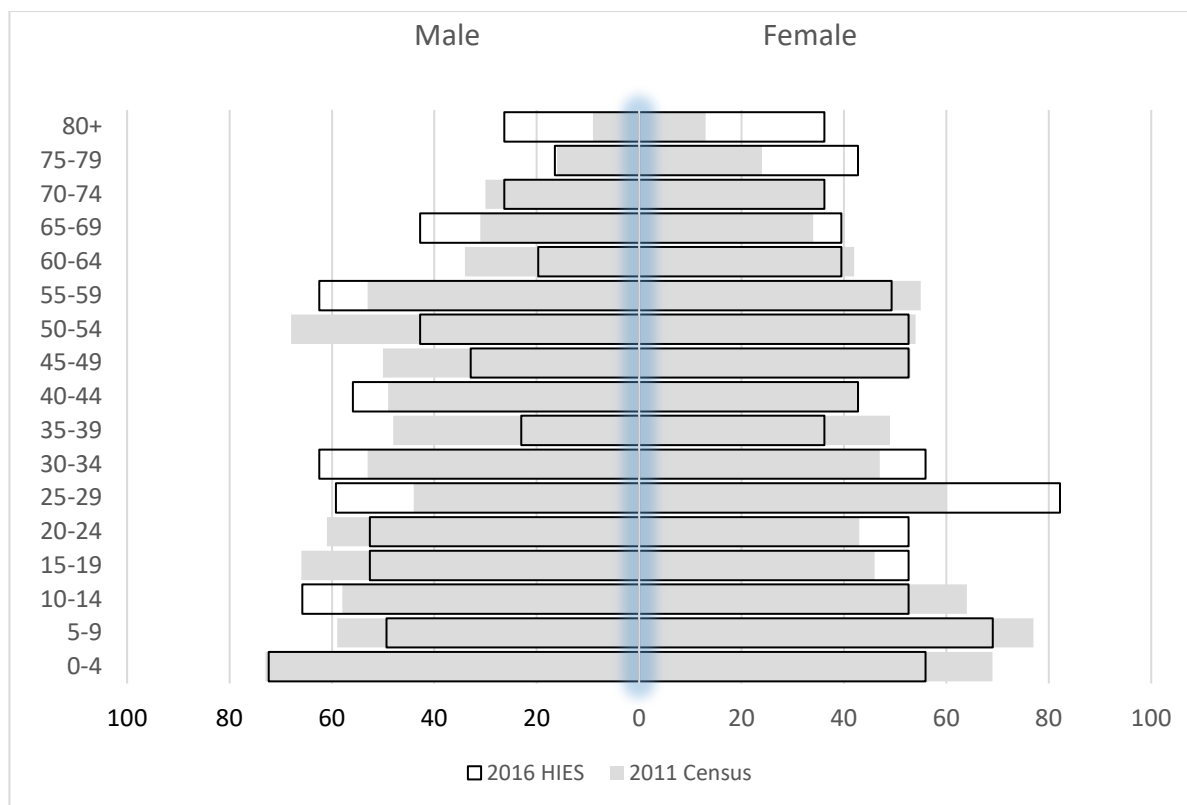
Comparing the age structure of the population demonstrates that the extrapolated HIES results reflects the population structure of Niue (Table 41). The population has aged between 2011 and 2016 as the proportion of population aged more than 65 increases from 12 percent to 16 percent and the youth population decreased from 26 percent to 22 percent.

**Table 41: Age structure of the population**

Age group	2011 census	2016 HIES
Less than 15 years old	26.4%	22.7%
15 to 39 years old	32.0%	32.9%
40 to 64 years old	29.2%	28.0%
65 years old and more	12.4%	16.5%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The population pyramids in the below figure present the HIES population structure, by age group and sex, with the 2011 census population structure overlaid to show the difference between the HIES estimates and the population. It can be seen that the overall population structure, extrapolated from the HIES results, closely represents that of the 2012 census. Nationally, the population structure is highly representative, with a few age groups showing under or over estimation. It is not possible at this stage to know if those changes are due to the population trend or the sample design.

<sup>1</sup> The 2016 population census was not ready at the time of the HIES data reporting



**Figure 6: 2015/2016 HIES and 2011 PHC population age structure comparison, by sex**

**Table 42: 2015/2016 HIES and 2012 PHC population characteristics**

	National Niue	
	2011 Census	2016 HIES
Sex ratio (male to female)	0.99	0.90
Dependency ratio	0.63	0.64
Median age	32	33

To further add to the comparison of population structure, Table 42 (above) shows the characteristics of the population: sex ratio (male population to female population), dependency ratio (population aged 0 to 14 and 65+ to population aged 15 to 64) and the median age. As expected the sex ratio is higher from the HIES (as the male population growth rate was much higher than the female one). In addition the dependency ratio shows a slight difference too, but the number of dependant people is tranfered from young (less than 14 year old) to old (more than 65 years old). Again population trend over time combined with survey design effect explain those differences and it is not possible at this stage to determine which on these two is the main factor.

### Activity profile (persons aged 15+ years)

The main activity in the past 7 days for the population aged 15 years and older, was employed in the public sector (40 percent), followed by employed in private sector (15 percent) and retired/too old (11 percent). with almost 36 percent of persons reporting this as their main activity (Table 43). Following this, 9 percent declared home maker as main occupation and 7 percent students.

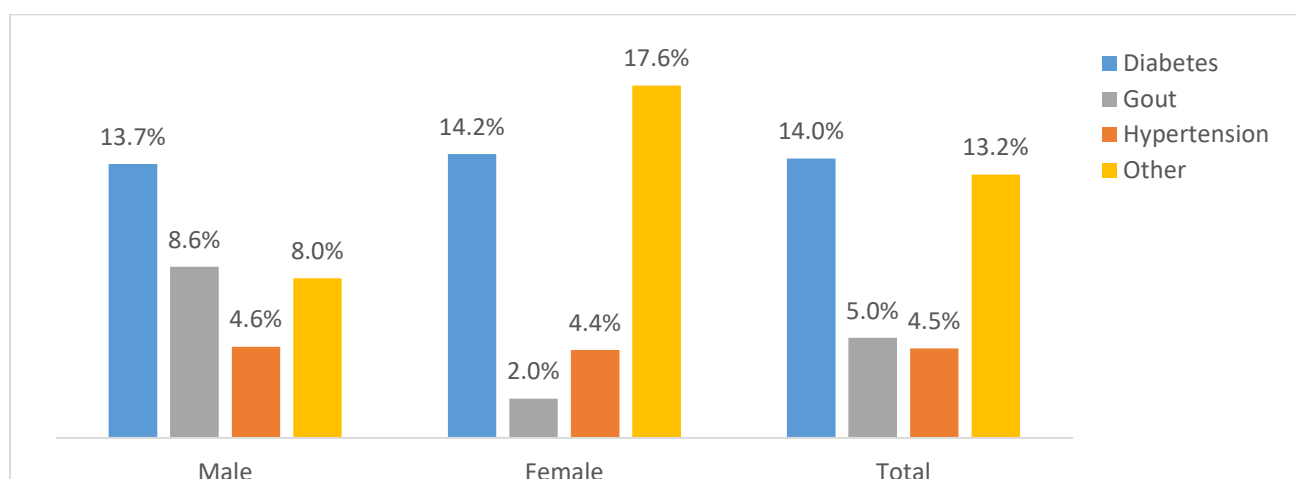
By gender, employed in the public sector is the main occupation for both males and females, but the second main occupation for female is home maker, followed by retired and private sector. Regarding the males, private sector comes second followed by subsistence activities and retired (home maker makes only 3 percent of the adult male population).

