# **Consumer Price Index**

# July 2013





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### A note to the reader

he following report presents the price statistics for July 2013. At the end of July 2013 the Consumer Price Index (CPI) shows a decrease of 0.1% compared to the end of June 2013. The sector which affected the CPI the most was "Food and non-alcoholic beverages" (-0.8%), which led to an effect of -0.11 percentage points (ppts) on the  $\Delta$  CPI of July 2013 (-0.1%). Compared to July 2012 the CPI decreased by 2.8%. The sector which affected the CPI the most was "Housing" (-10.3%). Specifically, prices of "Water supply and miscellaneous services relating to the dwelling" and "Electricity, gas and other fuels" decreased by respectively 27.0% and 15.3%. The decrease in prices of these categories caused an effect of -3.41 ppts on the end of period inflation of July 2013 (-2.8%). The period average inflation for the period July 2012 - July 2013 is -3.1%, which is 7.5 ppts lower compared to the period average inflation for the period July 2011 - July 2012 (4.4%). Utilities (Water and Electricity) did not register price changes in July 2013. The price of gasoline decreased by 1.5% and caused an effect of -0.10 ppts. The price of diesel registered a decrease (-1.2%) in July 2013 and had an insignificant effect on the  $\Delta$  CPI of July 2013 (-0.1%).

This report is divided in 7 sections. An overview of the monthly percentage changes in the CPI and index per sector is presented in section 1. Section 2 provides the yearly percentage changes in the CPI and index per sector. The development of indices of main sectors and utilities is outlined in section 3. Section 4 presents the percentage change in the CPI of Aruba's major trading partners and compares the CPI of Aruba and the USA. Section 5 presents an overview of the monthly and yearly percentage changes of the core inflation. Section 6 presents the price movements in food & catering services. The development of the subsistence level is presented in section 7 and is followed by the appendices.

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### 1 Monthly change of the CPI

#### **1.1 CPI and Inflation**

The CPI of the total population of Aruba for the month of July 2013 is 117.35; a decrease of 0.1% compared to the CPI of June 2013 (117.44). An overview of the percentage change in the CPI ( $\Delta$  CPI) for different periods during 2012 and 2013 is shown in Table 1. The terms percentage change in the CPI and "inflation" (deflation) are considered similar and are used interchangeably. The deflation over the last 12 months (end of period inflation) is 2.8%, while the deflation over a period of 24 months (period average inflation) is 3.1%.

#### Table 1: Overview of ∆ CPI

		% Changes		Ind	ex
Period		2013	2012	Current	Last
Monthly	Jun - Jul	-0.1	-0.4	117.35	117.44
Year-to-date	Dec - Jul	0.4	-0.5	117.35	116.85
Last 12 months <sup>1</sup>	Jul - Jul	-2.8	0.4	117.35	120.70
Last 24 months <sup>2</sup>	Jul - Jul	-3.1	4.4	117.75	121.50

Source: Central Bureau of Statistics Aruba

<sup>1</sup> End of period inflation

<sup>2</sup> Period average inflation

Figure 1 depicts the monthly  $\Delta$  CPI over a period of one year starting from July 2012, whereas the  $\Delta$  CPI for the month July for the years 2004 to 2013 is illustrated in Figure 2.

#### **1.2 Changes in sector**

Figure 3 provides an overview of the percentage changes for the indices per sector for July 2013. The percentage change in index is further denoted as  $\Delta$  I. The largest  $\Delta$  I is observed for the sector "Recreation and culture" (1.0%).

#### 1.3 Changes in categories and subcategories

The largest positive and negative  $\Delta$  I is seen in the categories "Telephone and telefax equipment" (17.0%) and "Household appliances" (-4.4%), respectively. In the "Food and non-alcoholic beverages" sector a decrease of 1.0% is observed for the category "Food", while the index for "Non-alcoholic beverages" registered an increase of 0.3%. In the "Recreation and culture" sector the major  $\Delta$  I is observed for the category "Holidays" (4.2%), which is mainly the result of an increase in "All inclusive holidays or tours" of 28.3%<sup>1</sup>.

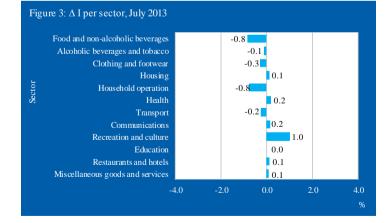
The categories which influenced the CPI calculation the most are "Food", "Operation of personal transport equipment" and "Transport services", which had an effect of respectively, -0.12, -0.10 and 0.06 ppts on the  $\Delta$  CPI. Reference is made to tables 16 and 17 in Appendices 1 and 2. Table 16 provides an overview of the indices for the months July 2012, December 2012, June 2013 and July 2013 together with corresponding weights per sector and the monthly, year-to-date (ytd), end of period and period average

percentage changes for July 2013. In table 17 an overview of the effect on the monthly, ytd, end of period and period average CPI per sector and category for July 2013 is presented. The course of indices for 2007 up to July 2013 is illustrated in Appendix 4.









<sup>&</sup>lt;sup>1</sup> The focus is on the four major sectors which are: Housing, Transport, Food and nonalcoholic beverages and Recreation and culture. Together these sectors form 64% of the total weight of the basket of goods and services.

# S Consumer Price Index Aruba End of period change July 2013

### 2 End of period change of the CPI

#### 2.1 End of period change CPI for July 2013

The CPI decreased from 120.70 in July 2012 to 117.35 in July 2013, a decrease of 2.8%. This  $\Delta$  CPI is together with the one of 2009 the lowest registered over a period of 5 years for the month July, and is 3.2 ppts lower than the  $\Delta$  CPI registered in 2012 (0.4%) (see table 2).

#### Table 2: End of period △ CPI for July, 2009 - 2013

Period	Δ CPI	Index
2008-2009	-2.8	114.66
2009-2010	-0.1	114.59
2010-2011	5.0	120.27
2011-2012	0.4	120.70
2012-2013	-2.8	117.35

Source: Central Bureau of Statistics Aruba

#### 2.2 Changes in sector

An overview of the percentage change per sector over the period July 2012 - July 2013 is presented in table 3. The largest  $\Delta$  I is observed for the sector "Housing" with a decrease of 10.3%. The decrease in the "Housing" sector is mainly caused by decreases in the categories "Water supply and miscellaneous services relating to the dwelling" (-27.0%) and "Electricity, gas and other fuels" (-15.3%). Furthermore, decreases of 8.0% and 1.4% are observed for the sectors "Clothing and footwear" and "Household operation" respectively. A comparison of the  $\Delta$  I's for the years 2012 and 2013 is provided in figure 4.

