Nauru
Household Income and Expenditure Survey (HIES)
2012/2013

Methodology information
(April 2014)

Bureau of Statistics, Department of Finance
Republic of Nauru
SECTION 1 – INTRODUCTORY NOTE

This document provides details of the main methodology issues adopted for the Nauru HIES 2012/2013. Whilst there are a lot of methodology issues which could be detailed in this report, the focus will remain on just the key issues for now.

There are three main sections covered in this document which provide information on the following:

Section 2 – Concepts and Definitions: In this section some of the information for the expenditure and income definitions is repeated a little in the main analysis report, but this section also contains additional information on how dwellings and households are defined in the survey along with how household members are determined.

Section 3 – Survey Procedures: This section provides important details on various aspects of the survey conducted, including:

a) the scope/coverage of the survey
b) the choice of sample frame for the survey
c) the sample selection procedure
d) the survey forms adopted
e) how the data was collected in the field
f) the data processing procedures
g) the procedure for weighting up survey results.

Section 4 – Quality of Results: This section provides details on some of the non-sampling errors associated with the survey results to guide users as to how cautious they should be in using the information.

In the Appendix section of this report is a glossary of all the key terms used in the collection, and dissemination of results from the survey.
SECTION 2 – CONCEPTS AND DEFINITIONS

This section of the report addresses some of the key concepts and definitions addressed in the survey. Naturally, for a survey such as a HIES, the two main concepts to be addressed are "Income" and "Expenditure", but other important concepts and definitions will also be covered.

The areas covered in this section are therefore:

- Expenditure/Disbursements
- Income/Receipts
- Dwelling v Household
- Defining Household Members

For income and expenditure, the general concepts of these terms will be discussed; however, more information will also be provided in these sections addressing how the groupings and categories were formed in the income and expenditure analysis in the main analysis report.

2.1 EXPENDITURE/DISBURSEMENTS

2.1.1 Introduction

The concept of expenditure being adopted for the Nauru HIES 2012/2013 is based on Resolution 1 – Resolution concerning household income and expenditure statistics, from the Seventeenth International Conference of Labour Statisticians (ICLS).

In these guidelines, instructions are provided on how both Consumption and Non-Consumption Expenditures are defined and are detailed as follows:

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

and

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

2.1.2 Formation of Main Expenditure Categories

As mentioned above, the concept of expenditure being adopted for the Nauru HIES is based on Resolution 1 from the Seventeenth International Conference of Labour Statisticians. For this reason the following broad categories have been adopted for the expense/disbursement tabulations in the main HIES report:
1. Consumption Expenditure:

1.1. Household Consumption Expenditure: The value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

1.2. Other Consumption Expenditure: The value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households.

2. Non-Consumption Expenditure: Those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members.

Other information that will also prove useful in completing the expenditure/disbursement composition of the household includes:

3. Investment: Covers expense items incurred by household members for financial security or accumulation of significant assets, such as a house.

2.1.3 Finer Level Categories for Main Expenditure Analysis

Consumption Expenditure

For tabulation purposes, the analysis will separate out Category 1, Consumption Expenditure, into subgroups conforming to the COICOP classification guidelines. This would result in the following 12 subgroups being formed in the tables for addressing consumption expenditure:

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, Household Equipment and Routine Household Maintenance
6. Health
7. Transport
8. Communication
9. Recreation and Culture
10. Education
11. Restaurants and Hotels
12. Miscellaneous Goods and Services

Non-Consumption Expenditure

For Category 2, Non-Consumption Expenditure, the analysis will further split this group to create subgroups of importance to Nauru. The seven main categories identified for Nauru include:

1. Special Events
2. Cash Donations to households in Nauru
3. Cash Donations to households overseas
4. Non-Cash Donations to households in Nauru
5. Donations to Church
6. Donations to Community/Village
7. Donations to School/Other
Special events covers the household’s contributions to things like weddings, funerals, birthdays, etc. The last six categories above refer more to acts of generosity on behalf of the household where they have provided assistance to the community in some form (another household, church, village, school, etc.).

**Investment**

For Category 3, Investments, data were only collected under two items which covered:

1. House construction
2. House major modifications

Although information was asked of households selected in the survey if they purchased a house, no cases arose during data collection.

**2.1.4 Type of expense**

To add further value to the analysis, effort has been made throughout the survey to determine how that expenditure was received. Three main categories have been created to establish the manner in which the expenditure was received, which include:

1. Cash/In-kind purchases
2. Home production
3. In-kind receipts

Further explanations for each are provided below.

**Cash/In-kind purchases**

Cash/In-kind purchases represent any purchases made by the household for products or services for which a payment was made by the household. The payment can be made in the form of a cash payment or payment in-kind (i.e. the household pays for the product or service with something other than cash). In the situation where a purchase is made in-kind, the household is required to estimate the value of the item/service they exchanged for their purchase.

**Home production**

Home production in the expenditure tables only covers the value of items which were home produced by the household and then consumed by that household. Any home production given away or sold by the household is not regarded as an expense. In the case of the selected household being given home produced items from another household, this will be included in the group In-kind receipts.

**In-kind receipts**

In-kind receipts covers non-cash gifts received by the household which in turn are consumed by that household. This may be a home produced item from another household or any other gift received by the selected household, from another household/organisation/business for which the selected household consumes.
2.2 INCOME/RECEIPTS

2.2.1 Introduction

The concept of income being adopted for the Nauru HIES 2012/2013 is also based on Resolution 1 – Resolution concerning household income and expenditure statistics, from the Seventeenth International Conference of Labour Statisticians (ICLS).

Once again, in these guidelines, instructions are provided on how household income should be defined, but more importantly what categories make up household income. For the tabulations in the main analysis report, an additional section addressing Irregular Gifts and Other Receipts is included for completeness, and to make comparisons with Expenditure/Disbursements easier to interpret.

The instructions in the ICLS guidelines for household income is as follows:

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

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

To be more consistent with the concept of income used in the national accounts, income from the production of household services for own consumption has been omitted from the tabulations in the Income/Receipts tables in the main analytical report. This is also because the only information collected from this component was for the gross estimated value of housing services provided by owner-occupied dwellings.