**Table 43: Main activity in the last 7-days (persons aged 15+), by gender**

	Male	Female	Total
Employer	1.1%	0.5%	0.8%
Self Employed	5.1%	2.9%	4.0%
Employed in the public sector	41.1%	39.7%	40.4%
Employed in the private sector	20.0%	11.8%	15.6%
Producing good for own consumption	9.1%	2.5%	5.5%
Unpaid family worker in a business	0.6%	1.0%	0.8%
Unpaid family help with basic HH	1.1%	3.4%	2.4%
Volunteer worker	1.7%	2.0%	1.8%
Student	6.9%	7.8%	7.4%
Home maker	2.9%	14.2%	9.0%
Retired / Too old	8.6%	14.2%	11.6%
None / Did not work	1.1%	0.0%	0.5%
Physically / Mentally disabled	0.6%	0.0%	0.3%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

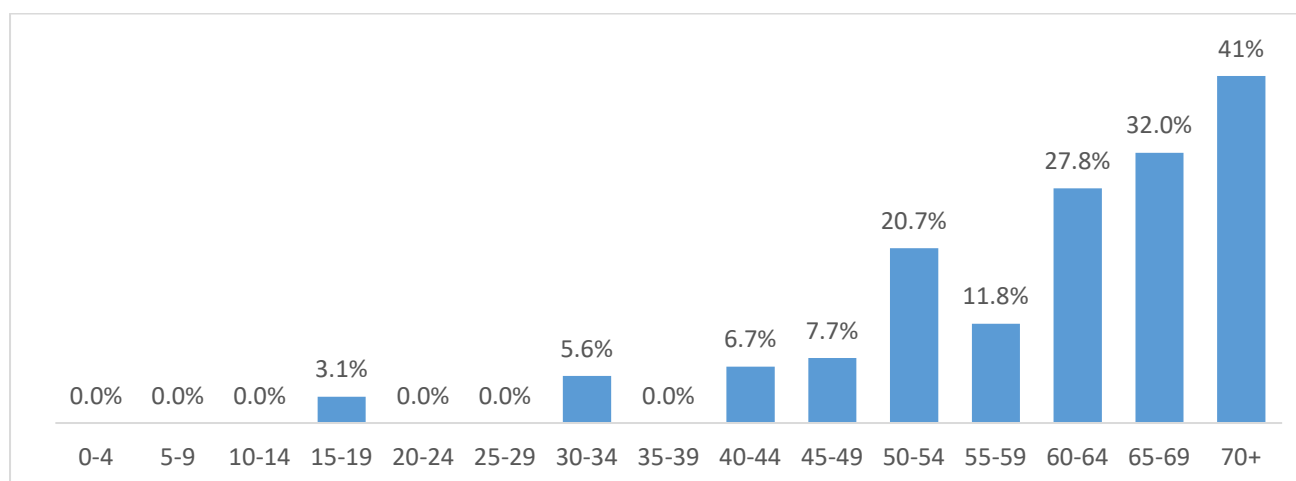
## Health problem

22.6 percent of the population self-reported having an ongoing health problem. This ranged from 20 percent of the male population to 24.7 percent of the female population.



**Figure 7: 2015/2016 HIES and 2011 PHC population age structure comparison, by sex**

Diabetes is the main on going sickness reported by both male and female population. Gout is more common within the male population, while female reports more other sickness (like heart disease for example).



**Figure 8: Distribution of the population having diabetes, by age group**

After 60 years old, a third and after 70 years old half of the population developed diabetes.

77 percent of the population who reports an on going sickness regularly consult an health professional and 85 percent take medication.

### Alcohol kava and tobacco use (persons aged 15+)

Approximately 40 percent of the population aged 15 years and over drank alcohol in the last seven days (53 percent of the males and 30 percent of the females). Kava is not very common in Niue as less than 2 percent of the population consume it. Regarding tobacco, more than 13 percent of the adult population smoke, and more especially the men as 18 percent of them are smokers.

**Table 44: prevalence of alcohol kava and tobacco (population aged 15+)**

	Male	Female	Total
Drink alcohol	53.0%	30.0%	40.0%
Drink kava	2.6%	0.9%	1.7%
Smoke tobacco	18.0%	10.0%	13.6%

On average the smokers declared 43 cigarettes per week as their usual consumption, 45 for male and 39 for female.

## 2. Household characteristics

### Expenditure-related characteristics

Nationally, 98 percent of HHs are connected to the public electricity grid and the main source of cooking energy is gas (66 percent) followed by the electricity (26 percent). Almost all the HHs are connected to the public water grid (97 percent) and 87 percent of them use it as main source of drinking water. In parallel 57 percent of the HHs own a water tank and only 8 percent use it as their main drinking water source.

75 percent of the HHs have an operational landline phone at home and 24\$ are connected to the internet through the land line phone. Looking at the cable/satellite Tv, 20 percent of the HHs are connected.

In Niue 67 percent of the HHs own the house in which they reside, 23 percent are living in free of charge (through the family or the employer) and 10 percent are renting.

### Income-related characteristics

A large proportion of HH participate in primary production related activities (Table 45). 59 percent of HHs participate in agriculture which is the most popular primary production activity.