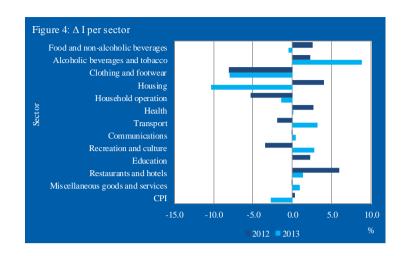
#### Table 3: Percentage change for July, 2012 - 2013

Sector	% Change
Food and non-alcoholic beverages	-0.5
Alcoholic beverages and tobacco	8.8
Clothing and footwear	-8.0
Housing	-10.3
Household operation	-1.4
Health	0.1
Transport	3.2
Communications	0.5
Recreation and culture	2.7
Education	0.0
Restaurants and hotels	1.3
Miscellaneous goods and services	1.0
CPI	-2.8

Source: Central Bureau of Statistics Aruba

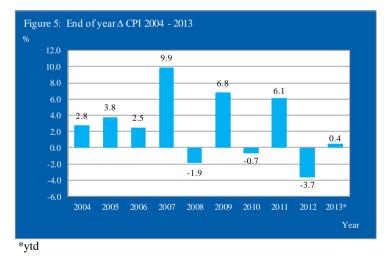
#### **2.3 Changes in categories**

The largest positive and negative  $\Delta$  I in categories observed over a period of one year are respectively, "Holidays" (27.0%) and "Water supply and miscellaneous services relating to the dwelling" (-27.0%). For an overview of the end of period percentage changes per category refer to table 16 in Appendix 1.



#### 2.4 End of year change CPI 2004 - 2013

The end of year  $\Delta$  CPI for the period 2004 - 2013 is shown in figure 5. The  $\Delta$  CPI for 2013 is calculated by comparing the CPI of July 2013 with the CPI of December 2012. At the end of each year, the end of year percentage change equals the ytd  $\Delta$  CPI. The vtd  $\Delta$  CPI for July 2013 is 0.4%.



#### 2.5 Period average change CPI for July 2013

The period average change CPI ( $\Delta$  ACPI) for July 2013 is -3.1%. Table 4 provides an overview of the  $\Delta$  ACPI for the month July for the years 2009 to 2013. The  $\Delta$  ACPI for 2013 decreased by 7.5 ppts compared to 2012.

#### Table 4: Overview of Δ ACPI for July, 2009 - 2013

Period	Δ ΑCPI	Index
2008-2009	1.2	112.48
2009-2010	1.9	114.65
2010-2011	1.5	116.36
2011-2012	4.4	121.50
2012-2013	-3.1	117.75

Source: Central Bureau of Statistics Aruba

The bureau of statistics Consumer Price Index Aruba Indices of main sectors and utilities

# **3** Development of indices of main sectors and utilities

#### 3.1 Indices main sectors

The four major sectors, "Housing", "Transport", "Food and nonalcoholic beverages" and "Recreation and culture", constitute 64% of the total weight of the basket of goods and services, which are observed on a monthly basis. An overview of the course of indices for 2007 up to July 2013 per sector and for the CPI is provided in figures 9-1 to 9-12 in Appendix 4.

Changes in the indices of the sectors "Housing" and "Transport" are mainly the result of changes in the international oil prices and prices of utilities during the respective months. The development of crude oil, fuel surcharge, electricity, water, gasoline and diesel prices is provided in table 5 and in the adjoining figures 6-1 and 6-2.

#### Table 5: Prices of utilities, gasoline and diesel, 2012 - 2013

		Fuel	Fuel				
	Crude oil	surcharge <sup>2</sup>	surcharge <sup>2</sup>				
Month	per barrel <sup>1</sup>	≤ 500 kWh	501-1000 kWh	Electricity <sup>3</sup>	Water <sup>4</sup>	Gasoline <sup>5</sup>	Diesel⁵
Jul-12	87.69	32.49	38.47	363.27	195.47	223.60	191.60
Aug-12	93.71	32.49	38.47	363.27	137.05	228.70	203.20
Sep-12	94.57	32.49	38.47	363.27	137.05	244.70	214.40
Oct-12	90.04	32.49	38.47	363.27	137.05	244.90	218.10
Nov-12	86.48	24.60	30.90	306.75	137.05	233.00	215.70
Dec-12	87.77	24.60	30.90	306.75	137.05	220.20	207.60
Jan-13	94.04	24.60	30.90	306.75	137.05	218.80	206.40
Feb-13	96.21	24.60	30.90	306.75	137.05	227.80	210.40
Mar-13	93.00	24.60	30.90	306.75	137.05	242.00	218.80
Apr-13	91.86	24.60	30.90	306.75	137.05	239.50	209.00
May-13	94.39	24.60	30.90	306.75	137.05	231.40	201.60
Jun-13	95.77	24.60	30.90	306.75	137.05	232.40	200.10
Jul-13	104.53	24.60	30.90	306.75	137.05	228.90	197.60

Source: Central Bureau of Statistics Aruba

<sup>1</sup> Average West Texas Intermediate (WTI) crude oil price per barrel in US\$ (Source: U.S.

Energy Information Administration)

<sup>2</sup> Fuel surcharge in Afl. cents per kWh

<sup>3</sup> Electricty price in Afl.

<sup>4</sup> Water price in Afl.

<sup>5</sup> Gasoline and diesel prices in Afl. cents per liter

#### **3.2 Electricity**

The price of electricity is determined in Aruban florins (Afl.) for an average usage by households. The average usage is 725.5 kWh per month. The electricity price for an average consumption of 725.5 kWh did not change in July 2013, it remained at Afl. 306.75. Figure 6-1 provides an overview of the course of changes in the electricity price for the period 2009 to 2013.