2.2.2 Formation of Main Income Categories

As discussed above, the concept of income being adopted for the Nauru HIES is based on Resolution 1 from the Seventeenth International Conference of Labour Statisticians, with Category ((iii) above) Income from the production of household services for own consumption, being removed. For this reason the following broad categories have been adopted for the Income/Receipts tabulations in the main HIES report:

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

1.1 Income from Employment: Comprises receipts for participation in economic activities in a strictly employment related capacity. It consists of two components:
1.1.1 **Employment Income**: Comprises direct wages and salaries for time worked and work done, cash bonuses and gratuities, commissions and tips, directors’ fees, profit-sharing bonuses and other forms of profit-related pay, remuneration for time not worked as well as free or subsidised goods and services from an employer. It may include severance and termination pay as well as employers’ social insurance contributions. These items should be reported separately, when included. Employee income may be received in cash (monetary) or in-kind as goods or services.

1.1.2 **Income from Self-Employment**: Is defined as income received by individuals, over a given reference period, as a result of their involvement in self-employment jobs. In particular, income from self-employment concerns, primarily, owners of unincorporated enterprises who work in these enterprises. It excludes profits from capital investment of partners who do not work in these enterprises ("sleeping partners"), dividends and directors’ fees paid to owners of incorporated enterprises. Income from self-employment includes the estimated value of goods and services produced for barter as well as goods produced for own consumption, less expenses.

1.2 **Property Income**: Property income is defined as receipts that arise from the ownership of assets (return for use of assets) that are provided to others for their use. These are returns, usually monetary, from financial assets (interests, dividends), from non-financial assets (rents) and from royalties (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/loans, securities, debentures and loans to non-household 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. Royalties are receipts from writings, right to make use of inventions, etc. (i.e. patented or copyright materials).

1.3 **Transfer Income**: Transfers are receipts for which the recipient does not give anything to the donor in direct return for the receipts. Transfers can consist of cash (in the monetary sense), of goods or of services. Current transfers are those that usually recur regularly (relative to the reference period used for income), tend to be small and are also mostly available for use during the reference period. Regarded as income are all current transfers received in cash and as goods as follows:

(a) Social security pensions, insurance benefits and allowances generated from government sponsored social insurance schemes (compulsory/legal schemes) such as pensions (including military and overseas pensions), unemployment benefits, sickness benefits;

(b) Pensions and other insurance benefits from employer-sponsored social insurance schemes not covered by social security legislation (both funded and unfunded) such as education allowance, medical expenses;

(c) Social assistance benefits from governments (universal or means-tested) which provide the same benefits as social security schemes but which are not provided for under such schemes;

(d) Current transfers from non-profit institutions (e.g. charities, trade unions, religious bodies) in the form of regular gifts and financial support such as scholarships, union strike pay, union’s sickness benefits, relief payments;
(e) Current transfers from other households in the form of family support payments (such as alimony, child and parental support), regular receipts from inheritances and trust funds, regular gifts, financial support or transfer in kind of goods.

Transfer of housing services between households should be considered as income for the recipient household. Although income includes current transfers received in the form of services from governments and non-profit institutions (social transfers in kind) and in the form of other services from households, the operational definition of income should exclude such transfers until methods exist for valuing them that are widely acceptable.

2. Irregular Gifts Received and Other Receipts: As stated above, household income covers all receipts which are received by the household or by individual members of the household at annual or more frequent intervals. In the Pacific, many gifts are received by households, whether it is by other households or other community groups, on an ad-hoc irregular basis. For this reason, a section in the tabulations has been included to cover such receipts, due to their significance for a country like Nauru. Any other receipts the household may receive will also be covered in this section, and include things like Birth allowance, Funeral allowance, Sale of motor vehicle, Sale of other assets and Inheritances.

2.2.3 Finer Level Categories for Main Income Analysis

Household Income
For household income, it is desirable to have the three main sub-categories as recommended in the Resolution remain:

1.1 Income from Employment
1.2 Property Income
1.3 Transfer Income

For each sub-category, finer level breakdowns for Nauru income analysis will be as follows:

1.1 Income from Employment: The main categories included here are:

1. Wage and Salary Income (current)
2. Wage and Salary Income (pending)
3. Income from own business (non-subsistence)
4. Subsistence Income (Fisheries)
5. Subsistence Income (Agriculture)
6. Subsistence Income (Livestock)
7. Subsistence Income (Other)
8. Home Production Consumed

The second category above addresses pending salaries which the Government of Nauru owes individuals from employment in the past. During the economic downturn a few years back from 2003/04, the Nauru Government and its instrumentalities were faced with a crisis of being unable to compensate its employees their full salaries and wages entitlements. Records of government debts against wages and salaries for each entitled employee were kept. Subsequent annual policies against a long-term strategy were devised on an ad-hoc basis depending on fiscal budget surpluses or acquired development assistance, whichever the case may be. Since rebounding from the economic downturn, the government and government instrumentalities since 2006 began the process of paying their employees the entitlements on unpaid wages/salaries for services rendered between 2003 and 2006. These annual lump sum payments of unsettled compensation of employees are referred to as “pending salaries”. The
total annual amount at which the total sum for the fiscal year is to be disbursed is determined by government and the prevailing circumstances at the time.

An effort has also been made to separate out the main subsistence activities into the four main groups identified, in this instance – Agriculture, Livestock, Fisheries and Other (covers home processed food and handicrafts). Whilst it will be seen that not great deals of money will be collected from these sectors, they still play a very significant role in the lives of Nauruans in terms of consuming what is collected/produced and gifted amongst households, especially inside the fisheries sector.

1.2 Property Income: As discussed above, property income is income which arises from the ownership of assets. In Nauru, income from this source plays a significant role in the livelihood of Nauruans. For this reason this category has been split into the major types of property income which include:

1. Home Rental
2. Royalties
3. Land Lease
4. Other Property Income

In the questionnaire on income (Module 4), land lease was actually collected under Other Property Income, whereas in the tabulations in the main analysis report, Other Property Income will be comprised of interest from financial institutions overseas, interest from money lending and dividends.

