# Consumer Price Index Republic of Palau

2<sup>nd</sup> Quarter 2014 Volume 1



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2<sup>nd</sup> Quarter 2014

June 2014

Statistics Office
Office of Planning & Statistics
Ministry of Finance
Koror, Palau, 96940
Republic of Palau



# MINISTRY OF FINANCE Bureau of Budget & Planning

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# Foreword

We are pleased to publish this quarter's Consumer Price Index (CPI) publication.

The statistical information presented in this publication contains a wealth of information that measures quarterly changes in prices of a "basket" of goods and services, which are representative of purchases by private households in Palau.

We acknowledge with great appreciation the valuable contributions of many offices of the National Government and state governments as well as those participating establishments for enabling us to continue the collection of prices on a quarterly basis for the selected items within the Palau CPI. With your cooperation and assistance, we will continue to publish the Palau CPI to account for the changes in the prices of commodities consumed by all the people residing in Palau.

Sincerely,

Casmir E. Remengesau

Director

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# **Explanatory Notes**

#### **Brief Description of the Palau Consumer Price Index:**

The Consumer Price Index (CPI) measures quarterly changes in prices of a 'basket' of goods and services, which are representative of purchases by private households in Palau. This 'basket' covers a wide range of goods and services, arranged in the following eight groups: Food & Beverages; Alcohol, Tobacco & Betel nut; Clothing and Footwear; Housing; Household Operations; Transportation; Health, Personal Care, Education & Services; Leisure & Entertainment. Examples of items priced in each major group can be found in Appendix 2.

The Palau CPI measures price changes over time. It does not measure difference in price levels between groups or sub-groups. The base period for the Palau index is the second guarter of 2008.

#### Weighting of the CPI 'Basket'

The weighting is based on the results from the 2006 *Household Income and Expenditure Survey* (HIES). The weights on expenditure groups are displayed in the CPI tables appearing in the subsequent pages. The sum of all the eight weighted groups is equal to 100. Each weight for a certain expenditure group represents the percentage of consumer expenditure on that expenditure group in 2006. For example, the weight for the Food and Beverage group in Palau is 25.35 percent; consequently, about 25 percent of the household expenditure in Palau is used for food and beverage purchases. More details on the weights for each major group and sub-group can be found in Appendix 1.

#### **Prices**

Prices of goods and services included in the CPI are collected quarterly in the middle month of each quarter, from a representative range of retail outlets.

#### **Domestic and Imported Price Indexes**

These sub-indexes can give an indication of factors driving CPI price changes. The import index includes only items that are imported, such as canned foods, fuels, rice, motor vehicles. On the other hand, the domestic index includes items and services that are locally produced and have a local component, such as fresh fish, local produce, bakery goods, seafarers and electricity.

Note, however, that the prices for domestic items may be determined by prices of imported items. For example, if price of fuel, an imported commodity, should increase this will cause an upward movement in the domestic CPI index, because a higher fuel price causes an increase in price for items which are reflected in the domestic index.

In Palau, like other countries in the Pacific, imported items and services dominate household consumption, resulting in a weight of 57.03 percent. In other words, imported items represent around 57 percent of the overall consumer spending, while domestic items make up around 43 percent of consumer spending.

#### **Analysis of CPI Changes:**

Movements in index numbers from one period to another can be expressed in index points or as percentage changes. The following example illustrates the method of calculating changes in index points and percentage changes between any two periods. It is simply a difference between the current quarter index and the previous quarter index. The difference is divided into the previous quarter's index to generate the percent change between those two periods.

# **Example (quarterly change)**

Reference Periods: 1st Quarter 2012 – 4th Quarter 2011

Change in Index: 112.1 - 111.8 = 0.3

Change in Percent: 0.3/111.8 = .003

.003 \* 100 = 0.3%

### **Example (annual change)**

Reference Periods: 1<sup>st</sup> Quarter 2012 – 1<sup>st</sup> Quarter 2011

Change in Index: 112.1 - 103.9 = 8.2

Change in Percent: 8.2/103.9 = .079

.079 \* 100 = 7.9%

#### For Further Information

In addition to the statistics included in this publication, the Office of Planning and Statistics may have further details available. Inquiries should be directed to Ms. Muriell Sinsak, Planning Analyst, Office of Planning and Statistics at phone: (680) 767-1269, fax: (680) 767-5642; or email: ops@palaugov.org.