The component in the electricity tariff which is sensitive to price changes is the fuel surcharge (brandstofclausule). Fuel surcharge for a usage of electricity up to 500 kWh surcharge did not change in July 2013, it stayed at Afl. 24.60 cents per kWh. Fuel surcharge for a usage of electricity between 501 - 1000 kWh did not change in July 2013, it stayed at Afl. 30.90 cents per kWh.

#### 3.3 Water

The price of water is determined in Afl. for an average usage (water consumption) by households. Figure 6-1 provides an overview of the course of changes in the water price for the period 2009 to 2013. The water price for an average usage by households did not change in July 2013, it remained at Afl. 137.05.

#### **3.4 Gasoline and Diesel**

The retail price of gasoline decreased by 1.5% from 232.4 cents per liter in June 2013 to 228.9 cents per liter in July 2013. In July 2013, the retail price of diesel registered a decrease of 1.2% from 200.1 cents per liter in June 2013 to 197.6 cents per liter.

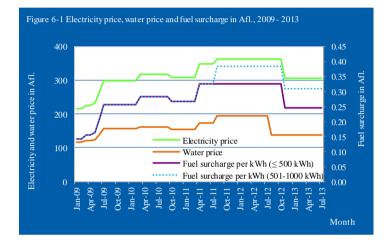
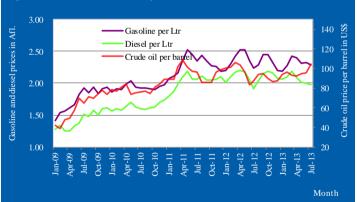


Figure 6-2 Gasoline, diesel and crude oil prices, 2009 - 2013



CDS CONSUMER Price INDEX Aruba CPI of Aruba's major trading partners

### 4 Percentage change CPI of Aruba's major trading partners

#### 4.1 Comparison of the CPI of Aruba and the USA

Table 6 provides an overview of the  $\Delta$  CPI of Aruba's major trading partners starting from July 2012. In July 2013 the  $\Delta$  CPI of the USA and the Netherlands were respectively 0.0% and 0.8%. The  $\Delta$  CPI of Curaçao for July 2013 is not yet available.

#### Table 6: Monthly Δ CPI 2012 - 2013 per Country

Period	Aruba	USA	Curaçao	Netherlands			
Jul-12	-0.4	-0.2	0.0	0.7			
Aug-12	-1.5	0.6	-0.2	0.1			
Sep-12	0.4	0.4	0.1	0.4			
Oct-12	-0.1	0.0	0.7	0.6			
Nov-12	-1.8	-0.5	0.7	-0.4			
Dec-12	-0.2	-0.3	-0.7	-0.1			
Jan-13	-0.1	0.3	-0.5	0.0			
Feb-13	0.7	0.8	0.9	0.8			
Mar-13	-0.1	0.3	0.7	1.1			
Apr-13	0.0	-0.1	0.6	0.1			
May-13	-0.4	0.2	-0.5	0.0			
Jun-13	0.2	0.2	-0.5	-0.4			
Jul-13	-0.1	0.0	n.a.	0.8			
Source: CBS Aruba, Bureau of Labor Statistics (USA),							

CBS Curação and CBS Netherlands

The USA is considered Aruba's largest trading partner<sup>2</sup>. Table 7 provides an overview of the  $\Delta$  CPI for Aruba and the USA for 2013. Aruba's monthly  $\Delta$  CPI for July 2013 is 0.1 ppt lower than the  $\Delta$  CPI of the USA.

#### Table 7: Overview of Δ CPI, 2013

Period		Aruba	USA
Monthly	Jun - Jul	-0.1	0.0
Year-to-date	Dec - Jul	0.4	1.7
Last 12 months 1	Jul - Jul	-2.8	2.0
Last 24 months 2	Jul - Jul	-3.1	1.7

Source: Central Bureau of Statistics Aruba

<sup>1</sup> End of period inflation

<sup>2</sup> Period average inflation

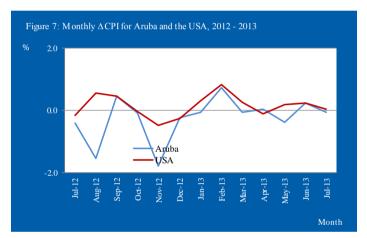
The  $\Delta$  CPI of Aruba over the last 12 months is 4.8 ppts lower compared to the USA's 12-month  $\Delta$  CPI. The  $\Delta$  CPI over the last 24 months for Aruba is 4.8 ppts lower than the  $\Delta$  CPI of the USA. The monthly inflation for both Aruba and the USA is depicted in figure 7 over a period of one year. Furthermore, an overview of the end of year  $\Delta$  CPI over the period 2003 - 2013 for Aruba and the USA is provided in table 8 and figure 8.

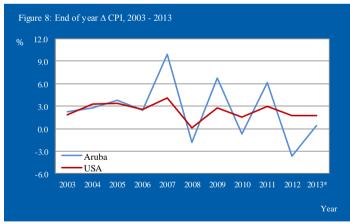
#### Table 8: End of year △ CPI, 2003 - 2013

Period	Aruba	USA
2003	2.3	1.9
2004	2.8	3.3
2005	3.8	3.4
2006	2.5	2.5
2007	9.9	4.1
2008	-1.9	0.1
2009	6.8	2.7
2010	-0.7	1.5
2011	6.1	3.0
2012	-3.7	1.7
2013*	0.4	1.7

Source: Central Bureau of Statistics Aruba

\* ytd





\*ytd

 $<sup>^2\,</sup>$  "56% of Aruba's import by sea and air originates from the USA" (Source: Foreign Trade Statistics Report, 1st Quarter 2013).

# CDS CONSUMER Price Index Aruba

Core inflation

### **5** Core inflation

### **5.1 Core inflation**

Core inflation is a measure of inflation which excludes certain items that face volatile price movements e.g. food products and energy. By calculating the core inflation these more volatile components are eliminated from the inflation. Core inflation indices serve to assess the mid- and long-term trend of the overall price level. For the purpose of adjusting monetary policy, many economists focus more intently on the core rate of inflation, as this allows for an in-depth assessment of inflationary processes ongoing in the economy.

### 5.2 Monthly change of the core inflation

In July 2013 the core inflation (measured over the period July 2012 - 2013) was -0.1%, 1.6 ppts lower compared to July 2012. In July 2013 the food index shows an increase of 0.1%, while the energy index had a decrease of 13.3%. Over the past year the food index decreased by 5.0 ppts and the energy index decreased by 26.8 ppts. Table 9 provides an overview of the monthly inflation and core inflation starting from July 2012.