1.3 Transfer Income: As discussed above, transfer income covers receipts for which the recipient does not give anything to the donor in direct return for the receipts. Transfer income does not have a major impact on the roles of Nauruan people (with the exception of the elderly and disabled), but it has still been split into three categories, based on level of interest:

1. Regular cash gifts (from overseas)
2. Pensions (old age and disability)
3. Other Transfer Income

Irregular Gifts Received
As stated above, this section addresses cash and gifts which are received by households, whether it is from another households or other community groups, on an ad-hoc irregular basis. The categories of most relevance to Nauru which are covered in this section are as follows:

1. Irregular Cash Gifts (inside Nauru)
2. Irregular Cash Gifts (overseas)
3. Ad-hoc Home Production Received
4. Ad-hoc Bought Goods Received
5. Other receipts

2.2.4 Type of income

To add further value to the analysis, effort has been made throughout the survey to determine how that income was received. Three main categories have been created to establish the manner in which the income was received, which include:

1. Cash Income
2. In-kind Income
3. Home Production Consumed
Further explanations for each are provided below.

**Cash Income**
Cash Income will account for most of the income households receive as it will account for the majority of wage and salary income, business income, and sales of home production. All receipts from property income and transfer income will also be classified as a cash income source.

**In-kind Income**
In-kind Income covers any income received by the household which was not in the form of cash. For wage and salary, this would entail the employer paying the household member, in full or partially, with a gift in-kind instead of cash. For the section in the tables addressing Irregular Gifts Received and Other Receipts, the component Ad-hoc gifts received will also be categorised as a form of in-kind income.

**Home Production Income**
Home Production Income only covers the value of home production that the household produces themselves and then consumes. If the household sells the home produce it is categorised as a cash income, as cash was generated from the sale.

### 2.3 DWELLING V HOUSEHOLD

Often confusion occurs when dealing with the definition of a household and dwelling. For the Nauru HIES 2012/2013 the definitions applying to both are:

**Dwelling**
A dwelling refers to the physical structure in which a person/s resides. The type of structure may vary considerably, and includes the following:

- a) Single structure unit
- b) Block of apartment units
- c) Small dwelling unit attached to a shop

**Household**
A household refers more to a group of people, and not the physical structure the people live in. Generally speaking, for survey purposes, a household is a group of people who pool their money together and cook and eat together. Often a household is very similar to a family, but the people comprising a household don’t have to be related.

**Treatment in the field**
Based on these definitions, you may have a dwelling being occupied by more than one household, if there are indeed two groups of people that cook and eat separately, living in the same dwelling. This is not too common, but instructions were given to field staff to take care when visiting dwellings to determine if one or more households resided in that dwelling.

It can also be said that one household may be occupying two or more dwelling structures. A good example of that would be a “granny” flat in the back of a dwelling that houses one or more people, but all members of those two structures form the one household, and still cook and eat together.

For the Nauru HIES 2012/2013, it was for the household that information was collected, and the sample frame was a list of households (not dwellings) from the last population census.
2.4 DEFINING MEMBERS OF THE HOUSEHOLD

A key criteria behind most household surveys is identifying the household members up front so it is clear from whom the data is being collected. For the Nauru HIES 2012/2013 an effort was made to define the household members similar to a population census, but with more focus on grouping people who were part of the same “economic unit”, given the focus of the survey was to collect income and expenditure data.

For many people associated with the household it is clear they should be included when listing the current household members. This is because they are always staying with the household and don’t move around much or spend lengthy periods away from the household. For other individuals it is not as clear, so a series of “include” and “exclude” rules were developed which cover:

**Include**

- Usual residents currently living in the house
- Usual residents who are away short term for a work trip or holiday
- Usual residents who are away longer term but are still financially linked to the household. Examples include:
  - as a provider, working overseas and bringing money back to the household
  - as a dependent school student, staying in a boarding house, but still reliant on the household for financial assistance with plans to return to the household at completion of studies
- Persons who come and go from the household, but this household is the place they stay the most
- Persons who stay with the household as a domestic worker and share accommodation and eating with the host family
- Visitors currently living with the household for one month or more

**Exclude**

- Temporary guests with the household who are only staying a short time
- Persons who come and go from the household but spend more time living with another household
- Persons who work as a domestic helper for the household full-time but sleep elsewhere most nights of the week
- Persons who are linked to the household, but are staying permanently in an alternate form of accommodation (e.g. elderly people staying at the hospital)

For the Nauru HIES 2012/2013 an effort was also made to list persons who would be considered part of the household in the last 12 months, but at the time of the survey were not considered a household member. This is to provide additional information on how many people had an impact on the income and expenditure patterns over the last 12 months. Examples of persons who fall under this category are:

- Persons who have moved out of the household in the last 12 months, permanently
- Persons who were part of the household and have passed away in the last 12 months
- Any persons who came and stayed with the household for three months or more during the last 12 months but no longer live there
SECTION 3 – SURVEY PROCEDURES

This section of the report addresses the key procedural issues associated with the conduct of the Nauru HIES 2012/2013. Whilst there are many issues which could be addressed in this section, focus will only be placed on the following six key issues:

- Scope and Coverage
- Sample Design
- Survey Materials
- Data Collection Strategy
- Data Processing
- Benchmarks and Weighting

3.1 SCOPE AND COVERAGE

3.1.1 Scope

The Nauru HIES 2012/2013 only covered persons who were considered usual residents of private dwellings. The breakdown of the private dwelling population and special dwelling population from the 2011 Population Census was as follows:

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th># Dwellings</th>
<th># Persons</th>
<th>% Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Dwelling</td>
<td>1,647</td>
<td>9,945</td>
<td>98.6%</td>
</tr>
<tr>
<td>Non-Private Dwelling</td>
<td>5</td>
<td>139</td>
<td>1.4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,652</td>
<td>10,084</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

As can be seen in Table 3.1, private dwellings accounted for 98.6 per cent of Nauru’s population. There were no further reductions in this population based on geographical area (i.e. exclusions due to remoteness) as the size of Nauru is very small, making all areas very accessible.

A household was considered in scope for the survey if they had resided in Nauru for the last 12 months or more, or if not, they intend to live in Nauru for the next 12 months. Households who didn’t meet either of these two criteria were excluded from the survey.