#### PALAU CPI - SUMMARY OF MOVEMENTS FOR 2014 QTR 2

#### Summary of Quarterly Movement

The Palau quarterly inflation rate for this quarter was 0.3 percent; this was a 2.0 percentage point decrease on the equivalent quarterly inflation for the same period last year. Major contributors to this increase include Health, Personal care, Education & Services group at 1.6%, followed by Food & Beverages group at 0.6%, Alcohol, Tobacco & Betel nut group at 0.1%, and Housing group at 0.1%. The remaining groups, Clothing & Footwear, Household operations, Transportation, and Leisure & Entertainment showed no price change this quarter.

This quarter's inflation rate can be further analyzed for domestic and imported items (Table 4). Domestic items increased by 0.3% and imported items increased by 0.4% over the last quarter.

More details on what has caused the latest quarterly movement can be found in the "quarterly change analysis" section of this report.

#### Summary of Annual Movement

The Palau annual inflation rate for this quarter was 3.3 percent; this was a -1.0 percentage point decrease on the annual inflation for the same period last year. The groups that showed a decrease were the Clothing & Footwear with the highest at -2.0%, followed by Housing at -0.3%, Food & Beverages at -0.2%, Leisure & Entertainment at -0.2% and Household operations at -0.1%. Whereas, groups that showed an increase were the Health, Personal care, Education & Services with the highest at 18.1%, followed by Alcohol, Tobacco & Betel nut at 9.9%, and Transportation at 2.0%.

The annual inflation rate can be further analyzed for both domestic and imported items (Table 4). Both domestic and imported items showed increases of 2.6% and 3.8%, respectively.

More details on what has caused the latest annual movement can be found in the "annual change analysis" section of this report.

# PALAU CPI – ANALYSIS OF INDEX, ANNUAL AND QUARTERLY

Table 1 below shows the value of the index for each major group, and its change over time both from an annual and quarterly perspective. More information regarding the interpretation of the changes from both annually and quarterly can be found in the next two sections of the analysis in this report.