#### Table 9: Monthly inflation<sup>1</sup> and core inflation, 2012 - 2013

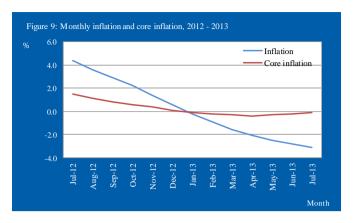
				Core
Period	Inflation	Food	Energy <sup>2</sup>	Inflation
Jul-12	4.4	5.1	13.5	1.5
Aug-12	3.6	4.8	10.9	1.1
Sep-12	2.9	4.3	8.6	0.8
Oct-12	2.2	3.7	6.4	0.6
Nov-12	1.4	3.1	3.7	0.4
Dec-12	0.6	2.5	1.0	0.1
Jan-13	-0.2	2.0	-1.5	-0.1
Feb-13	-0.9	1.5	-4.0	-0.2
Mar-13	-1.6	1.2	-6.5	-0.3
Apr-13	-2.1	0.9	-8.5	-0.4
May-13	-2.5	0.5	-10.3	-0.3
Jun-13	-2.8	0.3	-11.8	-0.2
Jul-13	-3.1	0.1	-13.3	-0.1

Source: Central Bureau of Statistics Aruba

<sup>1</sup> Period average inflation

<sup>2</sup> Energy : Electricity, water, gasoline and diesel

The monthly inflation and core inflation for Aruba is shown in figure 9 over a period of one year starting from July 2012.



# 5.3 End of year change of the core inflation, 2008 - 2013

The end of year core inflation of the total population of Aruba for the year 2013 (up to July) is -0.1%, 0.2 ppts lower than the core inflation of 2012. Table 10 provides an overview of the end of year inflation and core inflation over the period 2008 - 2013.

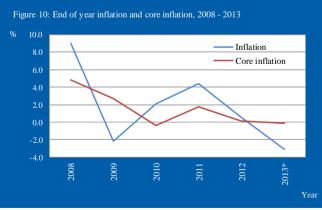
The end of year inflation and core inflation is presented in figure 10 over the period 2008 - 2013.

#### Table 10: End of year core inflation, 2008 - 2013

Period	2008	2009	2010	2011	2012	2013*
Inflation	9.0	-2.1	2.1	4.4	0.6	-3.1
Food	12.2	4.6	-2.7	4.5	2.5	0.1
Electricity	25.3	-18.5	18.0	10.3	2.5	-11.7
Water	25.2	-18.8	14.0	11.5	-3.6	-29.9
Gasoline and diesel	14.5	-22.6	10.6	18.9	2.7	-0.4
Core inflation	4.8	2.7	-0.4	1.7	0.1	-0.1

Source: Central Bureau of Statistics Aruba

\*current month



\*current month

### 6 Development of Food & catering services

#### 6.1 Monthly change of Food & catering services for **July 2013**

The "Food & catering services" index decreased by 0.6% in July 2013, after an increase of 0.2% in June 2013. The index for "Food at home" shows a decrease of 0.8% in July, as six of the eleven "Food at home" indices decreased in July 2013. The "Fruit" index registered the largest decrease (-6.1%) in July and was mainly caused by decreases of 14.2%, 8.6% and 5.0% in the indices for "Oranges, lemons and mandarins", "Melons and watermelons" and "Other fruits and fruit products", respectively. The "Vegetables" index declined by 3.3%. The indices for "Fish and other seafood" and "Potatoes and other tubers" show both a decrease of 1.3%. The "Bread and cereals" index increased the most (0.4%), followed by increases of 0.3% and 0.2% in the indices for "Non-alcoholic beverages" and "Meat", respectively.

Table 11 provides an overview of the corresponding weights per food group together with the percentage changes and effect for July 2013.

#### Table 11: Percentage change of Food for July 2013

Food	Weight	% Change	Effect
Food & catering services	1,492.8	-0.6	-0.11
Food at home	1,125.3	-0.8	-0.11
Bread and cereals	205.2	0.4	0.01
Meat	229.8	0.2	0.01
Fish and other seafood	56.4	-1.3	-0.01
Milk, cheese and eggs	140.0	0.0	0.00
Oils and fats	31.6	-0.3	0.00
Fruit	72.0	-6.1	-0.08
Potatoes and other tubers	18.5	-1.3	0.00
Vegetables	75.7	-3.3	-0.04
Sugar, jam, honey and other confectionery	49.6	-0.2	0.00
Food products n.e.c.	82.7	0.0	0.00
Non-alcoholic beverages	163.9	0.3	0.01
Food away from home	367.5	0.2	0.01
Source: Central Bureau of Statistics Aruba			

Source: Central Bureau of Statistics Aruba

Reference is made to table 18 in Appendix 3. Table 18 provides an overview of the monthly and end of period percentage changes and effect for July 2013 for the food groups.

In July 2013, "Food at home" and "Food away from home" as a group show a decrease in price of 0.6% compared to June 2013, and had an influence of -0.11 ppts on the CPI, while the remaining goods and services, as a group, experienced an increase in price of 0.04%, causing an effect of 0.03 ppts on the CPI.

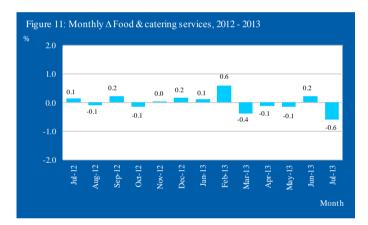
An overview of the percentage change and effect for "Food at home" and "Food away from home" for July 2013 is presented in table 12.

#### Table 12: Effect on the CPI of July 2013 of "Food at home" and "Food away from home"

Category	Weight	% Change	Effect
Food at home	1,125.3	-0.8	-0.11
Food away from home	367.5	0.2	0.01
Total group	1,492.8	-0.6	-0.11
Remaining goods and services	8,507.2	0.04	0.03
СРІ	10,000.0	-0.1	-0.07

Source: Central Bureau of Statistics Aruba

Figure 11 depicts the monthly  $\Delta$  Food and catering services over a period of one year starting from July 2012.



