Egyptian Food Observatory
Food Monitoring and Evaluation System

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Publication Objectives

This food security monitoring publication, which is jointly published by the Egyptian Cabinet’s Information and Decision Support Center (IDSC) and WFP, systematically tracks trends in the production, consumption and prices of key food commodities and their impact on the food security situation of the vulnerable households in urban and rural areas across Egypt. It identifies emerging local and global issues and monitors trends that can affect food security in Egypt. Aimed at policy makers and development partners, this publication seeks to provide updates and analysis of Egypt’s food security situation to assist its audience in policy decision-making.

Initially released monthly, the publication is now being produced quarterly to better highlight longer-term changes in the food security situation of the country and provide more comprehensive analysis to decision makers.

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1 Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”, FAO (1996), Declaration of the World Food Summit. The food security encompasses food availability, access, utilization and stability.
2 Due to political turmoil and consequent emergency state called in different governorates frontier governorates were excluded from current round of the survey.
Egyptian Food Observatory

Highlights

- **Inflation**, as measured by the Consumer Price Index, increased by 11.1% between September 2012 and September 2013, during the same period ‘food and beverages price index’ saw a sizeable increase of 14%. (Page 4)

- With 66.6% of the vulnerable households’ (HHs) expenditure going to food, this makes them particularly vulnerable to higher food prices and highlights that food security remains an issue of economic access. (Page 4)

- The cost of the average food basket, as measured by the Monthly Price Burden, saw an increase of 2.8% between June and September 2013 compared to an increase of 4.4% in the last quarter (March to June 2013). (Page 4)

- Prices rose across all regions, with Upper Egypt seeing the steepest increase of 4.4% between June and September 2013, followed by Frontier (3.6%), Urban governorates (2.1%) and Lower Egypt (1.1%). (Page 4)

- Some 17.3% of vulnerable HHs surveyed do not hold a ration card. (Page 10)

- Shortage in commodities (81.1%) at ration grocers was the main reason cited in preventing HHs from purchasing rationed commodities, followed by poor quality of commodities (10.8%). (Page 10)

- Only 6.2% of vulnerable HHs knew that rationed oil is fortified with vitamin (A) and vitamin (D), suggesting the need for awareness raising of the fortification and its benefits. (Page 10)

- All HHs consumed oil/ ghee/ butter and sugar (6.7 days a week) and vegetables (6.5 days a week) on a daily basis. There is low consumption of animal proteins by vulnerable HHs, with meat (beef and lamb), and fish (tilapia and catfish) consumed less than once a week. Eggs form the main source of animal protein consumed by 92.7% of HHs 2.6 days a week. (Page 11)

- The percentage of working children that belong to vulnerable HHs (6 – 18 years) “child labor” has amounted to 6.3%, about three quarters of these children (73.3%) belong to the age group (15 – 18 years). (Page 7)

- In Q3 of 2013 some 89.7% of vulnerable HHs surveyed reported their income to be insufficient to cover total monthly needs up from 82.7% in Q2 of 2013. (Page 9)

- HHs whose income was insufficient to meet their monthly needs used coping strategies including borrowing food or money depending on assistance from family members/ friends', which in Q3 of 2013 represented 35.3% of coping strategies, Consuming cheaper food items (25.7%), reducing food intake (18.0%) and buying on credit (10.8%). (Page 9)

- **Special Report: Cost of Hunger in Egypt**

- The Cost of Hunger in Africa (COHA) is a project led by the African Union Commission and supported by the Economic Commission for Africa (ECA) and the World Food Programme (WFP). The study was initiated in four pilot countries (Egypt, Ethiopia, Swaziland and Uganda). In Egypt the study was led by the Cabinet’s Information, Decision and Support Center (IDSC) in collaboration with WFP Country Office.

- The study for Egypt shows that an estimated 20.3 billion Egyptian pounds (US$ 3.7 billion) were lost in 2009 as a result of child undernutrition. This was equivalent to 1.9% of the country’s Gross Domestic Product (GDP).

- According to the study, up to one in every five cases of child undernutrition, largely related to stunting (low height for a person’s age), go untreated.

- The study highlights that today, there are more stunted children in Egypt than 10 years ago.

- Child mortality that is associated with undernutrition has reduced Egypt’s workforce by 1%. Stunted children achieve up to 0.2 fewer years in education, which affects their chances of income earning potential later in life.

- The study shows that undernutrition is not just a health issue, but an economic one as well. It reinforces the critical need to prioritize malnutrition in the national development agenda.