Table 1: Palau Consumer Price Indexes by Major Group

Period	All groups	Food & beverages	Alcohol, tobacco & betel nut	Clothing & footwear	Housing	H'hold operations	Transport <sup>n</sup>	Health, personal care, education & services	Leisure & entertain <sup>t</sup>
				Annual					
2000	78.2	83.3	69.8	127.7	109.7	68.1	71.4	88.3	107.8
2001	76.8	81.3	63.9	134.8	116.6	66.9	69.9	86.4	106.8
2002	75.8	80.2	61.8	128.7	111.0	66.9	69.4	87.8	107.3
2003	76.6	80.8	63.5	124.1	107.4	68.2	70.2	91.3	107.4
2004	80.4	86.6	80.9	119.5	105.5	67.1	73.5	92.3	109.1
2005	83.5	85.3	84.5	118.6	105.5	70.8	78.8	101.2	107.9
2006	87.2	84.2	90.7	106.6	102.2	75.8	85.3	112.2	106.1
2007	90.1	88.8	94.2	100.2	96.4	82.7	84.2	109.6	102.7
2008 (rebase)	100.8	104.2	98.8	100.3	100.3	101.0	99.4	99.7	100.5
2009	102.3	113.8	98.3	103.8	103.5	99.3	92.8	101.0	100.3
2010	103.7	115.9	97.4	102.6	103.1	102.5	95.7	101.3	100.9
2011	108.6	121.5	105.2	101.9	104.6	109.5	100.2	100.2	101.3
2012	112.5	126.9	108.7	103.1	107.9	114.4	104.7	99.6	101.8
2013	116.3	130.9	111.4	103.6	114.9	120.5	108.3	100.5	101.9
2014	120.8	131.5	123.6	102.5	116.9	121.4	109.8	118.1	101.8
				Quarter					
Mar-08	94.3	95.3	99.2	100.0	97.5	86.9	92.8	99.9	101.9
Jun-08	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sep-08	105.5	108.7	98.5	100.7	101.3	113.2	105.8	99.5	100.2
Dec-08	103.5	112.8	97.7	100.7	102.2	103.9	99.0	99.5	100.0
Mar-09	101.8	112.6	97.7	100.7	104.9	100.4	91.7	99.4	100.0
Jun-09	101.9	113.3	98.6	104.9	104.1	98.7	91.4	101.2	100.0
Sep-09	102.9	114.0	98.6	104.9	101.6	99.6	95.7	101.8	100.7
Dec-09	102.5	115.1	98.2	104.9	103.5	98.6	92.5	101.3	100.7
Mar-10	103.6	115.9	98.4	102.7	103.6	102.1	94.6	100.5	100.7
Jun-10	104.3	116.4	98.4	102.7	103.2	103.1	96.0	102.4	100.7
Sep-10	104.2	117.0	95.9	102.7	103.0	103.5	97.0	101.6	101.0
Dec-10	102.9	114.4	97.1	102.3	102.5	101.3	95.1	100.7	101.0
Mar-11	103.9	115.7	97.7	102.6	101.1	102.1	98.3	100.2	101.2
Jun-11	108.2	119.7	104.7	102.5	105.6	107.7	102.6	100.2	101.2
Sep-11	110.5	123.8	108.3	100.1	105.9	115.8	97.4	100.2	101.4
Dec-11	111.8	126.7	110.1	102.5	105.7	112.2	102.6	100.3	101.4
Mar-12	112.1	126.6	110.1	103.5	106.3	112.7	103.6	100.3	101.4
Jun-12	112.4	126.0	108.4	102.6	107.9	114.5	105.4	99.5	102.0
Sep-12	112.4	127.3	108.2	102.6	108.5	115.3	102.9	99.1	102.0
Dec-12	113.2	127.9	108.2	103.6	108.9	115.0	106.8	99.3	102.0
Mar-13	114.5	128.8	110.3	102.6	110.5	117.6	107.4	99.3	102.0
Jun-13	117.1	132.1	112.6	104.6	117.4	121.5	107.6	100.7	102.0
Sep-13	116.5	131.7	110.3	104.6	115.3	121.4	108.3	100.2	102.0
Dec-13	117.1	131.1	112.3	102.5	116.2	121.4	109.9	101.6	101.8
Mar-14	120.6	131.1	123.5	102.5 102.5	116.9	121.4	109.8	117.1 119.0	101.8
Jun-14	121.0	131.8	123.7	102.5	117.0	121.4	109.8	119.0	101.8

#### PALAU CPI – QUARTERLY CHANGE ANALYSIS, JUNE 2007 – June 2014

#### JUNE QUARTER KEY POINTS

#### ALL GROUPS CPI

Rose by 0.3% over the last quarter.

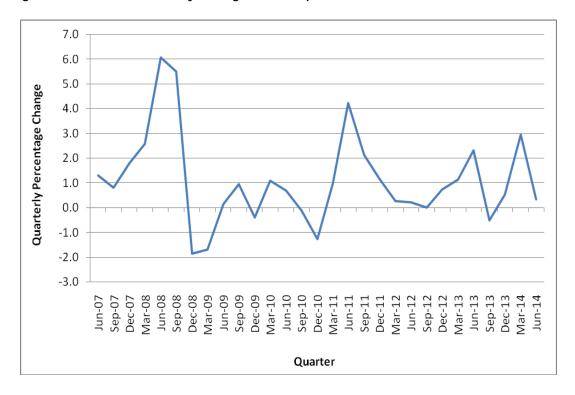
#### OVERVIEW OF CPI MOVEMENTS

- The Health, personal care, education & services group showed the highest increase over the last quarter. This change was mainly due to price increase of personal care and education.
- The Food & Beverages group showed an increase of 0.6% due to price rise of fruits, fresh beef, and dairy products.
- Alcohol, tobacco & betel nut group showed an increase of 0.1% due to price rise of alcohol beverages.
- The housing group also saw an increase of 0.1% due to price increase of household appliances.

