



Ministry of Planning and International Co-operation

**Puntland's Consumer Price Index
&
Exchange Rate Regime**

Updated Report

Garowe, Puntland State of Somalia

April 2018

Puntland's Consumer Price Index & Exchange Rate Regime

Executive Summary

CPI is obtained by comparing through time, the cost of a fixed basket of commodities purchased by consumers. Since the basket contains commodities of unchanging or equivalent quantity and quality, the index reflects only pure price movements. Price movements of the goods and services represented in the CPI are weighted according to the relative importance of commodities in the total expenditures of consumers.

Table 1 and Figure 1 show fluctuations in the general level of prices in Puntland. There is a decrease in the overall price level for the 1st quarter of 2018 reaching an average of **188.17%** with respect to the base year of 2005. (See Table 1 & Figure 1).

For Monthly CPI refer to table 2. In this Table the monthly inflation rate for all items was -0.2 percent in March 2018, up from -1.0 percent in Feb 2018. The inflation rate for food items was -1.7 percent in Feb and it increased to 1.8 percent in March while non-food items was -0.9 percent in Feb and it changed to -0.8 percent in March. It indicates that there is a big change for monthly inflation rate in food items than non-food and all items.

With regard to the **foreign exchange regime** in Puntland we have observed that for the first time in the history of Puntland, and indeed in Somalia in general, there is a declining trend in the market exchange rates and since August 2011 it is below the level (around SoSh20.99 in December 2012 per US\$) of the official exchange rate of SoSh30, 000 per US\$ (See Table 2 & Figure 2).

A recent report by an economic committee set for this purpose have come to a sensible proposal to collect import-export duties in solely US \$'s.

Mobile Phones Money Transactions (SAHAL)

Sahal is a Golis Telecom service allowing customers to transfer money using a mobile phone. It has solved the crucial problem of finding smaller denominations of the USD since the SoSh currency notes are disappearing from Puntland circulation after the Government stopped printing them due to inflationary pressures.

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Table of Contents

Executive Summary	2
I. CPI in Puntland.....	4
I.1 Limitations in Puntland’s CPI computations.....	5
II. Inflation in Puntland	5
Figure 1: Quarterly & Annual Inflation Rates	6
III. Foreign Exchange Rates	7
Figure 2: Foreign Exchange Market Rates Fluctuations (SoSh/USD)	7
Figure 2a – Yearly Market Forex Rates.....	7
IV. About this report.....	8
V. Annexes	8
V.1 Table 1: Quarterly and Annual Inflation Rates (2005=100) in %	8
V.2 Table 2: Monthly Inflation Rates in %	10
V.3 Table 3: Foreign Exchange Rates.....	11
V.4 Table 4 Consumer Price Index Distributed by Category.....	12
V.5 Figure 3 Consumer Price Index Distributed by Category	12
V.6 Present purchasing power for \$X using historical CPIs	13

I. CPI in Puntland

The Department of Statistics of the Ministry of Planning and International Co-operation publishes the CPI (for a definition of CPI see Annex V.4) on a monthly basis. For the first week of every month, data is collected from the different markets in three cities in Puntland (Garowe, the capital of Puntland, Bossaso the main financial city, and Galkacayo the second main commercial city). Aggregations are then obtained by compiling data on quarterly and on annual basis.

CPI is obtained by comparing through time, the cost of a fixed basket of commodities purchased by consumers. Since the basket contains commodities of unchanging or equivalent quantity and quality, the index reflects only pure price movements. Price movements of the goods and services represented in the CPI are weighted according to the relative importance of commodities in the total expenditures of consumers.

Samples in the price survey are obtained from a judgmental selection of geographical areas, representative commodities, and types and locations of retail outlets. Puntland has started approximately with a basket of 127 commodities specified to represent the price movement in 20 basic commodity classes. Sample commodities are chosen on the basis of representative-ness and expected continuous availability. The price quotes used in the construction of the CPI are collected by personal visits to selected retail outlets in the main urban areas of Bossaso, Galkacayo, and Garowe. For details in the derivation of CPI contact the above Statistics Dept.