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1 See Annex (p. 14) for the criteria of vulnerable household selection.  
2 See Annex (p. 14) for full list of items in the food basket.
1. Trends and Impact of Food Commodity Price Changes

1.1 Food Basket Price Changes

Quarter 3 (Q3) of 2013 saw continuation to the increase in the cost of the average food basket, (denoted by the monthly price burden – Fig. 1), which increased by 2.8% between September and June 2013 compared to an increase of 4.4% in the last quarter (March to June 2013). Since the 1st week of January 2011, September 2013 prices increased by 17.3%, resulting in a nominal price increase of L.E. 77.9 per food basket.

Prices rose across all regions (Fig. 2), with Upper Egypt seeing the steepest increase of 4.4% between September and June 2013, followed by Frontier governorates (3.6%), Urban governorates (2.1%) and Lower Egypt (1.1%).

Despite continued prices increase during Q3 of 2013, the relative slow-down of such price hike is worth noting. Such increase is reflected on slowing down the rate of increase in the cost of average food basket compared to the rates of increase witnessed in the previous quarter.

1.2 Inflation Rates

Inflation, as measured by the Consumer Price Index (CPI), increased by 11.1% in September 2013 year-on-year (compared to September 2012) and 1.7% month-on-month, against 6.3% and 1.5% in the same period the previous year. (Fig. 3)

The food and beverages price index saw a sizeable increase of 14% in September 2013 year-on-year and 2.1% month-on-month, against 9.1% annually and 2.1% monthly last year. (Fig.4)

Of note was the price increase of vegetables (by 3.6% monthly and 6.8% annually) and bread and cereals (by 0.9% monthly and 19.6% annually). Between September 2012 and 2013 prices of fish and seafood increased by 19.9%, and meat and poultry increased by 18.9%.

66.6% of surveyed HHs’ expenditure goes to food (page 8), thus they are particularly vulnerable to price fluctuations, which affirms that food security remains an issue of economic access (purchasing power).

1 The food basket includes 27 commodities presented in the Annex (page 14).
2 CAPMAS (September 2013), Consumer Price Index.
1.3 Regional Variations in Commodity Prices

Table 1 below shows an increase in the number of commodities that recorded price decrease in Q3 of 2013, in line with relative slow-down in price increases noted in Section 1.1.

On contrary to Q2, Q3 of 2013 has witnessed price decrease of Tomato across all regions following July harvest.

Potatoes prices continued to increase in Q3 of 2013. Such increase is expected to continue in October since it is sowing/ planting season.

September is sowing/ harvesting period.

Urban and rural commodity prices were monitored in September 2013 in Damietta, El-Sharqia, El-Behira, Ismailia, Giza, Assuit, Qena and Aswan governorates (see Table 2).

It is worth noting that 54.5% of urban prices were higher than rural prices; whereas 5.1% of rural prices compared were identical with urban prices.

Table (2) Comparison of food commodities prices between urban and rural areas

<table>
<thead>
<tr>
<th>Goods</th>
<th>Comparison of the price per Kg by amount and as %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local beans</td>
<td>Giza and El-Behera: urban &lt; rural by L.E. 4.0 and 3.0 respectively (66.7% and 42.9%, respectively).</td>
</tr>
<tr>
<td>Yellow lentils</td>
<td>El-Sharqia: urban &gt; rural by L.E. 2.3 (20.6%). Assuit: urban &lt; rural by L.E. 2.0 (25.0%).</td>
</tr>
<tr>
<td>Black lentils</td>
<td>Ismailia: urban &gt; rural by L.E. 4.3 (32.1%). Damieta and Assuit: urban &lt; rural by L.E. 3.8 and 3.0 respectively (50.0% and 42.9%, respectively).</td>
</tr>
<tr>
<td>Potatoes</td>
<td>Damiatta: urban &lt; rural by L.E. 2.0 (32.4%).</td>
</tr>
<tr>
<td>Onion</td>
<td>Aswan: urban &lt; rural by L.E. 2.0 (72.7%).</td>
</tr>
<tr>
<td>Garlic</td>
<td>El-Behera, Aswan and El-Sharqia: urban &lt; rural by L.E. 5.5, 5.0 and 2.8 respectively (68.8%, 33.3% and 26.6%, respectively).</td>
</tr>
<tr>
<td>Milk</td>
<td>El-Behera and Damiatta: urban &lt; rural by L.E. 3.5 and 2.0 respectively (50.0% and 32.0%, respectively).</td>
</tr>
<tr>
<td>Poultry</td>
<td>Giza, Damiatta and El-Behera: urban &gt; rural by L.E. 4.8, 4.4 and 4.0 respectively (25.9%, 23.2% and 20.7%, respectively).</td>
</tr>
<tr>
<td>Tilapia fish</td>
<td>Qena and Aswan: urban &gt; rural by L.E. 7.5 and 7.0 respectively (34.1% and 35.0%, respectively).</td>
</tr>
<tr>
<td>Catfish</td>
<td>Assuit: urban &gt; rural by L.E. 6.0 (37.5%).</td>
</tr>
<tr>
<td>Beef</td>
<td>Giza and El-Sharqia: urban &gt; rural by L.E. 17.5 and 15.3 respectively (25.0% and 23.5%, respectively). Aswan and Qena: urban &lt; rural by L.E. 22.0 and 15.0 respectively (66.7% and 30.0%, respectively).</td>
</tr>
<tr>
<td>Lamb</td>
<td>El-Behera and Damiatta: urban &gt; rural by L.E. 16.7 and 15.0 respectively (25.0% and 21.4%, respectively).</td>
</tr>
</tbody>
</table>