Table 2: Palau CPI Quarterly Change by Major Group, June 2007 – June 2014

		Food &	Alcohol, tobacco &	Clothing &		H'hold	e	Health, personal care, ducation &	Leisure &
Period	All groups	beverages	betel nut	footwear	Housing	operations	Transport <sup>n</sup>	services	entertain <sup>t</sup>
un-07	1.3	1.9	-1.4	-0.3	0.0	2.9	5.4	-1.5	-4.0
ep-07	0.8	0.1	2.3	0.0	0.0	1.7	-0.8	0.0	0.0
ec-07	1.8	1.8	0.7	0.0	0.6	2.8	4.2	0.0	-0.7
/lar-08	2.6	5.4	4.0	-0.1	0.7	1.4	6.0	-8.5	0.7
un-08	6.1	4.9	0.8	0.0	2.6	15.0	7.7	0.1	-1.8
ep-08	5.5	8.7	-1.5	0.7	1.3	13.2	5.8	-0.5	0.2
ec-08	-1.9	3.8	-0.8	0.0	0.9	-8.2	-6.4	0.0	-0.2
/lar-09	-1.7	-0.2	0.0	0.0	2.6	-3.4	-7.4	0.0	0.0
un-09	0.1	0.7	1.0	4.2	-0.8	-1.8	-0.3	1.8	0.0
ep-09	1.0	0.6	0.0	0.0	-2.4	0.9	4.7	0.6	0.8
ec-09	-0.4	1.0	-0.4	0.0	1.8	-1.0	-3.3	-0.5	0.0
/lar-10	1.1	0.6	0.1	-2.1	0.1	3.5	2.3	-0.9	0.0
un-10	0.7	0.5	0.0	0.0	-0.4	1.0	1.4	2.0	0.0
ep-10	-0.1	0.5	-2.6	0.0	-0.2	0.4	1.1	-0.8	0.3
ec-10	-1.3	-2.3	1.3	-0.3	-0.5	-2.1	-2.0	-0.9	0.0
/lar-11	1.0	1.2	0.6	0.3	-1.4	0.8	3.4	-0.5	0.1
un-11	4.2	3.5	7.2	-0.1	4.5	5.5	4.4	0.1	0.1
ep-11	2.1	3.4	3.4	-2.4	0.2	7.5	-5.1	0.0	0.2
ec-11	1.2	2.4	1.7	2.5	-0.2	-3.1	5.4	0.1	0.0
/lar-12	0.3	-0.1	0.0	1.0	0.5	0.5	0.9	0.0	0.0
un-12	0.2	-0.5	-1.5	-0.9	1.5	1.5	1.8	-0.8	0.6
ep-12	0.0	1.0	-0.2	0.0	0.5	0.7	-2.4	-0.4	0.0
ec-12	0.7	0.4	0.0	1.0	0.4	-0.2	3.8	0.2	0.0
/lar-13	1.1	0.7	1.9	-1.0	1.5	2.2	0.6	0.0	0.0
un-13	2.3	2.6	2.0	2.0	6.2	3.3	0.2	1.5	0.0
ep-13	-0.5	-0.3	-2.0	0.0	-1.8	-0.1	0.6	-0.5	0.0
ec-13	0.5	-0.4	1.8	-2.0	0.8	0.0	1.4	1.4	-0.2
/lar-14	2.9	0.0	10.0	0.0	0.5	0.0	-0.1	15.3	0.0
un-14	0.3	0.6	0.1	0.0	0.1	0.0	0.0	1.6	0.0

Figure 1: Palau CPI, Quarterly Change, All Groups, June 2007 – June 2014



## PALAU CPI – ANNUAL CHANGE ANALYSIS, 2002 – 2014

Table 3 and Figure 2 below provide detailed information on the annual change in the Palau CPI dating back to September 2002. Given this publication refers to the second quarter of 2014 (June 2014), the annual increases presented in this analysis relate back to the first quarter of previous years.

