

## Cost of Minimum Expenditure Basket (CMB) <sup>1</sup>

FSNAU developed<sup>2</sup> a minimum expenditure basket, consisting of minimum quantities of essential and basic food and non-food items (Table 1). The MEB<sup>3</sup> represents minimum set of BASIC food items such as sorghum, vegetable oil and sugar, comprising 2,100 kilocalories/person/day basic energy requirement for a household of 6–7 and non-food items such as water, kerosene, firewood, soap and cereal grinding costs. The MEB contains 4 sub-baskets; 2 baskets cover the rural and urban towns in the North West (Somaliland shillings) and the other 2 cover the rural and urban towns in the rest of the country (Somali Shillings).

**TABLE 1: POOR MINIMUM EXPENDITURE BASKET<sup>4</sup>**

	South		Central/ North	
Minimum Basket <sup>5</sup>	MINIMUM FOOD <sup>6</sup>			
	Urban town	Rural town	Urban town	Rural town
Red sorghum	95kg	95kg	95kg	95kg
Wheat flour	3.75kg	3.75kg	3.75kg	3.75kg
Sugar	5kg	5kg	5kg	5kg
Vegetable oil	4Lt	3Lt	4Lt	3Lt
Milk	15Lt	-	20Lt	-
Meat	4kg	2kg	10kg	5kg
Tea leaves	0.5kg	0.5kg	0.5kg	0.5kg
Salt	1.5kg	1.5kg	1.5kg	1.5kg
Cowpeas	6kg	-	4kg	-
	MINIMUM NON- FOOD ITEM <sup>7</sup>			
Kerosene	1.5Lt	1.5Lt	1.5Lt	1.5Lt
Soap( Laundry)	4pcs	4pcs	4pcs	4pcs
Firewood (bundle)	30	-	10	-
Water (Drum 200Lt)	9	9	9	9
Human drugs	20,000	10,000	20,000	10,000
School fees	90,000	52,000	90,000	52,000
Grinding cost	30kg	30kg	30kg	30kg
Clothes	30,000	30,000	30,000	30,000
Social tax	12,500	12,500	2,500	12,500
Any other	30,000	30,000	30,000	30,000

<sup>1</sup> The CMB is the base for the definition of the Consumer Price Index (CPI).

<sup>2</sup> MEB was developed from three urban baseline livelihood studies: Baidoa Baseline urban Assessment done in 2008,....

<sup>3</sup> The underlying assumption is that poor HH minimizes expenditure to survive, given income constraints

<sup>4</sup> The items constituting the basket have been selected on the basis of the importance of household consumption expenditure on them. The item's relative importance, which is called the "weight" (usually expressed as a figure per 1000), is the expenditure share of the item

<sup>5</sup> Of the food items, cereal is the most important, accounting for about 40% of the food basket and 30% of the entire MEB.

<sup>6</sup> Food Basket account for 70-80% of the total MEB, in line with Engle's economic theory, that the poorest spends a big portion of their income on food (food is account for the largest share of the household budget). The food items are arranged in order of their relative contribution to the basket.

<sup>7</sup> Non-food items are fixed costs.

## Analysis

Once the prices have been collected, entered into the e-forms and sent to Nairobi and imported into the IDSS, they are carefully examined for consistency and validity before they are entered into the CPI calculations template. The CMB is calculated and tracked on a monthly/ quarterly basis and the changes compared to the reference year (March 2007), the same month the previous year (year on year), quarterly and month on month variations. It is one of the indicators that we use in the quarterly urban food security analysis<sup>8</sup>. For every town, the Individual item basket Prices are multiplied by their corresponding Minimum Basket quantities. The Minimum Basket Cost for each town are then summed up to obtain the MEB. Higher level aggregation is then done for zone/ region using pivot table in Excel.

Computationally, the mean CMB for a given zone<sup>9</sup> containing  $i$  towns,  $i = \text{abduwaq}, \dots, \text{Wajale}$  is;

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Where  $P_j$  is the Minimum basket price and  $Q_j$  the minimum basket quantity;  $j = \text{red sorghum}, \dots, \text{other non-food expenditure}$ ;  $n$  is the number of markets in a given zone. Table... provides the quarterly zonal CMB Trends.