Example of eligible households:
- *Just married couple who have been living together since the wedding three months ago*
- *Expat family just arrived last month for a three-year contract in Nauru*
- *Expat family who has been living in the Nauru for two years*

Example of non-eligible households:
- *Expat male who rents a house in Nauru, arrived last month and plans to stay for six months*
- *All short-term visitors, who come to Nauru for a short period*
3.1.2 Coverage

As mentioned above, only usual residents were covered during the collection of information for those households considered in the scope of the survey. The details of who was considered a usual member of the household for the Nauru HIES 2012/2013 are addressed in Section 2.4 above.

3.2 SAMPLE DESIGN

The sample was selected to be representative of the whole country of Nauru. Approximately 37 per cent of households were selected across Nauru, although not all responded to the survey – these details are provided in Section 4 of this report. The sample fractions applied to each of the eight constituencies (plus Location) within Nauru were roughly the same, although they were slightly modified to create even workloads for interviewers. Whilst a 37 per cent sample seems exceptionally large for even a small country like Nauru, due to the large levels of non-response experienced in the 2006 HIES it was considered necessary.

The eight constituencies (plus Location) making up Nauru with the final sample sizes, were as follows:

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Number of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yaren</td>
<td>105</td>
</tr>
<tr>
<td>Boe</td>
<td>51</td>
</tr>
<tr>
<td>Aiwo</td>
<td>84</td>
</tr>
<tr>
<td>Buada</td>
<td>51</td>
</tr>
<tr>
<td>Ubenide (Denig/Nlbok/Uaboe/Baitsi)</td>
<td>104</td>
</tr>
<tr>
<td>Ewa/Anetan</td>
<td>53</td>
</tr>
<tr>
<td>Anabar/Ijuw/Anibare</td>
<td>53</td>
</tr>
<tr>
<td>Meneng</td>
<td>89</td>
</tr>
<tr>
<td>Location</td>
<td>120</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1704</strong></td>
</tr>
<tr>
<td><strong>Selected</strong></td>
<td><strong>624</strong></td>
</tr>
</tbody>
</table>

The selection of the households was based on the 2011 Census of Population and Housing. The process for making the selections was to order the households within each constituency by size (number of persons in the household) and running a systematic skip through each constituency list to achieve the desirable sample size. Such a procedure should ensure each constituency is suitably represented as well as each household size type.

3.3 SURVEY QUESTIONNAIRES

For the Nauru HIES 2012/2013, a total of five forms were used for the survey:

1) Module 1: Demographics and Dwelling Information
2) Module 2: Household Expenditures
3) Module 3: Individual Expenditures
4) Module 4: Income
5) Two 1-week Diaries
For the four modules, face-to-face interviews were conducted with the household, with the household head generally providing the majority of information, but also when required, other household members. These interviews took place over a two-week period whilst the household was required to complete the two 1-week diaries. For these diaries, they were delivered just prior to each 1-week period. After instructions were provided by interviewers on how to complete the diaries, they were left with the household for self-enumeration.

These forms can be found in Appendix B of this report.

Some more detail about the information contained in these forms is as follows:

**Module 1: Demographics and Dwelling Information**
As its name suggests, this module is responsible for collecting basic demographic information from each member of the household, as well as information about the dwelling. The demographic information collected from each member includes age, sex, and relationship to household head, country of birth, marital status and ethnicity. Also from each individual aged 15 years and over, information is sought about what their main activities were in the last week, assisting with providing valuable information about the labour force of Nauru.

The dwelling information is collected in two parts, the first of which collects information about the dwelling description, as well as access to electricity, water and sanitation. The second part collects information on the dwelling tenure of the occupants of the dwelling. In this part all households are required to state whether they “own the dwelling outright”, “pay rent” or “live in the house rent free”. Once that has been determined, information about the housing costs are collected.

**Module 2: Household Expenditures**
There are two modules devoted to collecting expenditure information from the survey, one which focuses on collecting expenses information which is more likely to be attributed to the household, and the other which collects expenses information which is more likely to be attributed to an individual within the household. For Module 2, which focuses on the household expenditure, eight main topics are addressed which cover:

1. Utilities and Communication  
2. Land and Housing  
3. Household Assets  
4. Vehicles  
5. Household Services  
6. Provision of Financial Support  
7. Contribution to Ceremonies  
8. Loans  

The first four of these sections, firstly identify if a household had any expenditures associated with that topic, and then if so, the details of the expense are collected. The two topics which are not often featured in many HIESs around the world, but have a very significant impact on the economic status of households in the Pacific, are Provision of Financial Support and Contribution to Ceremonies. Provision of Financial Support covers donations the household makes to other households, the church, community or school. These are common in Nauru, so need to be accounted for in the survey. Contribution to Ceremonies covers expenses associated with funerals, weddings and birthdays where expenses to the household can also be significant.

**Module 3: Individual Expenditures**
The second module devoted to collecting expenditure information is the individual expenditure form. As stated above, this form focuses on expenses which can be associated with an individual within the household.
There were five such expenditure types identified for the HIES, which included:

1. Education
2. Health
3. Private Travel
4. Clothing
5. Communication

For the first two sections addressing education and health, information about each individual’s educational status (four years and above) and health status (all) was collected. For education, the focus was on identifying who was currently in school, and for those who had left, what their highest level of education achieved was. For health, the focus was on firstly collecting information on chronic illnesses, followed by information on any other health complaints individuals may have suffered in the last three months.

Module 4: Income

The last of the modules covered the collection of income information. This module was divided into eight sections which covered:

1. Wage and Salary
2. Non-subsistence business
3. Agriculture activities
4. Handicraft and Home Processed food
5. Livestock activities
6. Fishing activities
7. Property and Transfer income
8. Remittances

In this module, Sections 3–6 all relate to collecting income from subsistence type activities, but due to the importance of this sector to the economy of Pacific Island nations such as Nauru, they have been separated out so the importance of each sector can be properly identified.

The other important income aspect for Pacific Island countries which doesn't hold the same importance for other more developed countries, is remittances. For this reason a separate section has also been devoted to collecting remittances, which includes the collection of monetary exchanges between households within Nauru.