1 http://www.fao.org/agriculture/seed/cropcalendar/cropcalendar.do
1.4 Global Food Commodity Prices

- ‘World yields basket’ was the name of ancient Egypt due to the abundance of wheat production. Thus achieving sufficiency to Egypt and many countries worldwide. Currently however, due to the deterioration of the agricultural system and the increase in population, Egypt has to import 50% of its wheat demands from abroad.

1.4.1 Global prices of key food commodities

- In 2013/14, coarse grains and wheat imports is forecasted to increased by 21% and 14% respectively, compared to the below average levels of 2012/13.

- Ministry of Supply and Internal Trade agreed with one of the largest international companies operating in retail food commodities to participate in the discounts initiative set up by the ministry to provide commodities for citizens with discounts ranging from 10 to 25%, including sugar, oil, rice, meat and poultry.

- Global prices of potatoes, garlic, rice and corn decreased by 23.6%, 48.0%, 2.5% and 29.2%, respectively, between Q2 and Q3 of 2013.

- ‘World yields basket’ was the name of ancient Egypt due to the abundance of wheat production. Thus achieving sufficiency to Egypt and many countries worldwide. Currently however, due to the deterioration of the agricultural system and the increase in population, Egypt has to import 50% of its wheat demands from abroad.

1.4.2 Egyptian Pound-US Dollar Exchange Rate and Net International Reserves

- For the first time since December 2010, the value of the Egyptian pound against the dollar increased by 1.3% between June and September 2013. (Fig 6)

- Net foreign reserves reached to USD 18.7 bn at the end of September 2013. It is expected that foreign reserves will see more stability and growth to nearly USD 20 bn by moving sources of foreign exchange for the first time since January 2011 revolution, and the return of pumping revenue into the banking sector. Development of improved foreign reserves provide about 30 bn pounds in the state budget due to lower borrowing costs.

- Trade balance deficit has reduced in June 2013 amounting to L.E 19.89 bn compared to L.E. 22.51 bn in June 2012 (i.e. decreasing by 11.6%).

- Balance of payments improved notably in 2012/2013 and achieved a total surplus of about USD 237 million, compared to a deficit of USD 11.3 bn during the previous year.

Figure (5) Global price developments of selected food commodities

Figure (6) Development of the Egyptian Pound exchange rate versus the US Dollar

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1 Ahram, 2 Oct, 2013, the Agriculture of wheat is not enough only 50% of our needs.
2 Crop Prospects and Food Situation, October 2013.
3 El masaaia, 4 Sep 2013, the share of rice amounted to 150 thousand tons, sugar enough and flooding.
5 Ministry of Agriculture and Land Reclamation.
7 Values of September aren’t published yet.
8 ‘World yields basket’ was the name of ancient Egypt due to the abundance of wheat production. Thus achieving sufficiency to Egypt and many countries worldwide. Currently however, due to the deterioration of the agricultural system and the increase in population, Egypt has to import 50% of its wheat demands from abroad.
2. Vulnerable Households’ Food Security

2.1 Characteristics of Vulnerable Households

- The number of HHs sampled in this survey was 1,680 (7,653 household members) equally distributed across 10 governorates. (see map on p.16)
- Female headed HHs constituted 20.1% of total HHs surveyed. Total HH heads’ participation in the labor force across Egypt amounted to 66.8%, constituting about 81.7% among male and 17.2% among female HH heads.
- About two thirds of the sample (64.3%) are aged 30 years or under.
- The rate of enrollment in education among those sampled group (6+ years old) amounted to 77.2%.
- Enrollment rates increased amongst those aged 30 years or under, where it ranged between 86.8% – 96.9%. These rates decreased in the 31 – 70 age group, where enrollment rates did not exceed 73.3%.
- Around 30.6% of the total sample (aged 6+ years) who had been enrolled in school, had dropped out of basic education (before preparatory level). Drop-out rates increased amongst the sampled groups with elder age. In this regard, drop-out rates was 1.3% among the 6 – 10 age group compared with 18.7% in the 11–20 age group.