#### **ANNUAL KEY POINTS**

#### ALL GROUPS CPI

Increased by 3.3% over the last 12 months.

#### OVERVIEW OF CPI MOVEMENTS

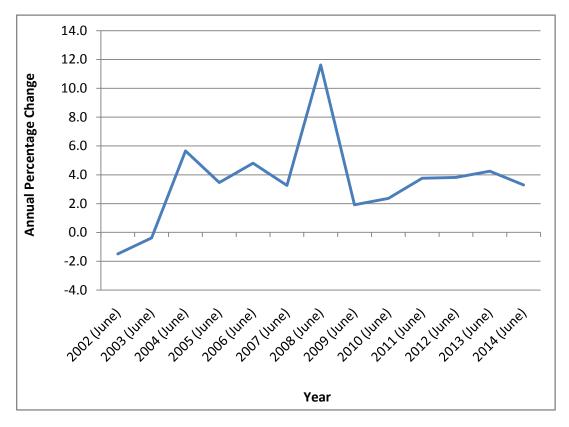
• The annual increase of 3.3 percent noticed for the last 12 months was largely driven by the increase of Health, Personal Care, Education & Services group, followed by Alcohol, Tobacco & Betel nut group. Items that contributed the most to these groups' increase include tobacco, personal care, and school tuition.

Table 3: Palau CPI: Annual Change by Major Group, 2002 – 2014

								Health, personal	
			Alcohol,					care,	
		Food &	tobacco &	Clothing &		H'hold		education &	Leisure &
Period	All groups	beverages	betel nut	footwear	Housing	operations	Transport <sup>n</sup>	services	entertain <sup>t</sup>
2002 (June)	-1.5	-0.9	-1.9	-4.0	-3.4	-3.2	-0.3	1.5	0.3
2003 (June)	-0.4	-0.8	-9.8	-4.2	-6.3	4.4	0.8	3.9	0.2
2004 (June)	5.7	6.6	41.1	-1.5	-2.0	-1.2	4.0	1.8	1.8
2005 (June)	3.5	-0.9	5.3	-3.2	-2.0	5.1	7.3	5.0	0.8
2006 (June)	4.8	-2.6	6.6	-15.7	3.3	8.4	9.1	13.7	-3.4
2007 (June)	3.3	7.1	2.9	0.6	-9.3	7.0	-0.9	-0.8	-4.0
2008 (June)	11.6	12.7	7.9	-0.2	3.9	21.9	18.0	-8.4	-1.8
2009 (June)	1.9	13.3	-1.4	4.9	4.1	-1.3	-8.6	1.2	0.0
2010 (June)	2.4	2.7	-0.3	-2.1	-0.8	4.5	5.0	1.2	0.8
2011 (June)	3.8	2.8	6.5	-0.1	2.3	4.5	6.9	-2.2	0.5
2012 (June)	3.8	5.3	3.6	0.0	2.1	6.3	2.7	-0.7	0.8
2013 (June)	4.2	4.8	3.8	2.0	8.8	6.1	2.1	1.2	0.0
 2014 (June)	3.3	-0.2	9.9	-2.0	-0.3	-0.1	2.0	18.1	-0.2

NB: The annual change represents the change from June to June each year





# **PALAU CPI – MAJOR GROUP ANALYSIS**

The following section of analysis looks more at the impact of each major group to the CPI over the last few years.

Figure 3 below examines how each major group has fared over the last 2 year and 5 year time periods.