Two 1-week Diaries

The final forms used for the survey are the two 1-week diaries. These diaries are divided into four sections which cover the following:

1) Daily expenditure on food and beverage items
2) Other non-food daily expenditures
3) Items received for free
4) Gambling winning and losses

The significant section in this diary of particular importance to the Pacific is Section 3 on Items received for free. This section covers both the consumption of home production by a household, as well as any gifts (non-monetary) which were received by the household from other households around Nauru. The gifts could be home production from another household, or items purchased from a store. For home production, efforts are made to capture information from agriculture, livestock and handicrafts/home processed food, but it is the fisheries sector which is of most importance to the people of Nauru.
3.4 DATA COLLECTION STRATEGY

The structure of the team overseeing the field work consisted of the HIES manager, an assistant coordinator, one supervisor, one quality control officer and four interviewers as shown below:

As can be seen from this structure, the HIES manager was responsible for overseeing the field work, with the aid of the assistant coordinator, both staff of the Bureau of Statistics. In turn the assistant coordinator was the main point of contact for the field supervisor, who provided the guidance and assistance to the four interviewers. The quality control officer was responsible for undertaking the data entry, and at the end of each round, feedback was given to the assistant coordinator about any errors which needed to be further addressed in the field.

The field work lasted a total of 12 months, which was divided up into 16 rounds, with each round lasting three weeks. In the course of each three-week round, interviewers were assigned approximately 10 households each, which meant approximately 40 households were approached each round. The actual timetable for the field work was as follows:

<table>
<thead>
<tr>
<th>Round</th>
<th>Dates</th>
<th>Round</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>7 Sept - 27 Sept</td>
<td>Round 8</td>
<td>8 Mar - 28 Mar</td>
</tr>
<tr>
<td>Break 1</td>
<td>28 Sept - 18 Oct</td>
<td>Round 9</td>
<td>29 Mar - 18 Apr</td>
</tr>
<tr>
<td>Round 2</td>
<td>19 Oct - 8 Nov</td>
<td>Round 10</td>
<td>19 Apr - 9 May</td>
</tr>
<tr>
<td>Round 3</td>
<td>9 Nov - 29 Nov</td>
<td>Round 11</td>
<td>10 May - 30 May</td>
</tr>
<tr>
<td>Round 4</td>
<td>30 Nov - 20 Dec</td>
<td>Round 12</td>
<td>31 May - 20 Jun</td>
</tr>
<tr>
<td>Break 2</td>
<td>21 Dec - 3 Jan</td>
<td>Round 13</td>
<td>21 Jun - 11 Jul</td>
</tr>
<tr>
<td>Round 5</td>
<td>4 Jan - 24 Jan</td>
<td>Round 14</td>
<td>12 Jul - 1 Aug</td>
</tr>
<tr>
<td>Round 6</td>
<td>25 Jan - 14 Feb</td>
<td>Round 15</td>
<td>2 Aug - 22 Aug</td>
</tr>
<tr>
<td>Round 7</td>
<td>15 Feb - 7 Mar</td>
<td>Round 16</td>
<td>23 Aug - 12 Sep</td>
</tr>
</tbody>
</table>
As can be seen in the table above, there were two breaks in the field work; one which occurred after Round 1 and another after Round 4. The first break was designed to undertake a review of how the field team was coping with the complexities of the survey. For a survey of this nature, it is extremely difficult to suitably train field staff on all aspects of the survey, prior to the commencement of field work. However, after one round the interviewers were in a far better situation to understand the survey and thus seek guidance on how to address some of the more complicated issues which arose during the first round. The second break was to allow both field staff and households to have a rest from the survey over the Christmas–New Year period.

3.5 DATA PROCESSING

The data for the Nauru HIES 2012/2013 was processed using CSPro 5. This processing software was used for data entry, data cleaning, data recoding and finally production of outputs. A brief outline of each of these stages of data processing follows:

3.5.1 Data entry: Interactive Keying

As with all surveys it is always better to correct errors in the field and within the smallest lapse of time between enumeration and processing. The field collection methodology allowed for a two-week enumeration window that gave ample time for survey teams to validate data collected. The data entry process took advantage of this window and allowed for questionnaires to be checked manually as well as systematically using the data entry program.

Standard heads-down data entry practices use double-entry to ensure that data entered in the system truly mirrors information collected on the form. Because of the large amount of survey data collected in the HIES, tight project time frame, and a limited budget, a single-entry interactive system was used in the processing of HIES data. This data entry system aided in improved data quality by incorporating standard error checking specifications listed below.

- Validity – This process checked if the data entered in the system fell within established ranges associated with the data item.
- Consistency – This process checked the relation between data items and within acceptable characteristics of the country such as employment, education ages or gender specific expenditures.

3.5.2 Data cleaning phase 1: Manual Cleaning

Although a heads-up interactive system was used in the processing of HIES data, data errors are always inevitable. This can be contributed to a multitude of reasons and additional efforts must be made to have accurate data. Data cleaning Phase 1 was done in-country where access to original questionnaires allowed us to correct data by referencing source documents. Errors were identified using an edit specification program which checks keyed data for:

- missing information
- value specific ranges
- data item relations
- sequencing errors.

Steps were taken to ensure that missing items were not replaced with assumed values from those involved with data corrections. Data items such as these were addressed in Data Cleaning Phase 2.
3.5.3 Data recoding phase 1: Sub-records of related data items

The objective of this phase was to combine similar data items in the questionnaire into 17 unique databases. The process involved identifying questions and sections in the questionnaire that were related either by subject area, classifications, and transaction types. The advantages of these databases are listed below:

- Simplify data corrections – when the data is organised into liked data items, it makes for easier data corrections when implementing sub-routines to check for further data inconsistencies, outliers and code verifications.
- Allow for area specific analysis – because the data is organised into similar subject areas, classifications and transaction types, the emerging databases then can be used independently or cross-referenced to other databases.
- Simplify the creation of aggregated data – the overall intention of these sub-databases is to create four main databases used in the analysis of HIES data.

3.5.4 Data cleaning phase 2: Validation, Imputation and Removal

Before any data could be properly recoded into the main aggregated income and expenditure databases the information needed to be properly coded. After field collection this activity was very time consuming because each transaction needed to be verified for relevance and completeness. Activities in this process included:

- deletion of households having inefficient amount of diary transactions or missing large amount of data
- data item code validation and correction (e.g. COICOP, ISIC, and ISCO)
- imputation of missing or invalid data items
- deletion of transactions with insufficient data items.