Table 4 highlights that the vulnerable groups are engaged in casual labor, with 70.2% of employed male HH heads working as carrier/office boy, worker, seller, farmers or driver; whereas 43.1% of employed female HH heads work as sellers.

Unemployment rate among the vulnerable at working age (15 – 64 age group) has decreased by 4.9% in Q3 of 2013 compared to Q2 of 2013 and amounted to 18.9% constituting 12.9% among males and 43.1% among females. This is against the national unemployment rate of 13.3% in Q2 of 2013; 9.8% and 25.1% among males and females, respectively. This points that unemployment in Egypt continues to be a youth issue and it affects both vulnerable and non-vulnerable.

The percentage of working children (6 – 18 years) “child labor” has amounted to 6.3%, about three quarters of these children (73.3%) belong to the age group (15 – 18 years).

Table (3) Breakdown of the sample, enrollment and drop out rates by age groups (%)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Age Distribution</th>
<th>Enrollment Rate1</th>
<th>Drop out Rate2</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-</td>
<td>26.1</td>
<td>96.9</td>
<td>1.3</td>
</tr>
<tr>
<td>(11-20)</td>
<td>22.3</td>
<td>95.3</td>
<td>18.7</td>
</tr>
<tr>
<td>(21-30)</td>
<td>15.9</td>
<td>86.8</td>
<td>31.5</td>
</tr>
<tr>
<td>(31-40)</td>
<td>12.5</td>
<td>73.3</td>
<td>48.8</td>
</tr>
<tr>
<td>(41-50)</td>
<td>10.4</td>
<td>57.9</td>
<td>58.6</td>
</tr>
<tr>
<td>(51-60)</td>
<td>6.8</td>
<td>44.1</td>
<td>80.1</td>
</tr>
<tr>
<td>(61-70)</td>
<td>4.1</td>
<td>32.1</td>
<td>82.2</td>
</tr>
<tr>
<td>71+</td>
<td>1.9</td>
<td>14.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>77.2</td>
<td>30.6</td>
</tr>
</tbody>
</table>

1 Enrollment rates had been calculated for individuals who are 6+.
2 Drop out rates had been calculated for individuals who are 6+ and stopped education whereby did not complete preparatory schooling.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, September 2013.

Table (4) Breakdown of employed household heads by occupation and gender (%) (1)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier or office boy</td>
<td>16.9</td>
<td>11.8</td>
<td>16.7</td>
</tr>
<tr>
<td>Worker</td>
<td>16.4</td>
<td>3.8</td>
<td>15.9</td>
</tr>
<tr>
<td>Seller</td>
<td>12.3</td>
<td>43.1</td>
<td>13.7</td>
</tr>
<tr>
<td>Farmer (not holding property)</td>
<td>13.4</td>
<td>11.8</td>
<td>13.3</td>
</tr>
<tr>
<td>Driver</td>
<td>11.2</td>
<td>0.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Carpenter</td>
<td>6.1</td>
<td>0.0</td>
<td>5.9</td>
</tr>
<tr>
<td>Building construction</td>
<td>4.0</td>
<td>0.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Security guard</td>
<td>2.8</td>
<td>0.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Waiter</td>
<td>2.5</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Other</td>
<td>14.4</td>
<td>27.5</td>
<td>15.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1 Includes those who don’t work, but are seeking a job (i.e. excluding those who are economically inactive such as housewives, school or university students, army recruits, etc.).
2 Includes; peddler, street vendor, and seller in shop.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, September 2013.
2.2 Changes in Income and Expenditure of Vulnerable Households

2.2.1 Vulnerable Household Expenditure

Average spending on food and non-alcoholic beverages amongst vulnerable HHs constituted some 66.6% of total HH spending this quarter, up from 64.7% in the previous quarter, and against 40.6% by the average HH in Egypt1.

Average monthly expenditure of vulnerable HHs surveyed this quarter, amounted to L.E. 749.5 (or daily per capita expenditure of around L.E. 5.8), down from L.E. 761.3 in Q2 of 2013.