**Table 45: Proportion of HHs that participate in primary activities**

	Agriculture	Fisheries	Livestock	Handicrafts
<b>Total</b>	<b>59%</b>	<b>17%</b>	<b>6%</b>	<b>12%</b>

Table 46 shows the proportion of HHs that sell a portion of their harvest, by industry. It can be seen that not all HHs that participate in primary industry sell any of their produce (i.e., there are some HHs that undertake primary productive activities solely for subsistence purposes), however a relatively high portion do, especially in the agriculture and handicraft areas (11 percent of the HHs are selling agriculture and handicraft products).

**Table 46: Proportion of HHs that sell primary produce**

	Agriculture	Fisheries	Livestock	Handicrafts
<b>Total</b>	<b>11%</b>	<b>5%</b>	<b>3%</b>	<b>11%</b>

## SECTION 7: ADDITIONAL ANALYSES

In this section, we compare the results of the 2015/2016 HIES with those from the 2010 HIES. Following this, we have a section that discussed intermediate expenditure that HHs incur and, finally, we look at the distribution of income and expenditure in Niue.

### 1. Comparison with previous HIES

Below we compare the results of the 2002 (most previous) HIES with those from the 2015/2016 HIES. Where nominal is reported, this is the actual amount that was reported in 2002. Where real is reported, this is the consumer price indices (CPI) inflated 2002 nominal amount, which gives a better comparative representation between 2002 and 2015 as the prices are inflated to 2016 levels. The 2002 aggregates were inflated by the national CPI index, with no disaggregation, and the aggregates presented in table 46 is the total consumption expenditure (donations, taxes and HH investment excluded).

The different methodology used in Niue 2015/2016 HIES might explained some big differences obtained in the comparison. The questionnaire, the classification and the field operation plan were different in the 2015/2016 HIES from the 2002 HIES which have definitely an impact on the computation of the aggregates.

#### Expenditure

The consumption expenditure decreases by 24 percent between 2002 and 2016 (in real price). The decrease is lower for the average HH consumption expenditure (17 percent) and even lower for the per capita consumption expenditure (10 percent). It means that the population in Niue spent less in 2016 compared to 2002 (their power of purchase has been affected during the period).

**Table 47: Comparison of 2002 and 2016 - consumption expenditure**

	2002 NZD	2016 NZD	CPI 2002 - 2016 %	2002 NZD (2016 price)	2016 NZD (2016 price)	% Change
<b>Total consumption expenditure</b>	<b>13,111,880</b>	<b>16,827,260</b>	<b>55.3%</b>	<b>20,061,180</b>	<b>15,190,400</b>	<b>-24.3%</b>
Av HH consumption expenditure	26,020	32,800	55.3%	39,800	32,800	-17.6%
Av PC consumption expenditure	7,620	10,450	55.3%	11,660	10,440	-10.4%

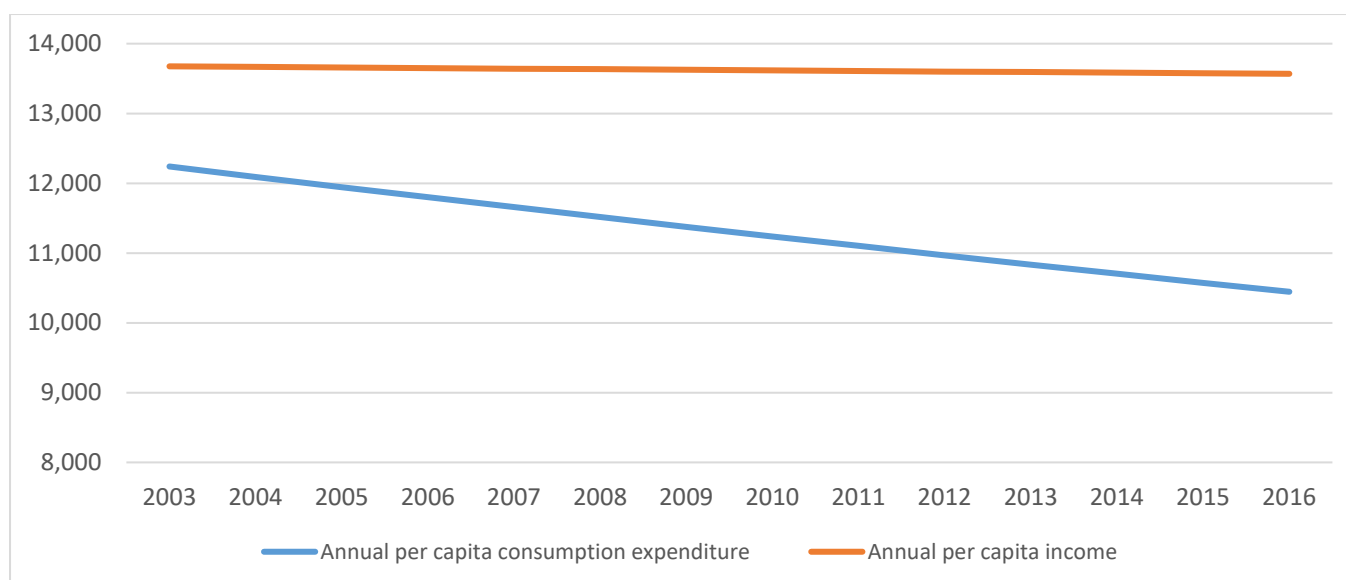
#### Income

The income aggregates decreases by 7 percent during the period, which results to a 1.4 percent decrease of the per capita total income during the period.

**Table 48: Comparison of 2002 and 2016 income**

	2002 NZD	2016 NZD	CPI 2002 - 2016 %	2002 NZD (2016 price)	2016 NZD (2016 price)	% Change
<b>Total income (excl imputed rents)</b>	<b>15,145,440</b>	<b>21,858,140</b>	<b>55.3%</b>	<b>23,520,870</b>	<b>21,858,140</b>	<b>-7.6%</b>
Av. annual HH income	30,050	42,610	55.3%	46,670	42,610	-9.2%
Av. annual PC income	8,810	13,570	55.3%	13,670	13,570	-1.4%

During the period 2002 to 2016, the average per capita cash expenditure decrease annually by 1.2 percent while the per capita consumption expenditure has decrease by 0.06 percent annually on average.



**Figure 9: Per capita income and expenditure 2002 to 2016 in real price (2016)**

## 2. Intermediate expenditure

The income aggregates reported herein are all net of intermediate expenditure, however intermediate expenditure is collected in HIES and it is, as such, worth reporting. The table below reports the gross, intermediate and net income, by income category. Non subsistence businesses were largely under reported and half of them had no related income and expenditure reported. The net income was imputed based on the median of the businesses net income<sup>2</sup>.