3.5.5 Data recoding phase 2: Output

The final phase was to recode the sub-databases into the four main databases (Income, Expenditure, Person and House). The activities in this phase included quality control measures that checked for consistencies and balancing between:

- categories, reference periods and transaction types
- income and expenditure
- sub-databases and aggregated databases.

3.6 BENCHMARKS AND WEIGHTING

As discussed in Section 3.2, the sample selection for the Nauru HIES was based on a frame extracted from the 2011 Population Census (30 September 2011). As the Nauru HIES commenced collection of data in the field in early September, 2012 (less that 12 months since the population census) this frame was not updated to account for any changes in population size since the actual census date.

In production of Nauru HIES estimates however, the population was updated to reflect estimated growth between the time of the population census date and the mid-point of the HIES field work (end of March, 2013). This was only performed for persons living in private dwellings.
The process adopted for producing an estimated population of persons living in private dwellings, and the corresponding number of households they represented, at the midpoint of the HIES field work was as follows:

**Step 1:** Start with the number of persons living in private dwellings, and the number of households they represent from 30 September 2011 Census

- 9,945 Persons living in PDs
- 1,647 Private HHs in PDs

These figures are further derived for each of the eight constituencies, plus Location.

**Step 2:** Compute the average household size for a typical household in Nauru

\[ \text{Ave HH size} = \frac{9,945}{1,647} = 6.04 \]

**Step 3:** Derive the projected number of persons living in Nauru in private dwellings as of the mid-point of HIES field work

\[ \text{Est (Persons living in private HHs at 31 Mar, 2013)} = 10,293 \]

**Step 4:** Derive the estimated number of private household in Nauru as of the mid-point of HIES field work by dividing the estimated number of people by the average household size at the time of the census

\[ \text{Est (Private HHs at 31mar, 2013)} = 1,704 \]

**Step 5:** Distribute the estimated number of households to each constituency, based on the distribution noticed to the 2011 population census

NB: While it would have been more appropriate to estimate the population of persons living in private dwellings, excluding those households who had not been residing in Nauru for a sufficient amount of time (see Section 3.1), as this information was not collected suitably in the survey, it was not considered possible. There were very few households expected to fall under this criteria.

**Household Weights**

The household weights for the analysis were derived by dividing the projected population of households for each constituency as at the mid-point of HIES field work, by the final responding sample of households for each constituency.

\[ \text{Weight}_i(HH) = \frac{\text{ProjPop}_i(HH)}{\text{RespondingSample}_i(HH)} \]

where "i" represents the constituency

**Person Weights**

The person weights for the analysis were derived by dividing the projected population of persons for each constituency, sex and age group as at the mid-point of HIES field work, by the final responding sample of persons for each constituency, sex and age group.

\[ \text{Weight}_i(Per) = \frac{\text{ProjPop}_i(Per)}{\text{RespondingSample}_i(Per)} \]

where "i" represents each combination of constituency by sex by age group.
SECTION 4 – QUALITY OF RESULTS

4.1 INTRODUCTION

As with any sample survey, results of the survey will be subject to error. These errors can be split into the two following categories:

- **Sampling Error**: The error associated with conducting a sample survey as opposed to enumerating the full population.
- **Non-sampling Error**: All other errors associated with the survey results.

The issue of non-sampling error will be discussed throughout this section of the report, whilst sampling error will be covered in the main analytical report.

4.2 NON-SAMPLING ERROR

Many factors contribute to the magnitude of the non-sampling errors associated with survey results. Unfortunately, unlike the sampling error, it is difficult to measure the extent of the impact. In order to better understand the reason behind this, one only needs to look at the different types of non-sampling errors to appreciate why it is difficult to measure their impact. Some of the more significant non-sampling errors which are discussed below include:

- Non response bias
- Reporting errors
- Data entry errors
- Changing economy.

4.2.1 Non-response bias

The HIES 2012/2013 survey response rates were a significant improvement on those achieved for the 2006 HIES, reaching levels more in line with what is considered acceptable. As illustrated below in Table 4.1, the constituency of Yaren and the area in Location recorded the lowest response rate of 55 per cent and 56 per cent, respectively. On the other hand, the constituency of Meneng and Ewa/Anetan recorded the highest response rates at 93 per cent and 92 per cent, respectively. The remaining constituencies posted acceptable response rates as illustrated in the table below.

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Number of Households</th>
<th>Sample Frame</th>
<th>Selected</th>
<th>Responded</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yaren</td>
<td>105</td>
<td>40</td>
<td>22</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>Boe</td>
<td>136</td>
<td>49</td>
<td>37</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>Aiwo</td>
<td>215</td>
<td>81</td>
<td>59</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td>Buada</td>
<td>137</td>
<td>49</td>
<td>43</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Ubenide (Denig/Nibok/Uaboe/Baitsi)</td>
<td>240</td>
<td>101</td>
<td>68</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Ewa/Anetan</td>
<td>156</td>
<td>51</td>
<td>47</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>Anabar/Ijuiw/Anibare</td>
<td>129</td>
<td>51</td>
<td>39</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Meneng</td>
<td>249</td>
<td>86</td>
<td>80</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>337</td>
<td>116</td>
<td>65</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1704</strong></td>
<td><strong>624</strong></td>
<td><strong>460</strong></td>
<td><strong>74%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1: Response rates by constituency
The overall feeling from the HIES field work team was that the survey was generally well received by the public, who were quite supportive in assisting the collection process. It should also be noted that the figures presented above in the Responded category, only represent full responses, and many additional households did partake in the survey, but for various reasons, did not provide sufficient information and were thus excluded from the survey. Such example included households who did not provide sufficient diary information or declined from providing income information.

As expected, the earlier rounds had lower response rates as enumerators were still new to the survey and dealing with how best to encourage households to partake in the collection. The advertising campaign was also still in its infancy with only small segments of the household population aware the survey was taking place. This was clearly evident when the first two constituencies were surveyed (Yaren and Location) which recorded the lowest response rates of all areas. After these areas were covered, the response rates improved significantly, with enumerators performing their task of encouraging households to partake in the survey more effectively.