2.2.2 Vulnerable Household Income

HH incomes continued to remain largely static. Based on a recall question for the previous month (September to August 2013), some 90.1% of HHs surveyed reported that their monthly income remained unchanged, compared to 95.4% in Q2 of 2013. About 8.2% of HHs in Q3 of 2013 reported an income reduction by an average of L.E. 213.9. Whereas 1.7% of the surveyed HHs reported an income increase amounting to L.E. 102.0 on average. (Fig. 7)

About 41.0% of the surveyed HHs reported exposure to some form of crisis/problem which affected their financial situation over the past year. This is up from 36.2% in Q2 of 2013. About 29.9% of these HHs identified increased health expenditures as a major crisis, followed by job loss (21.2%).

About 47.2% of the surveyed HHs reported obtaining additional sources of income to supplement that from their main job. This is against 41.9% in Q2 of 2013.

Governmental assistance/social solidarity pension constituted the most significant supplementary income source; it brought about 38.8% of additional income, slightly up from 35.0% in Q2 of 2013.

Retirement/insurance pension constituted, on average, 29.2% of additional income sources, while charitable assistance constituted about 25.5%, either in the form of family assistance (14.3%), philanthropic community assistance (7.2%), or assistance from non-governmental organizations (4.0%).

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1 Percentages are calculated based on recall question “During the past year has your family been exposed to any crisis/problem that affected your financial situation?”.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, September 2013.
In Q3 of 2013, 89.7% of vulnerable HHs surveyed reported their income to be insufficient to cover total monthly needs (including food, clothes, shelter etc.), up from 82.7% in Q2 of 2013 (Fig. 9). Of those 89.7%, some 80.6% reported insufficient income to cover monthly food needs in Q3 of 2013.

In current sample which covers 10 governorates, the percentage of HHs whose income was insufficient to meet their total monthly needs recorded its highest value in Ismailia (98.8%), followed by Damietta and Aswan (92.9%).

The highest percentage of HHs stating that their income was insufficient to meet their monthly food needs was recorded in Aswan (97.4%), followed by Qena (94.8%) and El-Behera (92.9%).

2.2.3 Coping Strategies

HHs whose income was insufficient to meet their monthly needs resorted to employing a number of coping strategies. The most prevalent in September 2013 was ‘Borrowing food or money/ depending on assistance from family members/ friends’ (Fig. 10) representing 35.3% of coping strategies, down from 38.4% in Q2 of 2013. This is against the established pattern from September 2011, where consuming cheaper food items used to top the coping strategies that has been reverted in Q2 of 2013. Q3 sustained such change in the overall trend.

Borrowing and consuming cheaper food items are the most prevalent coping strategies that vulnerable HHs used to cover their needs, suggesting that vulnerable HHs are adopting more severe coping mechanisms where incomes do not suffice. Consuming cheaper food items by families whose income was insufficient to meet their monthly needs represented 25.7% of coping strategies in Q3 of 2013 compared to 19.7% in Q2 of 2013.

Other coping strategies adopted included; buying on credit (10.8% down from 17.6% in Q2 of 2013), and reducing food intake (18.0%), which continued its increase since Q1 of 2013, as did rationalizing adult food consumption for the sake of children (3.2%, compared to 2.2% in Q2 of 2013 and 1.4% in Q1 of 2013). These are negative trends that make recovery more difficult for vulnerable HHs.
Vulnerable Households Use of Ration Cards for Subsidized Food

Some 17.3% of vulnerable HHs do not hold a ration card (Fig. 11). In the current sample of 10 governorates, the highest percentage of vulnerable HHs not holding ration cards was recorded in Cairo (28.6%), followed by Alexandria (22.0%) and Qena and Ismailia (21.4%).

About 38.8% of vulnerable HHs have children under the age of five. Just under one quarter of these HHs do not hold a ration card. In Egypt some 66.7 million people hold ration cards1. This highlights the need to review and improve targeting criteria, particularly during challenging economic times.

Given the fact that the average vulnerable HH contains 4.6 person in Q3 of 2013, the survey found that 3.5 person per HH on average have access to ration cards, indicating that only 77% of the HH members are likely to benefit from ration cards.

The majority (90.9%) of vulnerable HHs holding ration cards utilized them to purchase their ration allocations. Of those, 49.6% did not purchase their full ration allocation. It is worth mentioning that since Q2 of 2013 the percentage of HHs who reported missing some items from their regular allocation has doubled from 24.9% in Q1 of 2013 to 49.6% in Q2 of 2013.

A shortage in commodities at ration grocers was cited as the main reason preventing HHs from purchasing different commodities (81.1%), followed by poor quality of commodities (10.8%).

Despite the fact that sugar, oil and rice are the most widely purchased commodities with ration cards, quantities of each of the three commodities cover only 29%, 22% and 18% of vulnerable HHs' needs respectively.