**Table 49: Gross, intermediate and net annual HH income from primary employment activities (NZD)**

	Cash (Gross)	Subsistence (Gross)	Int exp (Subsistence)	Int exp (Primary)	Int exp (Business)	Net income
Non subsistence business	1,682,980				-461,040	1,221,940
Agriculture activities	193,760			-26,750		167,010
Fishing activities	48,210			-6,480		41,730
Livestock activities	5,590			-5,570		20
Handicraft activities	64,910			-6,310		58,600
Home production		944,280	-138,820			805,460
<b>Total</b>	<b>1,995,450</b>	<b>944,280</b>	<b>-138,820</b>	<b>-45,110</b>	<b>-461,040</b>	<b>2,294,760</b>

Net profit margins in agriculture and fishing activities is estimated to be 13 percent and 10 percent in handicraft. The livestock activity does not generate any income (intermediate expenditure balance the gross income) as HHs involved in livestock are occasionally selling animals (just to help them in financing their livestock activities for their own need).

Looking at the home production category (subsistence), all activities combined, the intermediate expenditure amount 15 percent of the estimated gross income.

The following table 50 presents a breakdown of the intermediate expenditure by type of primary activity and purpose. It can be seen that the transport of goods, fishing equipment, animal feed and raw materials are respectively the main operating costs for agriculture, fishing, livestock and handicraft activities.

<sup>2</sup> Due to the imputation process on net income for non subsistence business, the breakdown on intermediate expenditure is not possible for this category

**Table 50: Intermediate expenditure by primary production activities by purpose (NZD)**

	Purpose of the expenditure		
	Business	Subsistence	Total
<b>Agriculture (% HHs involved)</b>	<b>11%</b>	<b>69%</b>	<b>71%</b>
Transportation of goods	21,700	58,220	79,920
Labour	0	920	920
Fencing and enclosure	160	13,480	13,650
Seedling, seeds and fertilizer	4,880	1,530	6,410
Other / Unlisted	0	1,120	1,120
<b>Total agriculture activities</b>	<b>26,750</b>	<b>75,270</b>	<b>102,010</b>
<b>Fishing activities (% HHs involved)</b>	<b>5%</b>	<b>35%</b>	<b>38%</b>
Purchase of fishing equipment	1,550	4,970	6,510
Transportation of catch	660	660	1,320
Ice	0	1,320	1,320
Fuel	990	1,150	2,140
Boat maintenance	0	1,970	1,970
Other / Unlisted	3,290	0	3,290
<b>Total fishing activities</b>	<b>6,480</b>	<b>10,060</b>	<b>16,540</b>
<b>Livestock activities (% HHs involved)</b>	<b>3%</b>	<b>42%</b>	<b>45%</b>
Animal feed	4,910	48,980	53,890
Fencing and enclosure	0	330	330
Transpiration of animals and goods	0	530	530
Purchase of animals	660	1,150	1,810
Veterinary	0	330	330
<b>Total livestock activities</b>	<b>5,570</b>	<b>51,320</b>	<b>56,890</b>
<b>Handicraft activities (% HHs involved)</b>	<b>11%</b>	<b>14%</b>	<b>26%</b>
Materials for making handicrafts	5,920	660	6,580
Transportation of goods	390	1,320	1,710
Other / Unlisted	0	200	200
<b>Total handicraft activities</b>	<b>6,310</b>	<b>2,180</b>	<b>8,490</b>
<b>Total intermediate expenditure</b>	<b>45,110</b>	<b>138,830</b>	<b>183,940</b>

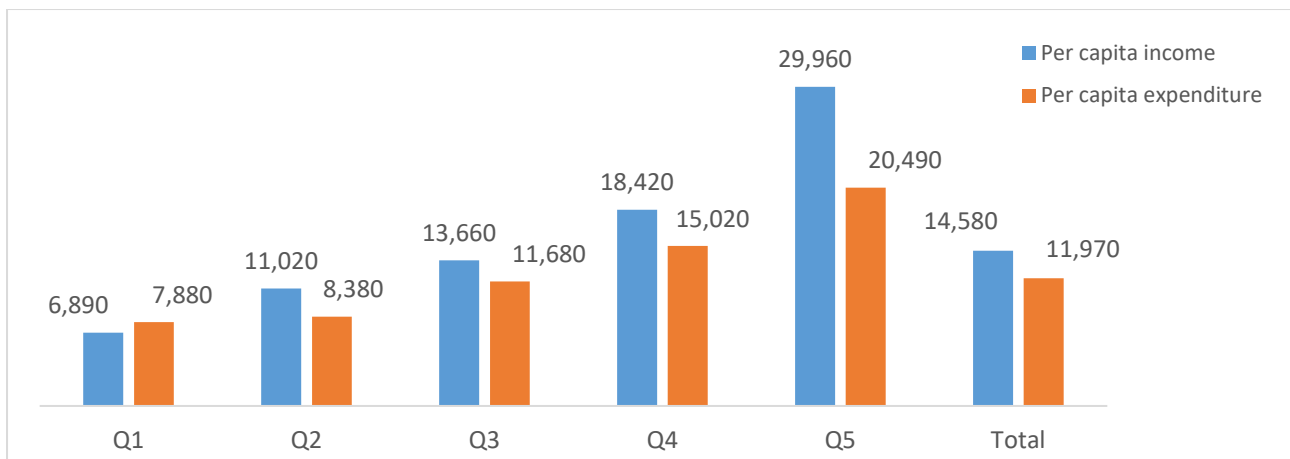
### 3. Income and expenditure distribution

In looking at the distribution of income and expenditure among HHs, we have already presented average and median. To add to this analysis, we have categorised HHs according to their per capita income quintile. That is, we've ranked HHs by their level of per capita annual income and created five groups. The 20 percent of HHs with the lowest annual income are grouped into quintile 1, while the 20 percent of HHs with the highest per capita income are put into quintile 5.

When we look at the average per capita income and expenditure by quintile (Figure 10), it shows a degree of inequality among the groups, especially when looking at the highest and lowest quintiles. The highest quintile has an average per capita income of NZD 29,960, while the lowest quintile has an average income of NZD 7,880 per annum. There appears to be more equal distribution of expenditure, however average annual expenditure increases throughout the quintiles.