The improvement was also attributed to the promotional and awareness activities which gained the support of respondents and the general public. Part of the standard awareness campaign, like radio and television broadcasts, took place. However, this was supplemented by an incentive for those households who fully participated in the survey, by having a raffle draw for each round. The incentive provided was a prize give-away with the winner receiving a shopping voucher of $150 from Capelle & Partner which sponsored the HIES project. At this event, which usually took place on a Saturday at the local market place, a member of parliament or a high-profile person whose constituency had just been surveyed, was invited to the draw to present the awards. This was complemented with an added bonus where a second prize was randomly handpicked from the draw by the special presenters who sponsored the additional cash prizes themselves.

Another area where responses were lower than desirable was with the Chinese population of Nauru. During the selection of the sample, every effort was made to ensure the Chinese population was suitably represented in the sample. A person with language skills in English and Chinese was also selected as part of the interview team to help boost responses from the Chinese households; however, this person was not kept on after the first few rounds, meaning few Chinese households were selected in the later rounds. To account for this, greater weights were applied during analysis of results, to those households from the Chinese population, to ensure they are suitably represented in the final analysis.

### 4.2.2 Reporting errors

Reporting errors are expected to occur in nearly all data collections, especially for a survey as complex as the HIES, which collects large quantities of data over a lengthy period of time. Whilst it is acknowledged these problems will exist, every effort is made to keep these errors to a minimum through sound questionnaire design, extensive training of field staff, and solid monitoring of the data collection process in the field by the survey management team. Despite these efforts, some of the main problem areas for the Nauru HIES 2012/2013 in this area were:

1. **Misinterpretation of questionnaire:** Despite extensive training of field staff before they were deployed to the field, it is unrealistic to expect all interviewers and supervisors to fully grasp and understand all complexities the survey questionnaires present. For this reason, when field staff were interviewing households, especially in the first few rounds of the survey, they often couldn’t explain properly, or even interpret what the questions were asking themselves. A good example of this was when a reference period was
collected for expenses on items such as rent and utilities. The information collected clearly didn't look right due to unexpected numbers provided. The processing/analysis team was required to amend a good proportion of the responses for these questions to make the data more meaningful.

II. Recall problems for the questionnaire information: For Modules 2–4 in particular, where a large portion of income and expenditure data was collected, households were required to recall these incidences over a period of up to 12 months at times. An approach such as this will always result in some households forgetting certain incomes and expenses, as well as forgetting exact details of such incidences. Some basic examples included:

a. A household purchases a TV set nine months ago and couldn’t remember the price they paid
b. A member of the household had a wage and salary job 10 months ago and couldn’t recall how much he/she received in either cash or in-kind in the 12 month recall since the date of the interview
c. A household purchased clothes for children in the household two or three months ago and totally forgot.

III. Intentional under-reporting for some items: Due to the somewhat sensitive nature of the information collected in the HIES, some households were not always willing to provide truthful responses to some questions. As a result, they may not necessarily have refused to answer certain questions, they simply under-reported the income or expense. A couple of very common examples included:

a. For many sections of Module 4 which collects income data, households sometimes intentionally understated what they truly earned over the last 12 months as it was information they would rather the interviewer not know (especially on a small island like Nauru).

b. When filling in the two 1-week diaries, expenditures on items such as alcohol, tobacco and gambling were often under-reported. This was partly due to people forgetting to record this information due to the manner in which these purchases were made, and also because the person in the household making these purchases didn’t want other household members to know how much money they spent on these items.

IV. Accidental under-reporting in the diaries: Whilst some of the missing records from the diary could be attributed to being intentionally under-reported, a larger number of missing diary data was simply due to the household just forgetting. Items which are purchased regularly from a supermarket are often remembered, but items purchased less frequently and when a household member is away from the house a while, can often be forgotten. Interviewers are trained to help prompt households to remember such instances, but this will still cause problems.

4.2.3 Data Entry error

Even with correctly collected data from the field, errors will occur when the data is transferred from the paper form to the computer. Whilst data entry only took place once (that is, not double entered), error reports were produced at the completion of each round which hopefully detected any data entered incorrectly.

One important aspect of the data entry was attaching codes to the different types of income and expenditure. During the process many errors were made as incorrect codes were assigned to
expenditure items in particular. A large amount of time was spent reviewing all these codes with many corrections being made to the data, but still some errors in this regard will remain.

4.2.4 Changing economy

There have been many changes to the economy in Nauru over the last 24 months as the Australian Offshore Processing Centre further expands the number of detention centres. As well, transferees and recruitment of local staffs has significantly increased to accommodate this expansion.

Also, similarly over the past 24 months, government has been committed to clearing its public debt by paying off some of the major arrears that have been on the government’s books for a number of years. Arrears include pending salaries, which is roughly estimated to be around 60 per cent to 70 per cent off the principle value, land rentals and the full disbursement of RONWAN.

The present economy is an economically active one. However, this affluence will soon end and everything will return to normal, with concerns of potential long term negative impacts on households economic well being. At the time of writing this report inflation has occurred due to the perceived boom in the economy, where the price of retail fuel has been increased by government which is possibly aiming to discourage increases in importation of motorised vehicles, as well as reducing consumption of fuel and traffic on roads. The prices of wholesale petrol have risen and diesel has fallen which suggests that the burden of price increases in fuel will be experienced at the retail end, which in this context translates to household expenses. Another example is the price of take-out food which is earmarked to increase by 1 April 2014 by almost 40 per cent. Alcohol and tobacco have increased by 25 per cent (wholesale) and 60 per cent (at establishments) since March 2014. Price increases of food, in particular rice, have not been evident from the major wholesalers; however, other food items are showing increases. There is a clear relationship between the major consumption expenditures of households identified in the HIES and those goods and services currently targeted for price increases or impending increases in the future.