Subsidized macaroni and tea are only occasionally purchased through ration cards (18.5% and 11.2% respectively), with HHs attributing this to low stock at the ration grocers.

Rationed commodities which are considered dispensable and could be replaced were macaroni (29.8%) and tea (43.5%). Such inputs match with the reported list of the least consumed commodities on ration cards.

Only 6.2% of vulnerable HHs knew that rationed oil is fortified with vitamin (A) and vitamin (D), suggesting the need for awareness raising of the fortification and its benefits.

1 Ministry of Supply and Internal Trade special data request from the ministry.
2.4 Vulnerable Households’ Food Consumption

Vulnerable households’ (HHs) food consumption patterns have remained largely constant since the launching of the EFO in September 2011, showing a continued over-reliance on subsidized cereals and bread, oil and sugar and a poor dietary diversity.

As Figure 13 below indicates, cereals and carbohydrates (bread/ grains/ roots) are the main food group that all HHs surveyed consume on a daily basis (noted at 6.9 days a week). Of these items, subsidized bread was the most frequently consumed item (6.2 days a week) by the majority of HHs (88.0% of HHs).

All HHs consumed oil/ ghee/ butter and sugar on a daily basis (6.7 days a week).

HHs surveyed show a lower consumption of fruits as 86.1% consume it only 1.2 days a week.

All HH consumed vegetables on an average of 6.5 days/week.

There is low consumption of animal proteins by vulnerable HHs, with meat (beef and lamb), and fish (tilapia and catfish) consumed less than once a week. About 83.7% of HHs eat poultry approximately once a week. Eggs form the main source of animal protein consumed by 92.7% of HHs 2.6 days a week.

Consumption patterns are driven largely by prices, as well as the composition of subsidized rations and poor nutritional awareness.

About 41.3% of the vulnerable HHs have complained about the availability of subsidized baladi bread through Q3 of 2013.

Given high and rising food prices that have placed certain items beyond the vulnerable’s purchasing power, more than one third of the surveyed HHs (34.9%) ceased to consume beef in the last five months on average.

One fifth of the surveyed HHs (18.3%) ceased to consume milk in the last 4.0 months on average.

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One fifth of the surveyed HHs (18.3%) ceased to consume milk in the last 4.0 months on average.

Figure (13) Breakdown of vulnerable households’ consumption by commodity type (from the food basket), frequency of consumption (number of days a week)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>No. days/week (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legumes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>Vegetables &amp; Fruit</td>
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<tr>
<td>Animal proteins</td>
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<tr>
<td>Cheese &amp; Dairy Products</td>
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<tr>
<td>Oils, Ghee, Butter &amp; Sugar</td>
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<tr>
<td>Grain, Flour &amp; Bread</td>
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<th>Commodity</th>
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1. Proteins including meat, poultry, rabbits, fish and eggs.
2. Vegetables including leafy and non-leafy vegetables.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, September 2013.
2.5 Vulnerable Households Perception of Food Prices

As part of the vulnerability survey conducted, HHs were asked about their perception of food commodity prices, by classifying each commodity either as expensive, adequate or cheap.

Figure 14 shows that animal proteins were the main food group reported by the majority of HHs surveyed as beyond their purchasing power. This was followed by fruits & vegetables, legumes (except for local beans), and oil, ghee & butter (except mixed oil).

Price perceptions match the consumption patterns of vulnerable HHs as detailed in section 2.4. and are largely in line with inflation trends. About half of HHs (48.8%) reported an increase in the price of vegetables, more than half reported an increase in the price of animal proteins (54.1%), almost one third in the price of diary products (40.1%) and 36.0% in the price of legumes.

About 94% of the vulnerable HHs find the price of subsidized baladi bread to be reasonable and within their purchasing power.

Figure (14) Breakdown of vulnerable households' perception of the price of different food commodities

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Expensive</th>
<th>Adequate</th>
<th>Cheap</th>
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<tbody>
<tr>
<td>Meat, Poultry and Fish</td>
<td>95.6</td>
<td>99.8</td>
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<td>100</td>
<td>89.3</td>
<td>90.5</td>
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<td>95.8</td>
<td>95.0</td>
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<tr>
<td>Eggs, Cheese &amp; Dairy Products</td>
<td>94.0</td>
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</table>

1 Proteins including meat, poultry, rabbits, fish and eggs.
2 Vegetables including leafy and non-leafy vegetables.
3 Butter/ghee including natural and manufactured.
4 Dairy products except for butter.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, September 2013.
3. Special report: Cost of Hunger in Egypt\(^1\)

- The Cost of Hunger in Africa (COHA) was undertaken in Egypt by the Cabinet’s Information and Decision Support Center (IDSC) in collaboration with WFP, the African Union Commission and the United Nations Economic Commission for Africa (UNECA). Data vital to the development of the study was provided by the Central Agency for Public Mobilization and Statistics (CAPMAS), the Ministry of Health, and the Ministry of Education in Egypt.