Generally, factors affecting the quality of the CPI include: - the size and composition of the price samples of commodities and outlets – the accuracy of the expenditure estimates used to assign weights – the frequency and speed of updating of the contents and weights of the CPI basket – the effectiveness of error detection and correction, and imputation methods for missing data – the application of appropriate methods of adjusting for quality change of commodities in the CPI sample. The CPI is believed to be sufficiently accurate for most practical purposes. In terms of general accuracy it is better at the Puntland level for any product index in the CPI compared to the same index at the city level.

The method used to construct CPIs in Puntland is the Laspeyres index. The Laspeyres index uses a typical basket purchased in the earlier of two periods compared. The Laspeyres index is computed as:

$$P_L = \frac{\sum(p_{c,t_n} \cdot q_{c,t_0})}{\sum(p_{c,t_0} \cdot q_{c,t_0})}$$

where P is the change in price level, t_0 is the base period (usually the first year), and t_n the period for which the index is computed, and

$p_{c,t}$ represents the prevailing price of c in period t

$q_{c,t}$ represents the quantity of c sold in period t

If, across two periods t_0 and t_n , the same quantities of each good or service were sold, but under different prices, then

$$q_{c,t_n} = q_c = q_{c,t_0} \quad \forall c$$

I.1 Limitations in Puntland's CPI computations

The statistical sources required for regional and outlet-type breakdowns are usually weaker. Only a large-sample Household Expenditure survey can provide a regional breakdown. Regional population data are sometimes used for this purpose, but need adjustment to allow for regional differences in living standards and consumption patterns.

Puntland is still waiting to implement a Household Expenditure survey as proposed on a number of occasions followed by frequent disruptions since 2002. It would have been easier to categorize the statistical relevance and the choice of representative goods and services basket. These are only part of the general CPI weaknesses: (i) Average spending pattern; (ii) Calculation errors; (iii) Expenditure survey absence; (iv) Delay in updating basket.

II. Inflation in Puntland

The percent change in the CPI is a measure of *inflation*. It is calculated by the simple formula

$$\text{CPI} = \frac{\text{Quantity*price in specific year}}{\text{Quantity*price in base year/period}} * 100$$

The rate of inflation is calculated by the simple formula

$$\text{Inflation Rate} = \frac{\text{CPI new} - \text{CPI old}}{\text{CPI old}} * 100$$

Inflation is computed quarterly & annually using the CPI at city levels and at Puntland level as shown in **Table 1** below:

Adjustments are needed to compute the proper inflation rate. This will require the elimination of some items in the list which might over-estimate or underestimate the rate of inflation in Puntland. For the above years the price of timber was removed from the list as a major item that considerably amplifies the general price level.

Inflation rate for Puntland was calculated by averaging the CPI data for only two cities (Garowe and Bossaso -**Table 1**). Galkacayo could not be included for Puntland CPI as the collection of data started late in 2008 by the MoPIC's Dept. of Statistics team with the assistance of UNDP-Somalia. Inflation rates are now calculated on a monthly basis to include three main cities Garowe, Bossaso and Galkacayo (**Table 3**).