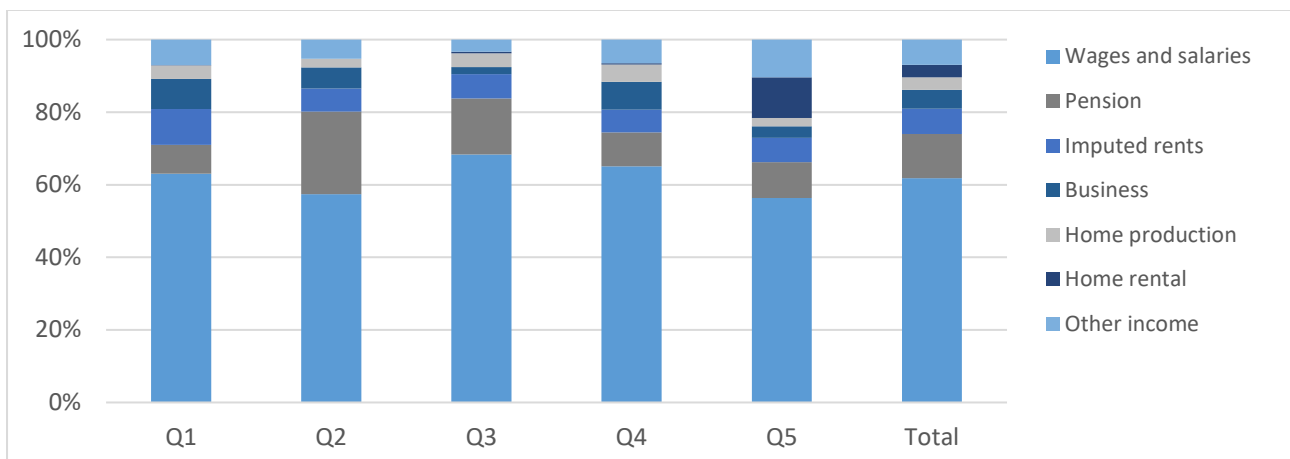
Expenditure is higher than income for quintiles 1 only, while quintiles 1 to 5 show higher levels of income than expenditure (implied savings). The higher the quintile is, the more saving occurs as the difference between income and expenditure increases.





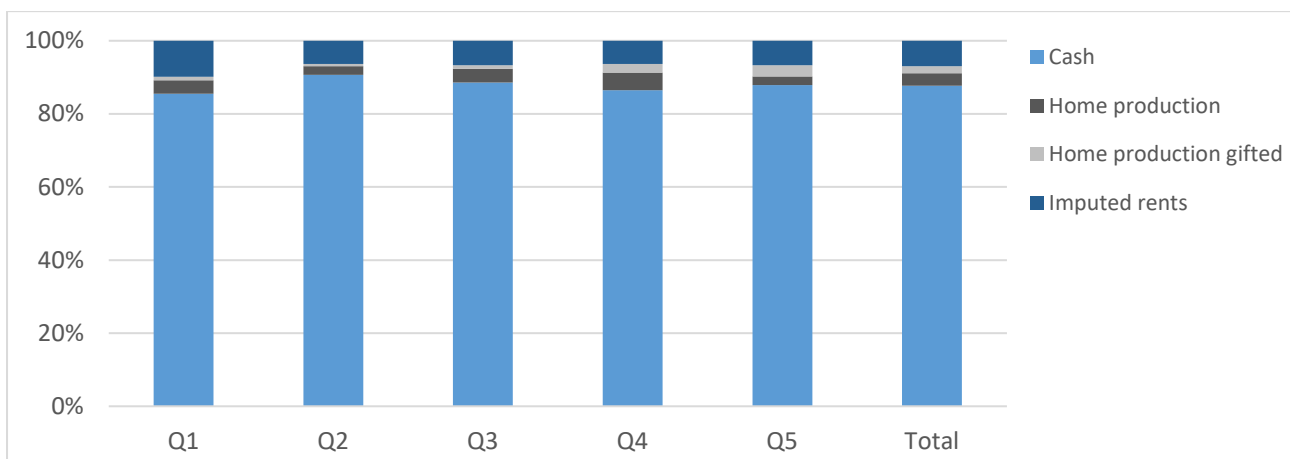
**Figure 10: Average annual income and expenditure, by income quintile**

When we look at the composition of HH income, by income category, we can see that wages and salaries represent a significant contributor to total HH income at all income quintiles. The main difference between high and low income in terms of income composition resides in the Home rental which is the second main source of income for the highest quintile and does not show up in other quintiles.



**Figure 11: Composition of HH income, by income category and quintile**

Looking at proportion of total HH income, by quintile, we can see that income from cash accounts for the majority of income across all quintiles (mainly wages and salaries)



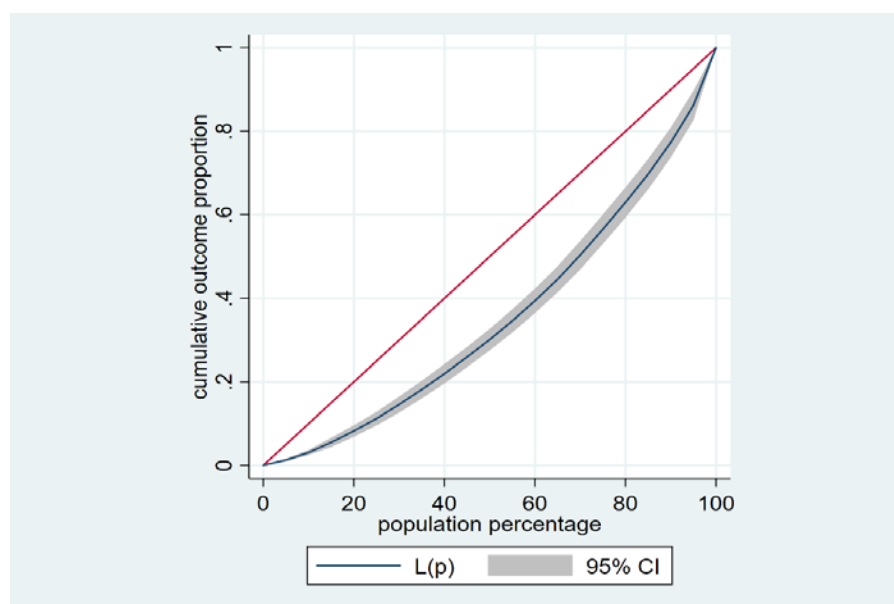
**Figure 12: Composition of income, by income type and quintile**

When we look at the composition of HH expenditure, by expenditure category, we do not see a significant difference between lower and upper quintiles (Table 51). In all quintiles, “Food and non alcoholic beverages” represents the main share of the budget (it ranges from 24 percent in Q5 to almost 26 percent in Q2), followed by “Housing, water, electricity and gas” and then “Transport”.