#### **KEYPOINT ANALYSIS**

- Over the last 2 years, the index has risen by 3.8 percent, whereas, the equivalent increase over the last 5 years is 3.7 percent.
- The major group with the biggest increase in the last 5 years was the Alcohol, Tobacco & Betel nut group (5.1% per year) and H'hold operations group (4.6% per year).
- The only group that showed decline over the past 5 years was Clothing & Footwear at -0.4%.

Figures 4, 5 and 6, show the change in index for each of the major groups since the re-base in June 2008.

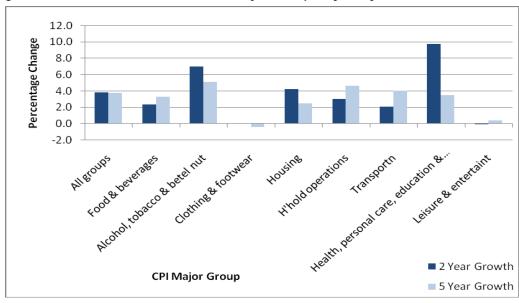


Figure 3: Palau CPI, Annual Growth of Major Groups, 2yr & 5yr

Figure 4: Palau CPI, Index for All Groups; Food & Beverages; and Alcohol, Tobacco & Betel nut, June 2008 – June 2014

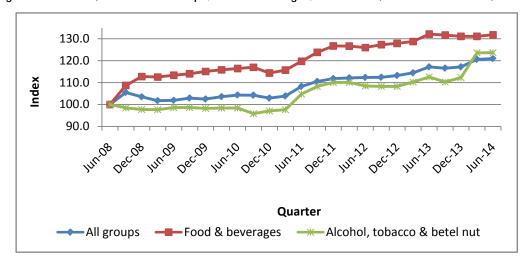


Figure 5: Palau CPI, Index for Clothing & Footwear; Housing; and Household Operations, June 2008 – June 2014

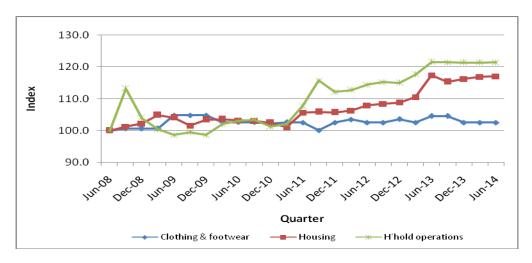
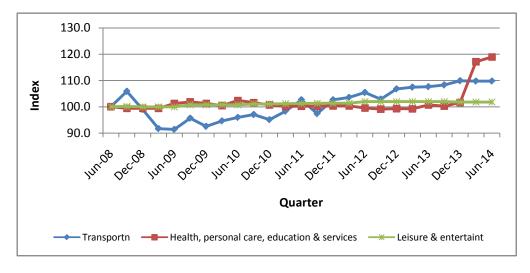


Figure 6: Palau CPI, Index for Transportation; Health, Pers. Care, Educ. & Services; and Leisure & Ent. June 2008 – June 2014



### PALAU CPI - DOMESTIC V IMPORTED ITEM ANALYSIS

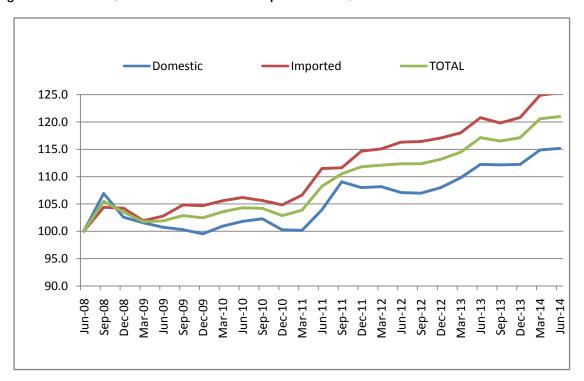
The final analysis section examines the impact of both domestic and imported item on the CPI for Palau. As discussed in the explanatory notes, imported items make up the bulk of household expenditure, accounting for 57 percent in total, with the remaining 43 percent covering expenditure on domestic items.