Figure 1: Quarterly & Annual Inflation Rates

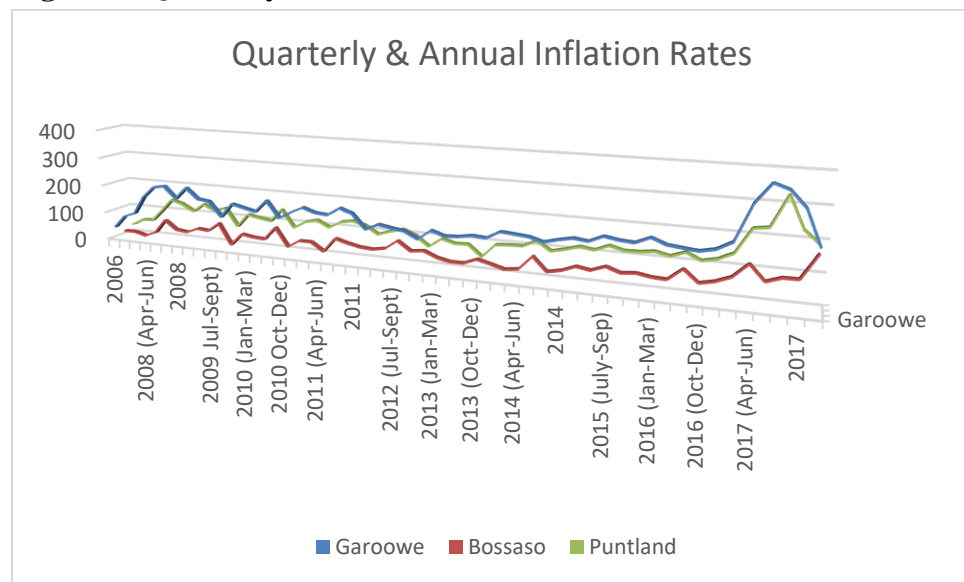


Figure 1 shows fluctuations in the general level of prices in Puntland. There is a decrease in the overall price level for the 1st quarter of 2018 reaching an average of **188.17%** with respect to the base year of 2005. (See Table 1 & Figure 1).

Inflation in Puntland has two major sources: domestic and International:

- (i) The domestic source is being contained to some extent by some positive steps taken by the Puntland Government in 2008, such as closing all the money printing establishments within Puntland as well as controlling for incoming banknotes from elsewhere. The Government has also set clear cut pro-poor policies such as reducing taxes by 20% to all imported necessity goods (mainly food items in 2008) and reduced by US\$2 the commission fee levied at the quarantine station gate per animal for exports in 2010 as well as lifting all local taxation for livestock transportation for exports.
- (ii) On the international front, after the experience of summer 2008, there is a real concern about the high volatility of energy prices, the new strategy for bio-fuels, and the declaration that a good number of world food country exporters are on the brink of withdrawing and restricting their exports and hence their export policies will have direct effects to local consumers everywhere. Now, we are expecting the full impact of the global financial crisis.

As in most countries of the world, one of the main objectives for Puntland is to keep the inflation rate as low as possible.

III. Foreign Exchange Rates

A liberal financial system operates in Puntland, with a dual exchange rate subsystem that uses market rates for private transactions but a usually overvalued rate for government transactions. The widely used foreign exchange rate in Puntland is the So.Sh./US\$ as shown below:

Figure 2: Foreign Exchange Market Rates Fluctuations (SoSh/USD)