#### 6.2 End of Period change of Food & catering services for July 2013

Over the last 12 months the "Food & catering services" index has decreased by 0.2%. The "Food at home" index shows a decrease of 0.5%. The "Fish and other seafood" index increased by 2.8%, the largest increase among the "Food at home" food groups, while the "Potatoes and other tubers" index shows the largest decrease (-11.4%). The index for "Food away from home" shows a 0.2% increase in July, after an increase of 0.1% in June 2013 and has increased by 1.2% over the last 12 months.

### 7 Subsistence level

#### 7.1 Subsistence level

The subsistence level is the minimum level of income which is perceived necessary to achieve an adequate standard of living in a given country. The subsistence level is usually determined by estimating the cost of all the essential resources that an average adult consumes in one month or year. This is commonly called a basic needs index, and varies according to the price of food, clothing, housing, transport and other items in the "basket". Equivalence scales are used to adjust for the assumed standard of living, of households of different sizes and composition. The scale assigns a weight of 1.0 for the first adult and 0.5 for each additional adult in the household (aged 15+) and a weight of 0.3 for each child (aged 0-14 years). The subsistence level is based on figures of the report "Bestaansminimum 2010" published by the CBS in November 2010 and is monthly updated for inflation using the monthly CPI. The reference unit used in this report is one of a household consisting of two adults and two children (aged 0-14 vears).

## 7.2 Monthly change of the subsistence level for July 2013

Table 13 provides an overview of the subsistence level for a family of two adults and two children (aged 0-14 years) by sector registered over a period of 5 years for the month July. Over a period of one year the subsistence level decreased by Afl. 174. The "Housing" sector shows the largest decrease (-Afl. 157), while the largest increase was registered for the "Transport" (Afl. 8) over this period.

 Table 13: Monthly subsistence level in Aruba (in Afl.) by sector for a family of

 2 adults and 2 children (aged 0-14 years) for July, 2009 - 2013

Sector	Jul-09	Jul-10	Jul-11	Jul-12	Jul-13		
Food and non-alcoholic beverages	1,453	1,410	1,478	1,516	1,508		
Clothing and footwear	325	303	308	284	261		
Housing	1,320	1,377	1,465	1,524	1,366		
Household operation	145	143	143	136	134		
Health	68	67	66	68	68		
Transport	234	231	256	251	259		
Communications	117	118	123	123	123		
Recreation and culture	185	185	189	183	188		
Education	59	60	62	63	63		
Miscellaneous goods and services	296	293	295	295	298		
Total	4,202	4,188	4,385	4,441	4,267		
Source: Control Bureau of Statistics Aruba							

Source: Central Bureau of Statistics Aruba

An overview of the subsistence level, for the most common family types, over the period July 2012 - July 2013 is presented in table 14.

Table 14: Subsistence level in Aruba (in Afl.) by family size and composition,

#### July 2013 (Base period Oct. 2010)

	Equivalence scales						
	1	1.3	1.5	1.8	2.1		
	1 adult	1 adult	2 adults	2 adults	2 adults		
Period		+ 1 child		+ 1 child	+ 2 children		
Jul-12	2,115	2,749	3,172	3,806	4,441		
Aug-12	2,071	2,692	3,106	3,727	4,348		
Sep-12	2,074	2,697	3,112	3,734	4,356		
Oct-12	2,072	2,693	3,108	3,729	4,351		
Nov-12	2,034	2,645	3,051	3,662	4,272		
Dec-12	2,035	2,645	3,052	3,662	4,273		
Jan-13	2,033	2,643	3,049	3,659	4,269		
Feb-13	2,044	2,657	3,066	3,679	4,292		
Mar-13	2,039	2,650	3,058	3,669	4,281		
Apr-13	2,038	2,650	3,057	3,669	4,280		
May-13	2,033	2,643	3,049	3,659	4,269		
Jun-13	2,037	2,648	3,056	3,667	4,278		
Jul-13	2,032	2,642	3,048	3,658	4,267		

Source: Central Bureau of Statistics Aruba

# 7.3 Comparison of the subsistence level and minimum wage

In July 2013 the subsistence level for a single adult household is Afl. 2,032, which represents an income deficit of Afl. 395, a decrease of Afl. 115 compared to the deficit observed one year ago (Afl. 510). This deficit is the lowest registered over a period of five years for the month July.

#### Tabel 15: Monthly income surplus/deficit (in Afl.) for

a single adult household for July, 2009 - 2013

	Minimum						
Period	1 adult	wage	Surplus/deficit				
2009	2,001	1,543	-458				
2010	1,994	1,543	-451				
2011	2,088	1,543	-545				
2012	2,115	1,605	-510				
2013	2,032	1,637	-395				