- This study highlights the significant economic losses a country could incur due to child undernutrition. It estimates the additional cases of illness, death, school dropouts, and reduced physical productivity that can be directly associated with those suffering undernutrition before the age of five and the associated economic losses incurred by the economy in terms of health, education, and potential productivity in a single year.

### 3.1 Conceptual Framework of the Study

The study highlights that Hunger/undernutrition has direct negative consequences on the livelihood of people as it affects their health and educational status. This is in turn affect the socio-economic status of households. (Fig 15)

![Diagram of the effects of hunger/undernutrition](image)

- **Labor force Reduction**
  - Reduced productivity
  - Increased mortality
  - Reduced productivity
  - Stunting of undernourished individuals
  - Increased morbidity
  - Children exposed to undernutrition in the early life stages (undernourished mothers)

- **Lower educational attainment**
  - Reduced income potential
  - Productivity cost of Undernutrition
  - Education cost of Undernutrition

- **Deterioration of cognitive and physical ability**


### 3.2 The Cost of Hunger in Egypt\(^1\)

- Overall results in Egypt show that an estimated 20.3 billion Egyptian pounds (US$3.7 billion) was lost in 2009 as a result of child undernutrition.

- Child mortality associated with undernutrition has reduced Egypt’s workforce by 1%. The average schooling achievement for a person who was stunted as a child is 0.2 years lower than for a person who was never undernourished. This disadvantage in the labor market is estimated to have generated private costs of 2.7 billion EGP in potential productivity for a single year.

- Child undernutrition was estimated to generate health costs equivalent 1.1 billion EGP (US$213 million) due to episodes directly associated with the incremental quantity and intensity of illnesses that affect underweight children. According to the data estimated, only 1 out of every 5 of these episodes received proper health attention.

- Undernutrition was associated with 11% of all child mortalities, which represents over 6 thousand child deaths in 2009 and over 28 thousand period from 2004 to 2009.

\(^1\) IDSC, Cost of Hunger in Egypt, May 2013.

\(^2\) Hunger refers to inadequacy of food that causes some diseases such as reduced weight for age, or stunting (height for age), or wasting (weight for height). Two different types of malnutrition can be identified: protein and energy malnutrition which refers to inadequacy of protein intake, and micronutrients deficiency.

\(^3\) Fatma El-Zanaty, Egyptian Demographic and Health Survey, 2005, 2008.
3.2 Cost of Hunger in Egypt (cont’)

- Stunted children have a higher grade repetition rate, at 7.4% than non-stunted children, at 5.4%. This incremental rate generated 79 thousand additional cases of grade repetition in 2009, in which the education system and families incurred a cost of 271 million EGP.

- Moreover, those children in Egypt are also more likely to drop out of school or repeat grades. Based on information from the 2009 CAPMAS Labor survey, the model estimated that the average schooling achievement for a person who was stunted as a child is 0.2 years lower than for a person who was never undernourished.

- 40% of adults in Egypt are stunted. This represented more than 20 million people of working age that are not able to achieve their potential, as a consequence of child undernutrition.

- An estimated 857 million working hours were lost in 2009 due to people who were absent from the workforce as a result of nutrition-related mortalities. This represents 5.4 billion EGP which is equivalent to 0.5% of the country’s GDP.

3.3 Recommendations and proposed interventions to fight hunger

- Draft a social, economic and health national plan by ensuring full participation of concerned ministries and stakeholders.

- Revise the agriculture policies to ensure a focus on producing varieties of food commodities that is consumed by children (Ministry of Agriculture).

- Revamp the national school feeding program, and implement periodic checkup programs for school students where students’ health can be generally evaluated, as well as apply early diagnosis of Anemia cases (Ministry of Education).

- Provide targeted ration cards for pregnant women and children. This should be accompanied by a revision of the current composition of subsidized ration cards commodities to ensure the nutrient food commodities (Ministry of Supply and Internal Trade).

- Target girls’ schools with proper nutrition and health awareness campaign.

- Enhance the government monitoring and evaluation system by shortening the period for child nutrition evaluation to two years instead of currently 3 – 5 years (all entities within the government nutrition system).

- Benefit from third countries experiences that have successfully tackled malnutrition namely Scaling Up of Nutrition Initiative.

- Leverage the resources of the private sector who are eager to actively participate to reducing under nutrition.