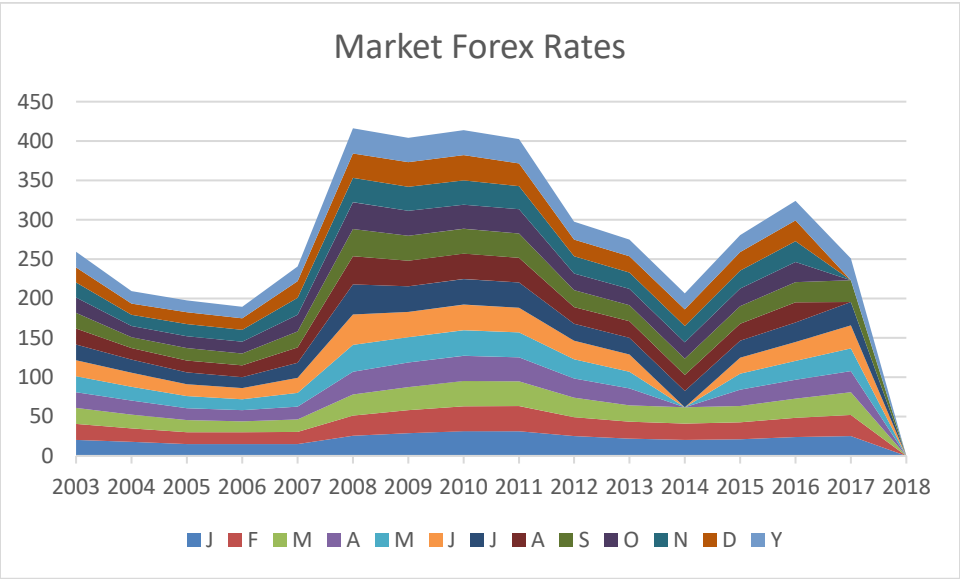
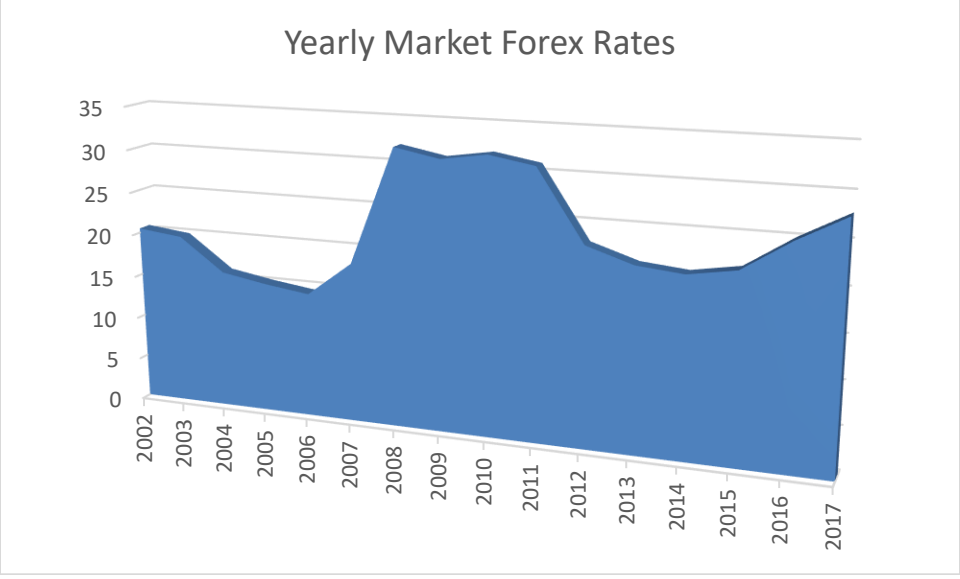


Figure 2a – Yearly Market Forex Rates



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V. Annexes

V.1 Table 1: Quarterly and Annual Inflation Rates (2005=100) in %

Year	Garoowe	Bossaso	Puntland
2006	43.32	16.11	29.72
2007	86.65	15.55	51.10
2008(Jan-Mar)	102.01	5.83	53.92
2008 (Apr-Jun)	166.02	23.18	94.60
2008 (Jul-Sept)	204.49	72.12	138.31
2008 (Oct-Dec)	211.36	40.99	126.18
2008	170.97	36.53	103.25
2009 (Jan-Mar)	212.91	53.75	133.33
2009 (Apr-Jun)	176.75	49.96	113.36
2009 Jul-Sept)	171.00	81.07	126.04
2009 (Oct-Dec)	120.59	06.99	63.79
2009	170.16	50.44	110.30
2010 (Jan-Mar)	160.22	43.52	101.87
2010 (Apr-Jun)	150.47	40.97	95.69
2010 (Jul-Sept)	193.48	87.37	140.43
2010 Oct-Dec)	137.19	22.80	79.96
2010	160.34	48.67	104.49
2011 (Jan-Mar)	181.03	48.71	114.87