**Table 51: Composition of HH expenditure, by income quintile**

	Q1	Q2	Q3	Q4	Q5	Total
Food And Non-Alcoholic Beverages	27.3%	27.8%	26.9%	27.3%	24.2%	26.5%
Alcoholic Beverages, Tobacco	6.9%	10.9%	8.9%	10.5%	8.4%	9.1%
Clothing And Footwear	2.4%	2.5%	2.8%	2.6%	3.3%	2.8%
Housing, Water, Electricity, Gas	16.3%	17.2%	17.3%	14.8%	19.7%	17.0%
Furnishings, HH Equipment	4.1%	6.0%	5.7%	3.9%	5.7%	5.0%
Health	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%
Transport	15.0%	13.6%	14.7%	12.9%	14.4%	14.1%
Communication	4.1%	5.7%	3.6%	3.2%	3.9%	3.9%
Recreation And Culture	1.5%	1.6%	2.4%	2.3%	2.7%	2.2%
Education	0.0%	0.0%	1.6%	0.0%	0.0%	0.3%
Restaurants And Hotels	4.5%	1.8%	1.4%	2.5%	3.4%	2.8%
Miscellaneous Goods And Services	4.0%	5.0%	3.2%	2.7%	3.4%	3.5%
Non consumption expenditure	8.8%	7.3%	9.8%	7.4%	7.8%	8.2%
HH investment	5.0%	0.5%	1.6%	9.8%	2.8%	4.6%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

In the below figure, we present the cumulative distribution of income at the National level. The red diagonal line represents perfect distribution of income whereby each HHs has a perfectly equal share of income, so as the population increases by, say 20 percent, the cumulative income also increases by 20 percent. This, however is not the case in Niue where an unequal distribution of income is present. We can see that around 50 percent of the lowest income HHs account for 30 percent of national income. To put this another way, half of the highest income earning population account for 70 percent of national income. The 30 percent income HHs (income quintile 5) account for around 30 percent of total HH income.



**Figure 13: Lorenz curve (per capita income)**

We can present this unequal distribution of income by using the Gini coefficient (Table 51). A perfectly equal distribution of income would result in a Gini coefficient of 0. A national Gini coefficient of 0.30 is not extreme income inequality, it is a moderate degree of income inequality. The lower the Gini index, the more equal income is distributed across the population.

**Table 52: Gini coefficient (per capita income)**

<b>Niue - National</b>
0.30

# APPENDIX 1: DEFINITIONS AND CLASSIFICATIONS

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## 1. Expenditure

This section provides information on the formation of the expenditure categories and their hierarchal structure, including the adoption of the classification of individual consumption by purpose (COICOP) for classifying HH consumption expenditure, and definitions of expenditure types.

### Formation of the expenditure categories

In order to best classify the expenditure data to provide the most meaningful and easily interpretable results to readers, the format of the expenditure categories was based on Resolution 1 from the Seventeenth International Conference of Labor Statisticians. This resolution proposes the following breakdown for classifying expenditures, which is how the HH expenditure aggregates are presented in the report:

1. Consumption expenditure:
  - a. HH consumption expenditure: the value of consumer goods and services acquired, used or paid for by a HH through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.
  - b. other consumption expenditure: the value of consumer goods and services acquired or used by the HH through transfers from the government, non-profit institutions or other HHs.
2. Non-consumption expenditure: expenditures incurred by a HH as transfers made to the government, non-profit institutions and other HHs, without acquiring any goods or services in return for the satisfaction of the needs of its members.
3. Investment: covers expense items incurred by HH members for financial security or accumulation of significant assets, such as a house (including improvements of the house) and machinery.

A description of each of the above expenditure categories is provided below.

### *Consumption expenditure*

For tabulation purposes, the report separates consumption expenditure into 12 divisions conforming to COICOP guidelines. This results in the formation of, and categorisation of all expenditure items into, the following 12 divisions (and their hierarchal sub-sets):

1. Food and non-alcoholic beverages
2. Alcoholic beverages, tobacco and narcotics
3. Clothing and footwear
4. Housing, water, electricity, gas and other fuels
5. Furnishings, HH equipment and routine HH maintenance
6. Health
7. Transport
8. Communication
9. Recreation and culture
10. Education
11. Restaurants and hotels
12. Miscellaneous goods and services

Following the COICOP hierarchy, all consumption expenditures are categorised following the below structure:

1. Category (1 to 12 above)
  - 1.1. Group
    - 1.1.1. Class
      - 1.1.1.1. Sub-class
        - 1.1.1.1.1. Commodity

### *Non-consumption expenditure*

The non-consumption expenditure category is divided into sub-categories of importance to the Pacific region. The five main subcategories include:

1. Cash donations to ceremonies and special events (e.g., weddings, funerals, birthdays)
2. Cash donations to HHs
3. Cash donations to church
4. Cash donation to other (e.g., school, association, community)
5. Taxes and fines

The above sub-categories within the non-consumption expenditure category, as mentioned above, are HH expenditures that are not associated with the acquisition of a good or a service. With exception of taxes and fines, non-consumption expenditure is mostly associated with charity or support provided to other HHs, religious or community organisations.

### *Investment expenditure*

The investment expenditure category is divided into sub-categories of irregular, asset accumulation associated expenditure, including:

1. Land purchase
2. House purchase and/or major alteration of dwelling
3. Purchase of plant or equipment (incl. boats)
4. Amortisation of a mortgage (loan repayments)

These expenditure sub-categories are irregular and are treated differently to consumption expenditure in the system of NA, even though the expenditure was incurred in exchange for a good or service.

### *Formation of the expenditure types*

To add further value to the data set and expenditure analysis, HH expenditure is also categorised by expenditure type. Five expenditure types have been used, which include:

1. Cash purchases – goods and services that were paid for with cash (or equivalent, such as EFTPOS) and consumed by the HH being interviewed
2. Home production (subsistence) – the gross value of goods that were home produced and consumed by the HH being interviewed (this is the opportunity cost of consuming the home produced and consumed goods), otherwise known as subsistence value
3. Cash gifts – goods and services that were cash-purchased (or equivalent) and gifted to another HH
4. Home produced gifts – goods that were home produced and gifted to another HH
5. Imputed rents - the estimated value of the services that an owner-occupied dwelling delivers the HH (as reported by the HH, but with some adjustments where deemed necessary)
6. In-kind – the value of in-kind income that is provided by the employer (and therefore, consumed by the HH and, as such, also reported as expenditure to balance this income and expenditure type)

## **2. Income**

This section provides information on the formation of the income categories and their hierarchical structure, including the adoption of the Pacific classification of income (PACCOI) for classifying HH income, and definitions of income types.