Source: Central Bureau of Statistics Aruba



		204.2	2042	2012	2042				
DESCRIPTION	WEIGHT coefficient	2012 Jul	2012 Dec	2013 Jun	2013 Jul	Monthly Jun - Jul	Ytd Dec - Jul	End of period Jul 12 - Jul 13	Period average Jul 12 - Jul 13
	coemcient	501	Dec	Juli	501	Jun-Jun	Dec-Jui	Jul 12 - Jul 13	Jul 12 - Jul 13
Food and non-alcoholic beverages	1,125.3	141.42	141.68	141.84	140.66	-0.8	-0.7	-0.5	0.5
Food	961.4	143.56	143.57	143.85	142.41	-1.0	-0.8	-0.8	0.1
Non-alcoholic beverages	163.9	128.88	130.57	130.05	130.44	0.3	-0.1	1.2	3.0
Alcoholic beverages and tobacco			127.84			-0.1	8.5	8.8	6.7
Alcoholic beverages for consumption at home Tobacco			116.79 156.81			-0.1 -0.1	0.4 24.2	0.8 24.4	1.8 16.3
Ibbacco	22.0	130.39	130.01	194.00	194.70	-0.1	24.2	24.4	10.5
Clothing and footwear	625.9	103.96	98.51	95.96	95.68	-0.3	-2.9	-8.0	-9.6
Clothing	550.4	105.35	99.24			-0.1	-2.6	-8.2	-10.1
Footwear	75.5	93.81	93.19	90.02	88.35	-1.9	-5.2	-5.8	-5.2
Housing	2,553.3	145.59	129.98	130.39	130.55	0.1	0.4	-10.3	-9.3
Actual rentals for housing			142.51			0.1	0.9	1.7	2.1
Maintenance and repair of the dwelling			101.67			0.6	1.5	1.4	-2.0
Water supply and miscellaneous services relating to the dwelling			119.95			0.0	0.0	-27.0	-27.0
Electricity, gas and other fuels	748.8	103.89	139.28	138.89	138.89	0.0	-0.3	-15.3	-11.3
Household operation	741.3	100.11	99.70	99.44	98.68	-0.8	-1.0	-1.4	-3.6
Furniture, furnishings, carpets and other floor coverings		69.59	70.25			-2.0	-7.5	-6.6	-12.5
Household textiles			128.82			0.4	-4.2	-9.9	-13.1
Household appliances	111.3	72.44	71.11	73.08	69.85	-4.4	-1.8	-3.6	-5.2
Glassware, tableware and household utensils	31.8	82.28	82.73	79.96	78.01	-2.4	-5.7	-5.2	-11.9
Tools and equipment for house and garden	40.0	82.65	83.85		88.54	0.0	5.6	7.1	-2.9
Goods and services for routine household maintenance and cleaning	346.6	117.76	118.51	119.82	119.86	0.0	1.1	1.8	2.2
Health	235.8					0.2	-0.6	0.1	2.4
Medical products, appliances and equipment	140.3	99.02	99.88		98.91	0.2	-1.0	-0.1	3.4
Out-patient services Other health products and services	57.2 38.3	81.36 92.63	81.36 93.52		81.36 93.86	0.0 0.3	0.0 0.4	0.0 1.3	0.0 1.5
Other realth products and services	56.5	92.05	95.52	95.54	95.60	0.5	0.4	1.5	1.5
Transport	1,815.4	116.24	117.72	120.21	119.92	-0.2	1.9	3.2	1.5
Purchase of vehicles			106.06			0.0	1.8	5.2	4.1
Operation of personal transport equipment	840.1	133.58	132.59	136.59	135.14	-1.1	1.9	1.2	-0.6
Transport services	163.8	94.51	99.23	96.69	100.88	4.3	1.7	6.7	2.7
Communications	706.3					0.2	0.2	0.5	0.3
Postal services			113.09			0.0	2.6	10.2	8.6
Telephone and telefax equipment	29.6	21.61	26.18		24.44	17.0	-6.6	13.1	-12.1
Telephone and telefax services	670.6	89.30	89.30	89.49	89.49	0.0	0.2	0.2	0.3
Recreation and culture	891.2	111.77	112.90	113.64	114.82	1.0	1.7	2.7	-0.6
Audio-visual, photographic and information processing equipment	123.8	91.89	92.11			2.8	-6.0	-5.8	-11.0
Other major durables for recreation and culture	19.2	61.20	64.87	59.74	59.74	0.0	-7.9	-2.4	-16.4
Other recreational items and equipment; gardens and pets	260.1	134.16	137.33	139.88	140.92	0.7	2.6	5.0	3.3
Recreational and cultural services	335.0	104.18	103.92	101.16	101.12	0.0	-2.7	-2.9	-2.6
Newspapers, books and stationery	82.1	98.38	98.74	100.36	100.75	0.4	2.0	2.4	-4.8
Holidays	71.0	129.37	131.34	157.65	164.32	4.2	25.1	27.0	12.7
Education			<b>116.61</b> 109.07			<b>0.0</b> 0.0	<b>0.0</b> 0.0	<b>0.0</b> 0.0	<b>0.3</b> 0.0
Pre primary and primary education Secondary education			116.94			0.0	0.0	0.0	0.0
Post-secondary non-tertiary education			129.44			0.0	0.0	0.0	0.0
Tertiary education			126.23			0.0	0.0	0.0	1.9
Education not definable by level			121.64			0.0	0.0	0.0	0.4
Restaurants and hotels	373.7	124.31	124.65	125.83	125.99	0.1	1.1	1.3	2.6
Catering services	367.5	125.07	125.35	126.33	126.55	0.2	1.0	1.2	2.6
Accommodation services	6.2	79.27	83.43	96.06	92.55	-3.7	10.9	16.7	7.5
Miscellaneous goods and services	767.0		100.33			0.1	0.3	1.0	0.7
Personal care			112.52			0.1	1.2	1.7	1.6
Personal effects n.e.c.			114.67			0.1	-3.2	0.8	-1.1
Social protection			132.55			0.0	0.0	0.0	0.0
Insurance Financial services n.e.c.	289.1 26.9	85.12 94.07	85.12 94.59			0.0 0.2	0.0 1.1	0.0 1.7	0.0 1.1
Other services n.e.c.	26.9 93.0				95.65 95.65	0.2	1.1	1.7	1.1
other services file.c.	55.0	2	555	55.40	55.05	0.2		±.,	
CPI	10.000	120 70	110.05	117 44	117 25	-0.1	0.4	-2.8	-3.1
CFI	10,000	120.70	110.02	11/.44	11/.55	-0.1	0.4	-2.0	3.1