2011 (Apr-Jun)	166.73	19.69	93.21
2011 (Jul-Sep)	163.44	70.06	116.75
2011 (Oct-Dec)	190.90	58.03	124.47
2011	175.525	49.1225	112.325
2012 (Jan-Mar)	126.57	46.20	86.385
2012 (Apr-Jun)	147.66	53.91	100.785
2012 (Jul-Sept)	139.88	84.98	112.43
2012 (Oct-Dec)	133.61	54.23	93.92
2012	111.93	59.83	61.83
2013 (Jan-Mar)	144.76	41.44	93.1015
2013 (Apr-Jun)	130.18	31.90	81.04
2013 (Jul-Sep)	133.00	32.49	82.745
2013 (Oct-Dec)	141.20	50.01	45.605
2013	137.285	38.96	90.48
2014 (Jan-Mar)	162.27	26.50	94.385
2014 (Apr-Jun)	158.89	32.76	95.825
2014 (July-Sep)	154.86	79.67	117.27
2014 (Oct-Dec)	142.6	33.96	88.28
2014	154.655	43.2225	98.94
2015 (Jan-Mar)	163.94	61.10	112.52
2015 (Apr-Jun)	158.78	53.90	105.95
2015 (July-Sep)	178.68	71.01	124.85
2015 (Oct-Dec)	171.07	55.32	113.20
2015	168.12	60.33	114.23
2016 (Jan-Mar)	188.40	52.70	120.55
2016 (Apr-Jun)	170.58	50.38	110.48
2016 (July-Sep)	165.73	88.79	127.26
2016 (Oct-Dec)	161.24	49.88	105.56
2016	171.49	60.44	115.96
2017 (Jan-Mar)	197.49	79.26	138.38
2017 (Apr-Jun)	313.04	124.27	218.66
2017 (July-Sep)	375.14	75.51	225.33
2017 (Oct-Dec)	359.45	92.19	325.82
2017	311.28	92.81	227.05
2018 (Jan-Mar)	203.10	173.23	188.17

Source: Statistics Department, MoPIC

V.2 Table 2: Monthly Inflation Rates in %

Recently the Statistics Department started compiling monthly inflation rates to fine-tune the earlier quarterly data. Data is compiled from Garowe, Bossaso and Galkacayo to determine the Puntland monthly inflation rates.

Table 2: CPI in March 2018

		Monthly CPI			Monthly Inflation Rates		
		All CPI Items	Food	Non - Food	All Items	Food	Non - Food
Year	Month						
2017	Feb	100.7	97.6	101.6	-1.0	-1.7	-0.9
	March	100.5	99.3	100.8	-0.2	1.8	-0.8