### *Formation of the income categories*

As with expenditure, the main consideration to the categorisation of different HH income sources was to present the data in a logical and easily interpretable structure. As such, six income categories have been used, which are set out below.

#### *Employment income*

Includes monetary or in-kind receipts in return for participation in economic activities in an employment-related capacity. This income category consists of three general components, as follows:

1. Employee benefits – mainly comprises of cash-based wages and salaries for time worked plus any bonuses, gratuities, commissions, tips or directors feed, and it also includes in-kind (non-cash) income, such as goods and services provided as employee benefits.
2. Self-employment – is income as a result of self-employment activities, such as dividends paid to HHs for their ownership in a business (but excluding shareholder dividends from enterprises for which they are not responsible

for day-to-day management of), net income from the sale of primary produce (agriculture, fisheries, livestock, handicrafts), and the estimated net value of own-account subsistence production that is consumed by the HH.

3. Subsistence – note that the net estimated value of home produced and consumed goods are classified as employment income, despite no cash being exchanged.

### **Property (capital) income**

Is defined as receipts that arise from the ownership of assets that are provided to others to use. These are returns, usually monetary, from financial assets (interests and dividends not included in 1b), from non-financial assets (e.g., housing rents) and from royalties (return for services of patented or copyright material). Interest receipts are payments received from accounts with banks, building societies, credit unions and other financial institutions, certificates of deposit, government bonds or loans, securities, debentures and loans to non-HH members. Dividends are receipts from investment in an enterprise in which the investor does not work. Pensions and annuities in the form of dividends from voluntary private insurance schemes are also included. Rents are payments received for the use of both unproduced assets (i.e., natural resources), such as land, and for produced assets, such as houses. Rents should be recorded net of expenses (i.e., they should be recorded and collected separately from other consumption expenditures, so they can be treated as both income and expenditure). Royalties are receipts from writings and rights to make use of inventions (i.e. patented or copyrighted materials).

### **Transfer income**

Are receipts for which the recipient does not give anything to the donor directly in return. Transfers can consist of cash, goods or services. The components of transfer income, and their description, are:

1. Social security – allowances generated from government-sponsored social insurance schemes, such as unemployment and disability benefits.
2. Superannuation / pension – employer-sponsored social insurance schemes, including retirement benefits, education allowances and medical benefits.
3. Child support – allowances generated from government-sponsored child support schemes, including one-off payments (e.g., baby bonus) and ongoing government (or other) child support assistance, including child-care support. It also included payments from a previous spouse to assist with living expenses of children.
4. Alimony – support paid to a previous spouse (spousal maintenance) during marriage separation or upon divorce.
5. Grants, scholarships and other grants – cash paid to the HH to support, for example, HH living, investment, health, travel or education. This is only reported if the cash is paid to the HH, not directly to the institution (e.g., government pays directly to the school).
6. Other transfer income – refers to transfer income not elsewhere classified (NEC).

### **Casual receipts**

HH income covers all receipts received by the HH (or individual HH members) at annual, or more frequent, intervals. It can include income from the sale of property or major assets (e.g., vehicles), inheritance, gambling winnings, or any receipts NEC.

### **Gifts and remittances**

In the Pacific, many gifts (cash, cash purchased goods or home-produced goods) are received by HHs, whether from another HHs (inside or outside of Niue) or from community groups. This is an important income source and, as such, has its own income category. Cash remittances are classified as being for: church gift; traditional ceremony; funeral; birthday or wedding; living support; undifferentiated or other. Cash purchased gifts are categorised by COICOP division, while home-produced gifts are classified by industry and specific-product. All the remittances refer to cash remittances received.

### **Imputed rents**

Is the income derived from the consumption services that an owner-occupied (or live for free) dwelling delivers to the HH. These services consists of the net estimated value of housing services and the value of services from access to HH durables. In other words, imputed rents are the estimated net rental amount that an OO HH estimates that it would receive if the dwelling was rented on the commercial market (with some adjustment for improbably estimates, where possible). These services fall under the general production boundary of the system of NA.

### **Formation of the income types**

To add further value to the analysis, the questionnaire was structured in such a way that allows differentiation between income types, or how the income was realised by the HH. The income types that we differentiate by, include:

1. Cash income
2. Subsistence income
3. Home produced gifts

4. Imputed rents
5. In-kind income

Further explanations for each are provided below.

### *Cash income*

Cash income accounts for most of the income that HHs receive becNZDe the majority of HH income is sourced from wages and salaries. All receipts from wages and salaries, business, agriculture, fisheries, livestock, handicrafts, property, transfer and casual income are cash-type income sources.

### *Subsistence income*

Subsistence income only covers the net value of home produced and consumed goods. If the HH sells the home produce it is categorized as a cash income becNZDe cash was generated from the sale.

### *Home produced gifts*

Any home produced (e.g., agricultural, fisheries and livestock harvests) and gifted items are reported as both income and expenditure. On the income and expenditure side, both are reported as gross values as the income derived from home produced goods received for free is valued at the market equivalent (i.e., if the goods were purchased), while the expenditure is valued as the opportunity cost of selling (e.g., the expense of gifting is the income lost from not selling that good at market prices).

It should be noted that cash-purchased gifts are not reported in the income aggregates, only the expenditure categories. This is to avoid double counting of income. The value of cash-purchased gifts is collected and included in the HIES data set, however the methodology for understanding the income category from which the cash purchase was made is too complex (e.g., to avoid double counting, we would need to deduct each cash income category by the value of the cash purchased gifts from the cash income category that financed the purchase of that gift – the current collection methodology does not allow this and this is not considered to be a significant issue).

### *Imputed rents*

Imputed rents, treated as both income (e.g., the gross value of the services delivered to the OO HH) and expenditure (e.g., the opportunity cost of not selling those services, or the cost of consuming those services) are non-cash income and expenditure items, but they're important to include to ensure that the value of these services are reported (and used in national account estimates) and to ensure that the income and expenditure of OO HHs is comparable to that of renting HHs.

### *In-kind income*

In-kind income is the estimated value of non-monetary employee benefits, such as, food, transport, communication, health and education. In-kind income is reported as both income and expenditure. The income is the value of the goods and services that are provided by the employer and the expenditure is associated with the consumption of these goods and services.