#### Table 16: Monthly & Yearly Changes (%) in the Consumer Price Index for July 2013, Total Population (Dec 2006 = 100)

CDS Consumer Price Index Aruba

DESCRIPTION	WEIGHT coefficient	Monthly Jun - Jul	Ytd Dec - Jul	End of period Jul 12 - Jul 13	Period average Jul 12 - Jul 13
Food and non-alcoholic beverages	1,125.3	-0.11	-0.10	-0.07	0.06
Food	961.4	-0.12	-0.10	-0.09	0.01
Non-alcoholic beverages	163.9	0.01	0.00	0.02	0.05
Alcoholic beverages and tobacco	81.9	0.00	0.08	0.08	0.06
Alcoholic beverages for consumption at home	59.3	0.00	0.00	0.00	0.01
Tobacco	22.6	0.00	0.07	0.07	0.05
Clothing and footwear	625.9	-0.01	-0.15	-0.43	-0.53
Clothing	550.4	0.00	-0.12	-0.39	-0.50
Footwear	75.5	-0.01	-0.03	-0.03	-0.03
Housing	2,553.3	0.03	0.12	-3.18	-2.86
Actual rentals for housing	854.2	0.01	0.09	0.17	0.21
Maintenance and repair of the dwelling	444.6	0.02	0.06	0.05	-0.08
Water supply and miscellaneous services relating to the dwelling	505.7	0.00	0.00	-1.86	-1.84
Electricity, gas and other fuels	748.8	0.00	-0.02	-1.55	-1.14
Household operation	741.3	-0.05	-0.06	-0.09	-0.22
Furniture, furnishings, carpets and other floor coverings	142.1	-0.02	-0.06	-0.05	-0.11
Household textiles	69.5	0.00	-0.03	-0.08	-0.11
Household appliances	111.3	-0.03	-0.01	-0.02	-0.04
Glassware, tableware and household utensils	31.8	-0.01	-0.01	-0.01	-0.03
Tools and equipment for house and garden	40.0	0.00	0.02	0.02	-0.01
boods and services for routine household maintenance and cleaning	346.6	0.00	0.04	0.06	0.07
Health	235.8	0.00	-0.01	0.00	0.04
Medical products, appliances and equipment	140.3	0.00	-0.01	0.00	0.04
Out-patient services	57.2	0.00	0.00	0.00	0.00
Other health products and services	38.3	0.00	0.00	0.00	0.00
Transport	1,815.4	-0.05	0.34	0.55	0.26
Purchase of vehicles	811.4	0.00	0.14	0.36	0.28
Operation of personal transport equipment	840.1	-0.10	0.18	0.11	-0.05
Transport services	163.8	0.06	0.02	0.09	0.03
Communications	706.3	0.01	0.01	0.02	0.01
Postal services	6.1	0.00	0.00	0.01	0.00
Telephone and telefax equipment	29.6	0.01	0.00	0.01	-0.01
Telephone and telefax services	670.6	0.00	0.01	0.01	0.02
Recreation and culture	891.2	0.09	0.15	0.23	-0.05
Audio-visual, photographic and information processing equipment	123.8	0.02	-0.06	-0.05	-0.11
Other major durables for recreation and culture	19.2	0.00	-0.01	0.00	-0.02
Other recreational items and equipment; gardens and pets	260.1	0.02	0.08	0.15	0.10
Recreational and cultural services	335.0	0.00	-0.08	-0.08	-0.08
Newspapers, books and stationery	82.1	0.00	0.01	0.02	-0.03
Holidays	71.0	0.04	0.20	0.21	0.09
Education	83.0	0.00	0.00	0.00	0.00
Pre primary and primary education	30.4	0.00	0.00	0.00	0.00
Secondary education	25.2	0.00	0.00	0.00	0.00
Post-secondary non-tertiary education	4.6	0.00	0.00	0.00	0.00
Tertiary education	10.4	0.00	0.00	0.00	0.00
Education not definable by level	12.4	0.00	0.00	0.00	0.00
P	272.7	0.01	0.04	0.05	0.10
Restaurants and hotels Catering services	<b>373.7</b> 367.5	<b>0.01</b> 0.01	<b>0.04</b> 0.04	<b>0.05</b> 0.04	<b>0.10</b> 0.09
Accommodation services	367.5	0.01	0.04	0.04	0.09
Miscellaneous goods and services	767.0	0.01	0.02	0.06	0.04
Personal care	262.0	0.00	0.03	0.04	0.04
Personal effects n.e.c.	67.3	0.00	-0.02	0.00	-0.01
Social protection	28.7	0.00	0.00	0.00	0.00
Insurance	289.1	0.00	0.00	0.00	0.00
Financial services n.e.c.	26.9	0.00	0.00	0.00	0.00
Other services n.e.c.	93.0	0.00	0.01	0.01	0.01