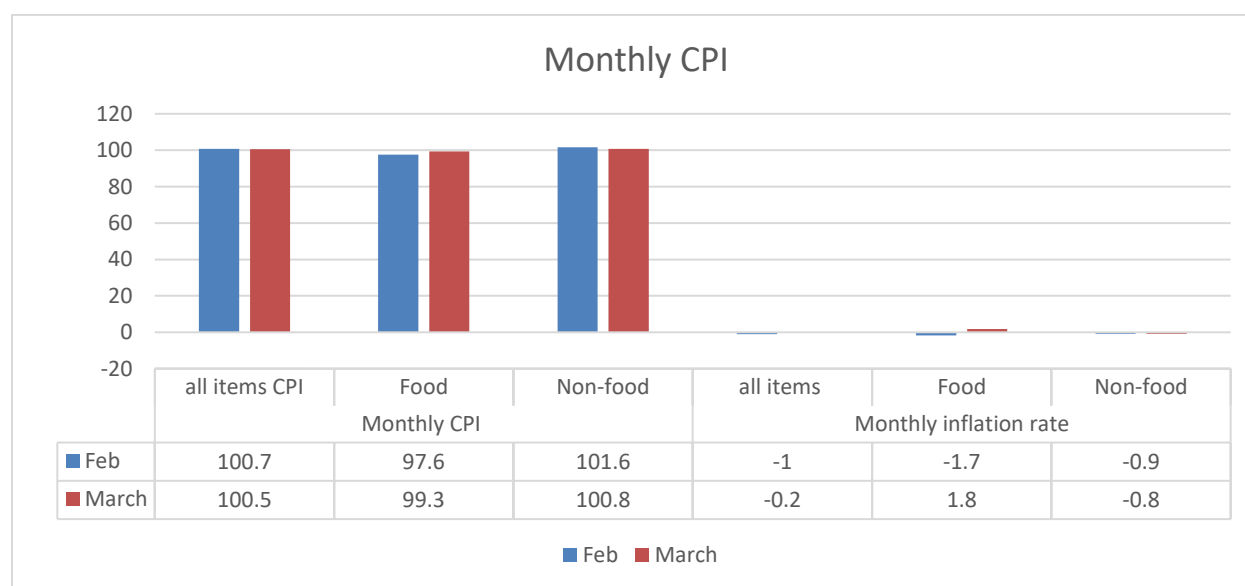


Figure 1: CPI in March 2018

In general, all CPI items decreased from Feb 2018 to March 2018. The CPI was 1,00.7 percent in Feb 2018 and it decreased to 100.5 percent in March 2018. However, the CPI for food items was 97.6 percent in Feb which changed to 99.3 percent in March. While the CPI for non-food items was 101.6 percent in Feb and it converted to 100.8 percent in March.

The monthly inflation rate for all items was -0.2 percent in March 2018, up from -1.0 percent in Feb 2018. The inflation rate for food items was -1.7 percent in Feb and it increased to 1.8 percent in March while non-food items was -0.9 percent in Feb and it changed to -0.8 percent in March. It indicates that there is a big change for monthly inflation rate in food items than non-food and all items.

V.3Table 3: Foreign Exchange Rates

Table 3 - Average Monthly Exchange Rate* for So.Sh per USD
2001-2018 (hundreds of thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
J	20.4	17.9	14.9	15.0	14.9	25.7	29.0	31.5	31.2	25.2	22.0	20.5	21.3	23.9	25.4	28,9
F	20.2	17.2	15.3	15.0	15.4	25.7	29.0	31.7	32.1	24.1	21.3	20.5	21.2	24.5	26.7	29,1
M	20.2	17.3	15.3	14.0	16.1	26.5	29.5	32.1	31.5	24.5	20.9	20.9	21.0	24.5	28.8	29,1
A	20.2	17.8	15.2	14.0	16.1	29.1	31.1	31.8	30.5	24.5	21.7	21,2	20.5	23.9	26.9	
M	20.2	17.6	15.3	14.0	17.5	34.0	32.2	32.5	31.5	24.5	21.2	20,6	20.4	24.0	28.8	
J	20.2	17.7	15.1	14.0	19.0	38.6	32.0	32.5	31.5	23.5	21.6	21,8	20.6	24.1	29.3	
J	20.2	17.0	14.9	14.0	19.2	38.1	32.7	32.5	32.0	21.7	21.4	20.5	21.5	24.5	29.5	
A	20.1	14.4	15.3	15.0	19.6	35.9	32.5	32.5	31.3	21.1	21.2	20.5	21.5	25.6	29,7	
S	20.0	14.0	15.6	15.0	20.3	34.6	31.7	31.4	31.0	21.5	20.3	20.6	22.1	25.7	27.7	
O	19.4	14.0	15.3	15.0	21.3	34.0	31.8	30.5	30.8	21.3	20.7	20.9	22.5	25.8	27,4	
N	19.3	14.2	15.2	15.0	21.3	31.0	30.5	31.1	29.1	21.9	20.7	20.7	22.9	26.4	28,5	
D	19.0	14.3	15.0	15.0	21.3	31.0	31.1	32.0	29.0	20.9	20.5	20.9	23.5	26.2	29,0	
Y	19.9	16.1	15.2	14.5	18.5	32.0	31.0	31.8	30.9	22.8	21.1	20.6	21.5	25.0	27.9	