To access the full report kindly visit http://www.wfp.org/content/egypt-cost-hunger-implications-child-undernutrition-social-economic-development-june-2013
Annex: Survey and Composite Index Methodology

1 Monthly Burden Index Methodology

- Index of the "Monthly Price Burden" indicates the differences between the prices of basic food commodities basket in each one of the months under observation against a specific reference time point.
- Development of the index depended on selecting a basket of commodities representing the main food groups (27 commodities), which the Egyptian HH uses in their meals. This basket would include one measuring for each selected commodity. This will include:
  1. **Meat, poultry and fish** group including a kilo of: beef, veal, lamb, poultry, catfish, Mugil Cephalus, and tilapia.
  2. **Vegetables** group including a kilo of: eggplants, potatoes, onions, garlic and tomatoes.
  3. **Legumes** group including a kilo of: local beans, yellow lentils and black lentils.
  4. **Grain and flour** group including a kilo of rice and wheat flour.
  5. **Butter, oil and ghee** group including: corn oil (liter), sunflower oil (liter), natural ghee (kg) and processed ghee (kg).
  6. **Eggs, dairy products, cheese and others** group including: eggs (package of 30), dairy (liter), cheese (kg), macaroni (kg), tea (kg) and sugar (kg).

In order to measure the monthly price burden of the commodities basket, first, the monthly average of the unit price of each commodity should be calculated using the weekly prices collected by the Field Monitoring Network based on the following equation:

\[ X_{jk} = \frac{\sum_{i=1}^{n_j} x_{ijk}}{n_j} \]

*Since:*
- \( X_{jk} \) is average monthly price of the commodity K in month j.
- \( x_{ijk} \) is the unit price (L.E.) of the commodity k in week i of the month j.
- \( n_j \) is the number of weeks in the month j.

Then total monthly prices of the commodities basket is calculated (27 commodities) in each of the months subject to measuring by using the equation:

\[ X_j = \sum_{k=1}^{27} X_{jk} \]

*Since:*
- \( X_j \) is total monthly average of the price (L.E.) for the commodities basket in month j.

This total is then compared during each of the months of measuring against the reference price of this given basket which had been selected to be its price in the first week of January 2011 which is calculated using the equation:

\[ Y = \sum_{k=1}^{27} X_{11k} \]

*Since:*
- \( Y \) is the reference line for measuring the monthly burden of prices.
- \( X_{11k} \) is the unit price of commodity k (in Egyptian Pounds) in the first week of January 2011.

2 Rural Price Observatory Methodology

The Rural Prices Observatory addresses prices of the commodities' basket according to the weekly market in the villages visited during the round of the Survey on the vulnerable HHs in all governorates except urban ones.

3 Survey Selection Methods

- **Selecting governorates:**
  In each round, the survey targets 10 governorates, covering Egypt’s four main regions: 2 urban, 3 Lower Egypt, 3 Upper Egyptian governorates (north and central Upper Egypt), and 2 Frontier governorates in the Eastern and Western regions. The 10 governorates are so that each governorate is surveyed at least once every 4 rounds.

- **Selecting Districts:**
  In each governorate, two urban and two rural areas are surveyed. For urban governorates four urban areas are surveyed based on 2007 CAPMAS poverty map where areas with the highest poverty rates (50% or more) are selected.

- **Selecting Households:**
  The survey was conducted during last week of September 2013, for a sample of 1680 vulnerable households (about 168 households per Governorate – the Governorates are mapped on page 16). In each village or urban area, the most vulnerable areas are selected based on community feedback, then HHs are screened for eligibility based on:
  - educational status of HH head (below university degree),
  - occupation of HH head (those working in high or medium levels, government sector, business sector or as contractors are excluded), and
  - based on income and asset ownership. HHs are excluded if they have agricultural holdings, if any of its members are in private education, and if per capita HH expenditure and income on an average month exceeds L.E. 300.

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- based on income and asset ownership. HHs are excluded if they have agricultural holdings, if any of its members are in private education, and if per capita HH expenditure and income on an average month exceeds L.E. 300.

1The first week of January 2011 had been selected instead of the average prices of the month in order to evade consequent impacts of the January 25th Revolution.
Map of Targeted Governorates*

Due to political turmoil and consequent emergency state called in different governorates frontier governorates were replaced by a governorate from Upper Egypt and a governorate from Lower Egypt.

*Governorates sampled in this edition include: Cairo, Alexandria, Damietta, El-Sharqia, El-Behira, Ismailia, Giza, Assuit, Qena, Aswan.

For online editions see: http://www.eip.gov.eg/ and http://www.wfp.org/content/egypt-food-observatory-2013