## 3. Standard classifications

The Pacific regional standardised HIES methodology adopts the following standardised classifications.

### Consumption expenditure

Consumption expenditure is classified using the Pacific classification of individual consumption according to purpose (Pac-COICOP), which is based on the international COICOP classification system that was developed by the United Nations Statistics Division. The Pac-COICOP hierarchal structure is the same, but at lower levels (sub-class and commodity), it includes goods and services that are commonly consumed (and in some cases, uniquely) in the Pacific region.

### Income classification

Income is classified using the regionally standardised Pacific classification of income (PACCOI), which was designed by SPC in consideration of Pacific income sources. The income categories follow the main PACCOI divisions, which are further disaggregated following the following structure:

1. Category (6 in total)
  - 1.1. Group
    - 1.1.1. Class
      - 1.1.1.1. Sub-class

## Industry classification

All productive activities are classified according to the international standard industrial classification (ISIC). It is important to note that the level of disaggregation is limited given: HIES is a survey; limited opportunity and need to build field worker capacity to collect detailed industry information; and HH participation in industries in the Pacific – particularly, those related to primary production – are often informal and mixed. Due to the sample size and limited capacity of the enumerators and, despite numerous efforts to recode the data set, disaggregation beyond ISIC group (3-digits) is not recommended.

## Occupation classification

The international standard classification of occupations (ISCO) that was developed at the Seventeenth International Conference of Labour Statistical (ICLS) at International Labour Office (ILO) is applied to classify occupations in HIES. Similar disaggregation issues exist with those of ISIC and it is on this bases that HIES data only be disaggregated by sub-major groups (2-digits).

## CSPPro HIES database

The data entry system, the dictionary and HIES database were designed using CSPPro. Although there are some coding differences between countries, the database structure is regionally standardised, which allows for cross-country comparisons.

## 4. Definitions

This section provides information on the definitions and terms used within the report to assist with interpretation.

### HH head

The HH head is nominated by the HH members and, with exception of the HH head having to be an adult, there are no criteria for selection of the HH head. That is, the HH head is not necessarily the main income earner or the person responsible for management of HH finances. In the Pacific, the oldest person or the man who own the HH if often, due to cultural reasons, selected as being the HH head. Considering this, the use of HH head as a variable to determine differences in income or expenditure by, for example, age or gender of HH head, doesn't make a lot of sense due to the loose criteria of nominating the HH head.

Despite this, some tabulations are provided that look at variation in income and expenditure by characteristics of the HH head. HH composition is often a more useful classification to use when comparing income and expenditure of different HH structures.

### Gross and net income

All employment income figures are reported as net. Property, transfer, casual, gifts and remittances, and imputed rents are reported as gross, although it is assumed that there are few transaction costs associated with these income sources (perhaps with exception of property and imputer rents income), so the gross figures are assumed to closely resemble the net figures.

### Subsistence

Subsistence income and expenditure refers to the value of home-produced goods that are consumed by the HH. Subsistence income is reported as net, as the income realised by consuming these goods is net of their cost of production, while the expenditure is reported as gross because of the opportunity cost of consuming the good rather than selling it.

### Average HH and per capita

Unless otherwise specified, averages are calculated as the numerator divided by the total number of HHs or persons respectively.

Attempts have been made to report the total number of HHs or persons reporting an item.

### Quintile

A quintile represents one-fifth of the population (HHs) grouped by their total expenditure. Quintile 1 represents 20 percent of the HHs with the lowest expenditure, while quintile 5 represents 20 percent of the HHs with the highest expenditure.

## APPENDIX 2: SAMPLING ERRORS

The tables in this section present the RSEs for the income and expenditure aggregates. It is beyond the scope of this report to present sampling errors at a finer level of disaggregation, however it should be noted that, as specified in Section 6, there is an increased degree of error with finer levels of disaggregation, especially where income and expenditure categories have few transactions and the sample is relatively small.

As a general guide, the below thresholds can be used to help with interpretation of the RSEs and to guide the robustness of each aggregated income and expenditure estimate.

**Table 53: Data quality thresholds**

RSE	Classification
< 5%	Very good
5% to < 10%	Good
10% to < 20%	Usable
20% to <30%	Use with caution
30% +	Potential for high degree of error

### 1. Relative sampling errors for expenditure aggregates

Table 54 presents the standard error and the RSE for the expenditure aggregates. In accordance to the data quality thresholds presented above, it can be seen that total RSE of 4 percent and 5 percent are very good (total expenditure, consumption expenditure, cash expenditure and food expenditure). Looking at the subsistence expenditure (home production) and non consumption expenditure the RSE are much higher but still usable. Those expenditure are less common as the others, this is the main reason why the error is higher.

**Table 54: Relative sampling errors and 95% confident interval - expenditure**

	Amount	SE	RSE	Total amount	95% Interval
<b>Total expenditure</b>	19,282,670	957,770	4.97%	17,405,440	21,159,890
<b>Total consumption expenditure</b>	16,827,260	708,250	4.21%	15,439,090	18,215,440
<b>Total non consumption expenditure (inc investment)</b>	2,455,410	442,050	18.00%	1,589,000	3,321,820
<b>Total cash expenditure</b>	16,246,310	861,460	5.30%	14,557,850	17,934,770
<b>Total subsistence expenditure</b>	1,395,160	155,870	11.17%	1,089,650	1,700,660
<b>Total food expenditure</b>	5,118,690	277,330	5.42%	4,575,120	5,662,260

### 2. Relative sampling errors for income aggregates

Table 55 presents the standard error and the RSE for the income aggregates. In accordance to the data quality thresholds presented above, it can be seen that total RSE for total income, employment income, cash income and wages and salaries are very good (RSE of 5 percent and lower). Looking at the net primary activity, this income is not very common and it results a higher RSE (41 percent) meaning that the results of the primary activities have to be interpreted very cautiously.

**Table 55: Relative sampling errors and 95% confident interval - income**

	Amount	SE	RSE	Total amount	95% Interval
<b>Total income</b>	23,495,010	1,078,300	4.59%	21,381,540	25,608,490
<b>Total employment income</b>	16,822,720	929,410	5.52%	15,001,070	18,644,360
<b>Total cash income</b>	20,597,470	1,002,590	4.87%	18,632,400	22,562,550
<b>Total wages &amp; salaries</b>	14,527,960	736,620	5.07%	13,084,190	15,971,730
<b>Total net primary activities</b>	267,360	110,180	41.21%	51,410	483,310



## APPENDIX 3: RESOURCES

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