### CMB Trends

Zone	CMB March 2007	CMB March 2008	CMB June 2008	CMB October 2008	CMB December 2008	CMB March 2009	CMB June 2009	CMB September 2009	CMB December 2009	CMB March 2010
Central	1,410,000	2,878,833	3,031,828	4,696,500	3,606,213	2,543,130	2,946,800	3,356,675	3,388,763	3,768,235
North	1,879,896	3,220,729	3,891,086	4,517,564	3,955,105	3,292,703	4,165,516	4,269,937	3,977,934	4,130,008
North (SlSh)	753,625	873,275	1,105,800	1,228,945	1,088,271	835,255	898,535	846,336	922,214	852,644
South	988,618	1,831,915	2,495,789	2,378,932	2,288,329	1,742,086	1,848,198	1,849,092	1,778,642	1,914,683

### Interpretation

A positive change in the CMB is indicative of rising cost of minimum cost of leaving and vice versa. The inability to afford<sup>10</sup> any portion of the basket signifies a serious threat to a household's livelihood and when a household's income level is insufficient to meet the total cost of the basket, there is a gap and signal to the need for intervention. From the table it's evident that the March 2010 CMB levels compared to the base year (March 2007) have gone up significantly (from SoShs 1.4million to 3.7million, 1.8million to 4.1million, .98million to 1.9million in Central, North (SoShs) and South respectively. The CMB in North SlShs is has been relatively stable except the hyperinflation year (2008) when prices spiralled out of control in the entire country.

<sup>8</sup> Gap analysis in which the cost of an urban minimum food and non-food expenditure basket (MEB) is relatively compared to the average income levels of the urban poor, in order to evaluate food access. Changes in income and expenditure patterns are analyzed and expenditure gaps – the amount of the MEB poor households cannot afford are estimated

<sup>9</sup> South, North SoShs, Central, & North SlShs

<sup>10</sup> By comparing to income level in urban analysis

## CPI<sup>11</sup>

FSNAU computes an urban Consumer Price Index (CPI) on a quarterly basis; in March, June, September and December to measure the effects of price inflation on the urban livelihoods' ability to afford the basic of cost of living standards. The CPI trends feeds into the bi-annual seasonal assessments technical series reports (Gu & Deyr) and the Quarterly Food Security and Nutrition Briefs (QFSNBs).

The CPI is calculated as the average percentage change in the current MEB Cost in reference to the March 2007 MEB Cost. As prices vary, the total cost of the basket also varies and thus the CPI measures the change in the cost of this basket. It provides a way to compare what this basket costs at a given period relative to a reference or base period. In our case, The March 2007 CPI from all markets (consequently all regions and Zones) set at 100% and the costs in other periods are expressed as percentage changes compared to the base period. Laspeyres Weighted<sup>12</sup> Price Index<sup>13</sup> methodology is applied in the computation.

The CPI is aggregated upwards from individual markets (towns) and represented by Zone (South, Central, North Somali Shillings (NE), North Somaliland Shillings (NW)).

Computationally, CMB for a given zone is:

$$CPI = \frac{\sum_{i=1}^n P_i Q_i}{\sum_{i=1}^n P_o Q_o} * 100\% = \frac{CMB(CurrentMonth)}{CMB(BaseYear - March2007)} * 100\%$$

The CPI value in the base year (March 2007) is normalized to a value of 100 (that is, 1\*100%).

## CPI Trends

CPI					
	Central	North	North(SlSh)	South	Somalia (SoShs)
CPI (March 2007)	100.0	100.0	100.0	100.0	100
CPI (March 2008)	204.2	174.8	115.9	185.3	188
CPI (June 2008)	209.0	221.6	146.7	186.9	206
CPI (October 2008)	333.1	229.8	163.1	240.6	268
CPI (December 2008)	255.8	216.3	144.4	231.5	235
CPI (March 2009)	180.4	191.5	110.8	176.6	183
CPI (June 2009)	209.0	221.6	119.2	186.9	206

<sup>11</sup> A consumer price index is a measures of price changes over time for a constant/ fixed market basket of goods and services,

<sup>12</sup> The weights are fixed and correspond to the base period expenditures. The weights reflects relative importance in household consumption

<sup>13</sup> A price index defined as a fixed weight, or fixed basket, index which uses the basket of goods and services of the base period. The base period serves as both the weight reference period and the price reference period.