The latest economic rebound, although much needed, is predicted to have a direct impact on prices in the future. It should be expected that increase or inflation will follow this economic boom. What should be taken into high consideration is how long the economy can maintain the current level of growth before returning back to normal, whatever the assumptions or predictions of economic normalcy will be. Certainly in the past 20 years since 1994, Nauru's economy has been anything but normal under the circumstances. However, whether households can manage with these latest inflationary patterns on a long-term basis remains to be seen. This will coincide with the settling down of the economy after the introduction of the Regional Processing Centre RPC. But it is clear that the level of price increases currently experienced at the time of writing this report poses greater burden on households in the pending future to ride the initial shocks as a buffer, particularly those with little or no current disposable income, or at the lower quintiles.
## APPENDIX A – GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Person’s age as of last birthday. Persons yet to reach 1 are given an age of 0.</td>
</tr>
<tr>
<td>Average weekly expenditure</td>
<td>Value obtained by dividing the estimated weekly expenditure of a group of households, by the estimated number of households in that group.</td>
</tr>
<tr>
<td>Cash/In-kind Purchases</td>
<td>Purchases made by a household for a good or service which can be either for the household’s benefit or for the benefit of someone outside the household. Purchases include both a cash payment or an in-kind payment (purchase with a good or service gift).</td>
</tr>
<tr>
<td>Constituency</td>
<td>An alternative division of geographical boundaries for assigning members of cabinet. There are eight constituencies in Nauru: Aiwo, Anabar, Anetan, Boe, Buada, Meneng, Ubenide, Yaren. Each have two members in cabinet, except Ubenide which has four.</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>A general measure of price inflation for the household sector in Nauru. Specifically it contains a measure of change, over time, in the cost of a constant basket of goods and services acquired by households in Nauru.</td>
</tr>
<tr>
<td>Consumption Expenditure</td>
<td>See 2.1.2 of this report for full definition.</td>
</tr>
<tr>
<td>Diary</td>
<td>A notebook which is left with the household for a period of two weeks in which the household members record all expenditures on goods and services, as well as details for the use of items received for free and home produce.</td>
</tr>
<tr>
<td>Deciles</td>
<td>Groupings that result from ranking all households or persons in the population in ascending order according to some characteristics such as their household income, and then dividing the population into 10 equal groups, each comprising 10 per cent of the estimated population.</td>
</tr>
<tr>
<td>District</td>
<td>The administrative divisions making up Nauru. In total there are 14 districts for Nauru: Aiwo, Anabar, Anetan, Anibare, Baiti, Boe, Buada, Denigomodu, Ewa, Ijuw, Meneng, Nibok, Uaboe, Yaren.</td>
</tr>
<tr>
<td>Dwelling</td>
<td>Defined as structures within a building which are self-contained and intended for long-term residential use. Examples of types of dwellings include: separate house; semi-detached, row or terrace house or townhouse; flat, unit or apartment; and other dwelling, including caravan, cabin, houseboat or house/flat attached to shop.</td>
</tr>
<tr>
<td>Employment Income</td>
<td>See 2.2.2 of this report for full definition.</td>
</tr>
<tr>
<td>Head of Household</td>
<td>The person identified as the senior spokesperson on behalf of the household members. May be male or female, but must be old enough to report responsibly on behalf of the household.</td>
</tr>
</tbody>
</table>
Home Production: Goods produced by the household for their own consumption, gifts for persons outside the household or for sale. The main categories of home production in Nauru cover the following: fishing and hunting, raising of livestock, agriculture, home processed food and handicrafts.

Household: A person living alone or group of related or unrelated persons who usually live in the same private dwelling (but don't have to) and share a mostly common economic situation with regards to expenditure and income.

Household Income: See 2.2.2 of this report for full definition.

Household Income Deciles: Groupings that result from ranking all households or persons in the population in ascending order according to some characteristics such as their household income and then dividing the population into 10 equal groups, each comprising 10 per cent of the estimated population.

Household Size: The number of usual resident members affiliated with the household at the time of the survey. Includes persons temporarily away for study or work reasons who are still economically involved with the household and intend to return.

Imputed Rent: The estimated market rent that a dwelling would attract if it were to be commercially rented.

Industry: Coded for all employed people aged 15 years and over using International Standard Industrial Classification (ISIC).

In-kind Purchases: Purchase made for services or goods, where a gift of some sort is provided instead of money.

In-kind Receipts: Goods or services received by the household for free from either another household or organisation which the receiving household can then consume.

Investment and Savings: Covers the expenditure a household has made on the construction or improvement of a house which they own. Not considered a part of consumption expense but collected in the survey to provide a more complete picture of the household's spending.

Irregular Gifts Received: Covers both monetary and non-monetary gifts received from outside the household which are not considered a regular source of income for the recipient household. They are therefore not considered part of household income, but are still collected to give a more complete picture of the household's receipts.

Location: A large housing complex based mostly in the district of Denigomodu, which houses a large number of overseas residents in particular.

Non-consumption Expenditure: See 2.1.2 of this report for full definition.

Main Source of Income: The source from which the most positive income is received. If total income is nil or negative then the main source is undefined.
Mean Income: The total weighted income received by a group of households divided by the estimated number of households in that group.

Median Income: The level of income that divides the units in a group into two equal parts, one half having income above the median and one half having income below the median.

Occupation: Coded for all employed people aged 15 years and over using International Standard Classification of Occupation (ISCO).

PACCOICOP: Pacific Classification of Individual Consumption According to Purpose. This is the international standard classification framework for classifying consumption expenditures on goods and services, modified slightly to suit pacific conditions.

Pending Salaries: Additional salaries being paid by the government as compensation for underpayment during the times of economic hardships in recent years.

Private Dwelling: Houses, flats, home units and other structures used as places of residence. These are distinct from special dwellings which includes hotels, boarding houses and institutions.

Property Income: See 2.2.2 of this report for full definition.

Quintiles: Groupings that result from ranking all households or persons in the population in ascending order according to some characteristics such as their household income and then dividing the population into five equal groups, each comprising 20 per cent of the estimated population.

Relative Standard Error (RSE): The standard error expressed as a percentage of the estimate for which it was calculated, and can be used to compare the reliability of different estimates. The smaller the RSE the more reliable the estimate.

Tenure Type: The nature of a household’s legal right to occupy the dwelling in which they usually reside. Tenure is determined according to whether the household owns the dwelling outright, pays rent to live in the dwelling or has some other arrangement to occupy the dwelling.

Transfer Income: See 2.2.2 of this report for full definition.