Both Table 4 and Figure 7 show the change in the index for both groups since the re-base in June 2008. As can be seen from this analysis, during this period, imported items have increased by over 25 percent whilst domestic items have only increased by a little over 15 percent.

Table 4: Palau CPI: Domestic v Imported Index, June 2008 – June 2014

	•		
Quarter	Domestic	Imported	TOTAL
Jun-08	100.0	100.0	100.0
Sep-08	106.9	104.4	105.5
Dec-08	102.6	104.2	103.5
Mar-09	101.6	101.9	101.8
Jun-09	100.8	102.8	101.9
Sep-09	100.3	104.8	102.9
Dec-09	99.6	104.7	102.5
Mar-10	100.9	105.6	103.6
Jun-10	101.8	106.2	104.3
Sep-10	102.3	105.6	104.2
Dec-10	100.3	104.8	102.9
Mar-11	100.2	106.6	103.9
Jun-11	103.9	111.5	108.2
Sep-11	109.1	111.6	110.5
Dec-11	108.0	114.7	111.8
Mar-12	108.2	115.1	112.1
Jun-12	107.1	116.3	112.4
Sep-12	107.0	116.4	112.4
Dec-12	108.0	117.1	113.2
Mar-13	109.8	118.0	114.5
Jun-13	112.3	120.8	117.1
Sep-13	112.2	119.8	116.5
Dec-13	112.2	120.8	117.1
Mar-14	114.9	124.9	120.6
Jun-14	115.2	125.4	121.0

Figure 7: Palau CPI, Index for Domestic v Imported Items, June 2008 – June 2014



# **Appendix 1: CPI Weights for Major Groups**

Sub-group	Weight
TOTAL	100.00
Food and Beverages	25.35
Fish, fresh, frozen & canned	2.06
Meat, poultry & eggs	4.90
Fruit and vegetables	2.43
Cereal, bakery, sugar and confectionery	4.48
Fats and oils	0.50
Condiments, spices & nut products	0.75
Dairy products	1.79
Non-alcoholic beverages	2.57
Other food and food away from home	5.87
Alcohol, tobacco and betel nut	17.52
Tobacco products	5.44
Alcoholic beverages	9.75
Betel nut	2.33
Clothing and footwear	1.62
Clothing	1.42
Footwear	0.20
Housing	6.91
Household maintenance	4.49
Rent	2.09
Insurance and Other Housing	0.32
Household operations	19.03
Household utilities and fuels	9.16
Household appliances	1.77
Furniture and home furnishings	0.80
Household supplies	2.18
Toiletries	0.56
Household services	2.35
Household communications	2.21
Transportation	16.77
Motor fuel and oil	5.07
Motor vehicle and boat expenses	9.56
Other Transportation	2.14
Health, personal care, education and services	9.29
Health	3.54
Personal care	1.78
Education	2.78
Personal service	1.19
Leisure and entertainment	3.52
Leisure and sporting equipment	3.52

# **Appendix 2: Examples of Items Priced**

Major Group	Examples of Items Priced
Food and Beverages	Fresh Fish, Frozen Chicken, Canned beef, Onions, Taro, Rice, Flour, Oil, Soya Sauce, Milk, Soft Drink, Coffee, Take-Away Meals
Alcohol, tobacco and betelnut	Cigarettes, Beer, Wine, Spirits, BeteInut
Clothing and footwear	Jeans, T-shirt, Shorts, Slippers, Sport Shoes
Housing	Lumber, Paint, Rent, Electricity Connection
Household operations	Electricty Bill, Water Bill, Refridgerator, Television, Mattress, Soap, Shampoo, Housekeeping, Telephone Charges
Transportation	Gasoline, Diesel, Car Hire, Airfare, Seafare
Health, personal care, education and services	Doctors visit, Scaling fee, Diapers, School Tuition, Haircut
Leisure and entertainment	Monthly Cable Fee, DVD rental