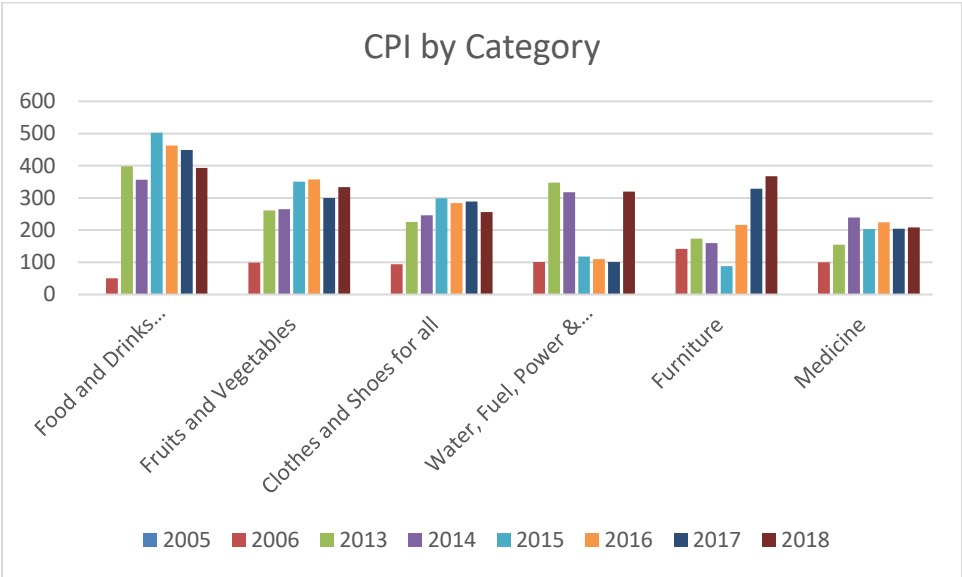
Source: Statistics Department, MoPIC

* This reflects only the foreign market exchange rates. Since August 2011 the official exchange rate is fixed at So.Sh 30,000 per US\$. After serious discussions with the Puntland authorities' traders are allowed to pay 60% of their duties in US\$ and the remaining 40% in SoSh at the official rate of exchange. A recent report by an economic committee set for this purpose have come to a sensible proposal to collect import-export duties in solely US \$'

V.4 Table 4 Consumer Price Index Distributed by Category

Q1 2018	2005	2006	2013	2014	2015	2016	2017	2018
Food and Drinks Including Sugar		50.74	398.405	356.385	502.14	462.36	448.36	393.33
Fruits and Vegetables		99.31	261.105	264.91	350.44	357.35	299.41	333.57
Clothes and Shoes for all		93.60	225.465	245.94	298.83	283.66	288.79	256.26
Water, Fuel, Power & Transportation		100.89	347.325	317.99	118.23	110.21	101.34	319.39
Furniture		142.05	173.735	159.54	88.27	215.94	328.69	367.20
Medicine		99.96	154.565	239.13	203.65	223.87	204.46	207.98

V.5 Figure 3 Consumer Price Index Distributed by Category



V.6 Present purchasing power for \$X using historical CPIs

As Puntland (Somalia) is a dollarised economy the calculation of the present inflation in dollar-value formula is obtained by using **Table 1** above:

Table 1 inflation rates data is easily converted to historical CPIs

$\text{CPI in 2017} / \boxed{\text{CPI in 2006}} * 2006 \text{ USD value} = 2017 \text{ USD value}$

129.72 in the year 2006 and **327.05** in 2017:

$327.05 / 129.72 * \$X = 2.5 * \X

The "purchasing power" of \$X from 2006 is **2.5** * \$X in 2017