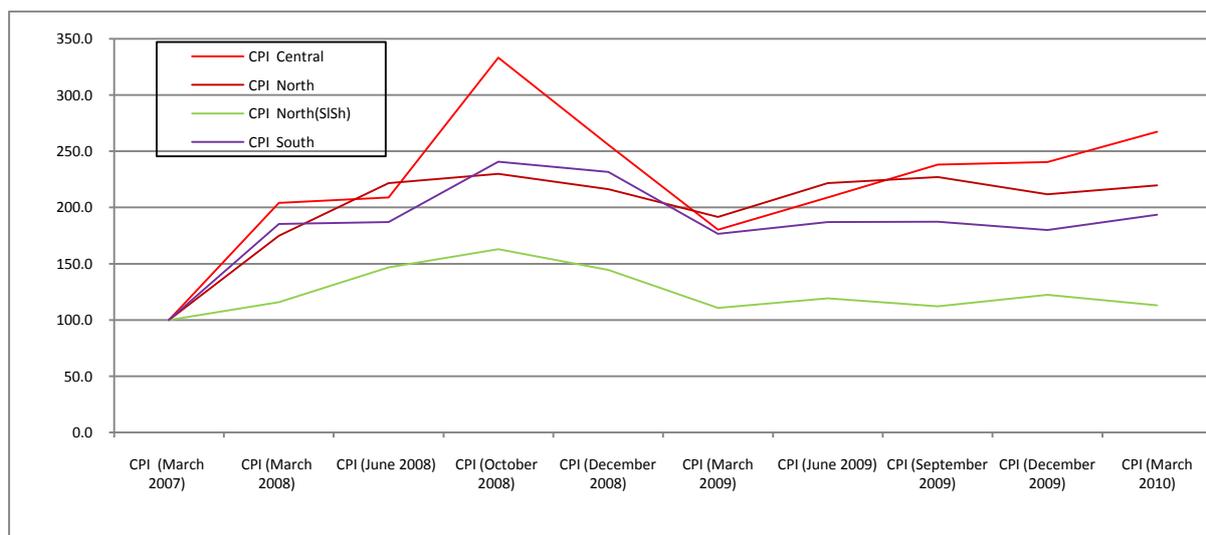
CPI (September 2009)	238	227	112	187	218
CPI (December 2009)	240	212	122	180	211
CPI (March 2010)	267	220	113	194	227
Change(December 09- March 010)	27	8	-9	14	16
Change(March 010- September 09)	29	-7	1	6	9
Change(March 010- March 07)	167	120	13	94	127
Change(March 010- March 09)	87	28	2	17	44

## Interpretation

The Consumer Price Index (CPI) in Central rose from 180.4 in March 2009 to 267 in March 2010, representing an increase of 87 points (or 48%). In other words, in March 2010 it costs 87 currency units more to purchase the same basket of goods and services than the same month the previous year, implying that on average, goods and services in the MEB cost 1.48 times as much as they did for the same basket goods and services in March 2010<sup>14</sup>. The significant increase in the CPI is largely attributed to increased sorghum prices, as cereal constitutes the largest proportion (30%–60%) of the MEB. The analysis of food price index can therefore help identify food insecure regions and suggest some form of prioritization of policy and program response.

## Presentation

Time and zonal trends in CPI are usually represented using a quarterly <sup>15</sup>time series line graphs as shown in figure ...below:



<sup>14</sup> This means that in order for a poor household to buy the MEB basket in Central Somalia in March 2010, it would cost on average 48% higher than it would cost the same basket of goods in March 2008. The cost of the Minimum Living Standard IN Central Somalia has increased by 48% over the last one year.

<sup>15</sup> Decision to compute CPI on a monthly basis has been taken and monthly trends will be reported alongside the quarterly ones