#### Table 17: Effect on the Consumer Price Index per sector and category for July 2013 (Dec 2006 = 100)

Source: Central Bureau of Statistics Aruba

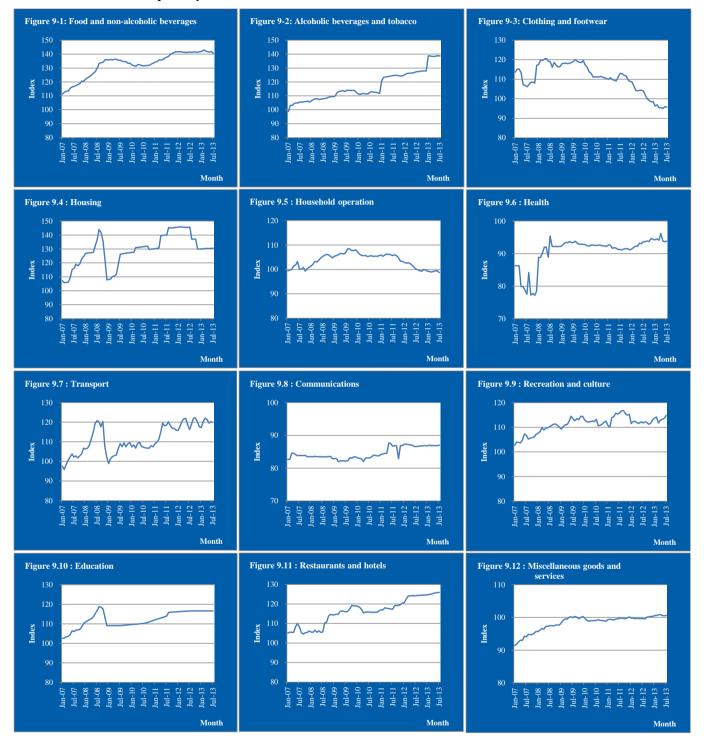
Table 18: Monthly & Yearly Changes (%) and effect	. In the Food & Ca					
			Change	Effect		
DESCRIPTION	WEIGHT coefficient	Monthly Jun - Jul	End of period Jul 12 - Jul 13	Monthly Jun - Jul	End of period Jul 12 - Jul 13	
Food & catering services	1,492.8	-0.6	-0.2	-0.11	-0.03	
Food at home	1,125.3	-0.8	-0.5	-0.11	-0.07	
Bread and cereals	205.2	0.4	1.7	0.01	0.04	
Rice	18.8	1.7	5.6	0.00	0.01	
Bread	98.1	0.0	1.7	0.00	0.02	
Pasta products Other cereals and cereal products	7.6 80.7	-1.1 0.7	-1.9 1.1	0.00	0.00 0.01	
Meat	229.8	0.2	1.9	0.01	0.05	
Bovine	44.7	0.1	0.7	0.00	0.00	
Swine	28.1	-0.1	-3.1	0.00	-0.01	
Poultry	59.5	0.4	5.9	0.00	0.05	
Other meat and meat preparations	97.5	0.3	1.0	0.00	0.01	
Fish and other seafood	56.4	-1.3	2.8	-0.01	0.02	
Fish and seafood preparations	56.4	-1.3	2.8	-0.01	0.02	
Milk, cheese and eggs	140.0	0.0	-0.8	0.00	-0.01	
Milk	58.8	-0.4	0.7	0.00	0.01	
Cheese	46.9	0.9	-3.2	0.00	-0.02	
Eggs	14.3	0.0	-0.1	0.00	0.00	
Other milk products	19.9	-1.0	-1.6	0.00	0.00	
Oils and fats	31.6	-0.3	-2.0	0.00	-0.01	
Butter and margarine	9.9	0.4	0.8	0.00	0.00	
Corn oil	9.4	-1.2	-6.8	0.00	-0.01	
Other oils and fats	12.3	-0.1	0.2	0.00	0.00	
Fruit	72.0	-6.1	-10.1	-0.08	-0.14	
Oranges, lemons and mandarins	11.1	-14.2	-25.6	-0.02	-0.04	
Bananas and plantains	13.8	-2.3	-2.1	-0.01	0.00	
Apples and pears	11.2	-6.5	7.8	-0.01	0.01	
Grapes	6.0	-4.5	0.0	0.00	0.00	
Melons and watermelons	6.7	-8.6	-16.9	-0.02	-0.04	
Nuts	6.9	-1.7	0.8	0.00	0.00	
Other fruits and fruit products	16.4	-5.0	-15.5	-0.02	-0.07	
Potatoes and other tubers	18.5	-1.3	-11.4	0.00	-0.02	
Potatoes	11.2	-1.7	-14.7	0.00	-0.02	
Sweet potatoes and yucca	2.5	-0.5	-8.6	0.00	0.00	
Other tubers	4.8	0.1	1.5	0.00	0.00	
Vegetables	75.7	-3.3	-2.7	-0.04	-0.03	
Lettuce	6.7	-8.0	3.7	0.00	0.00	
Celery and broccoli	6.3	-8.4	-0.9	-0.01	0.00	
Tomatoes & peppers	15.5	-3.1	-4.2	-0.01	-0.01	
Onions	7.8	-5.6	-10.3	-0.02	-0.03	
Frozen vegetable mixtures	6.7	-0.3	2.0	0.00	0.00	
Other vegetables	12.7	0.7	5.7	0.00	0.01	
Other preserved or processed vegetables	20.0	0.0	1.1	0.00	0.00	
Sugar, jam, honey and other confectionery	49.6	-0.2	1.8	0.00	0.01	
Sugar	14.4	-0.2	-1.1	0.00	0.00	
Jams and jellies	2.8	-0.5	-0.7	0.00	0.00	
Other confectionery products	32.4	-0.2	3.7	0.00	0.01	
• • • · ·						
Food products n.e.c.	82.7	0.0	1.0	0.00	0.01	
Other food products	82.7	0.0	1.0	0.00	0.01	
Non-alcoholic beverages	163.9	0.3	1.2	0.01	0.02	
Coffee and tea	30.1	0.4	3.1	0.00	0.01	
Soft and sports drinks	49.7	-0.2	0.9	0.00	0.00	
Fruit juices	61.0	0.6	1.2	0.00	0.01	
Other non-alcoholic beverages	23.1	0.3	-0.5	0.00	0.00	
Food away from home	367.5	0.2	1.2	0.01	0.04	
Food and beverage consumption away from home	367.5	0.2	1.2	0.01	0.04	
Other goods and services	8,507.2	0.0		0.03	-2.75	
Other goods	5,147.2	-0.2	- <b>3.3</b> -6.1	-0.08	-3.17	
Other services	3,360.0	0.4	1.4	0.12	0.42	
CPI	10,000	-0.1	-2.8	-0.07	-2.78	

#### Table 18: Monthly & Yearly Changes (%) and effect in the Food & catering services for July 2013, Total Population (Dec 2006 = 100)

Source: Central Bureau of Statistics Aruba

Appendix 4

#### Course of Indices for 2007 up to July 2013



### Glossary

#### The Consumer Price Index and Inflation

The Consumer Price Index (CPI) measures changes in prices of consumer goods and services by households. Consumer price indices can be intended to measure either the rate of price inflation or deflation as perceived by households or changes in their cost of living. In case of inflation, the percentage change is positive and it indicates a decrease in the purchasing power of the consumers.

#### Monthly percentage change

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of the previous month.

#### Year-to-date (ytd)

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of December prior to the year under review.

#### End of period inflation (last 12 months)

Percentage change in price indices of any aggregates of the CPI in relation to the respective price indices of the same month of the previous year.

#### Period average inflation (last 24 months)

The period average inflation is calculated by comparing the annual average CPI of the concerning period with the annual average CPI of the concerning period of the previous year.

#### Effect

Contribution of all percentage changes (of all respective aggregates) to the CPI.

#### **Core inflation**

Core inflation is a measure of inflation that excludes certain items which face volatile price movements. Core inflation eliminates the inflation of certain products that can have temporary price shocks because these shocks can diverge from the overall trend of inflation and give a false measure of inflation. The core rate of inflation is calculated by: total inflation excluding food and energy prices. In part, that is because the core is less volatile and reflects better the relationship of supply and demand in domestic product markets. The core usually is a better measure of the basic rate of inflation that will tend to emerge in the absence of supply shocks.

#### Food & catering services

The "Food & catering services" index is composed of the indices for the "Food & Non-alcoholic beverages" sector ("Food at home") and the "Catering services" ("Food away from home") category.

#### Subsistence level

The subsistence level is the minimum level of income which is perceived necessary to achieve an adequate standard of living in a given country. The subsistence level is usually determined by estimating the cost of all the essential resources that an average adult consumes in one month or year. This is commonly called a basic needs index, and varies according to the price of food, clothing, housing, transport and other items in the "basket". The subsistence level is monthly updated for inflation using the monthly CPI.