



Food Monitoring and Evaluation System

Issue (5) – January 2012





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Introduction

Food problem tops the list of issues facing most countriesspecially developing ones. Successive food crises motivated concerned parties to examine causes of such crises & establish systems which help forecast any future crises to evade or mitigate their occurrence. Therefore, an interest grew for establishing the Egyptian Food Observatory which provides tools for monitoring & evaluating the situation of a set of agricultural crops & main food commodities essential to the Egyptian citizen. In addition, the Observatory develops early warning tools which predict future food crises whether they are triggered locally or consequent to the global situation. The series of Observatory bulletins aim at:

- 1. Monitoring & following up the current situation through tracking the consumption pattern of the vulnerable households, market prices of the agricultural crops as well as commodities in the selected food basket.
- 2. Monitoring & following up local crises through tracking consumption, production, & market prices of the agricultural crops as well as commodities in the selected food basket.
- 3. Identifying the status of food security with special focus on the poor & most vulnerable groups to poverty risk. In addition, it connects the different dimensions of food security to production, consumption & prices through the proposed Observatory system.

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Editorial Board

Dr. Hatem Al Kady IDSC Chairman

Dr. Hussein Abdel Aziz Consultant to IDSC

Principal Investigator

Dr. Mohamed A. Ramadan

Deputy Manager of Quality & Development Department

Research Team

Ms. Neveen El-Helw Ms. Heba Adel

Ms. Hend Samir

Ms. Omnia Salem

Ms. Heba Youssef

World Food Programme Team

Mr. Abdallah Alwardat Program Advisor

Ms. Noura Abd-Elwahab Senior Economist

Ms. Riham Abu Ismail VAM/ Poverty Officer

> Ms. Alaa Zohery GIS Specialist



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Executive Summary

- The start of 2012 was somehow optimistic. \odot The indicator of the monthly price burden which represents the main measuring unit measured commodities basket the of revealed a relative stability in prices since Novmber-2011.
- However, a high percentage of the vulnerable households believe that the prices for the majority of commodities under investigation are far beyond their purchasing power.
- Compared to the month preceding the approximately 5.6% of the survey, households indicated an income reduction. About 48.7% of these households receive income from additional sources apart from current job.
- The income of 66.3% of the vulnerable households doesn't satisfy their monthly needs, borrowing & purchase on credit make up 48.6% of the means adopted by the vulnerable households for securing the minimum monthly food needs. Almost one fifth (19.1%) of the vulnerable
- \bigcirc households do not hold ration cards.



Source: Calculated upon 2010 data published by: Egyptian Ministry of Agriculture and Lands Cultivation, Israel Bureau of Statistics website & World bank website.

Summary of the 5th Round Methodology

The bulletin is concerned with monitoring the cost of buying a basket of main food commodities based on the main measuring unit (kilo/liter/box), and variation of prices of such commodities between urban and rural areas. Additionally, it includes indicators of evaluating the status of vulnerable households in terms of: total expenditure, sufficiency of their income, consumption rate of such commodities, perception of price change of commodities in question, and the approaches for coping with the price hikes. The bulletin uses data derived from several sources including: commodities prices data in the urban areas collected by the Field Monitoring Network affiliated with the Information and Decision Support Center, commodities prices data in the rural areas collected through surveying rural markets in the villages of the selected governorates as part of the current round, survey data on assessing the status of the vulnerable households that had been conducted in the 5th week of January-2012 on a sample of the vulnerable Egyptian households (total of 540 households /54 from each governorate) distributed among governorates representing main regions as shown on the Geographic Information System (GIS).



Required Actions:

- Allocate part of Egypt scientific research expenses to discover economically feasible mechanisms for desalination of sea water, to maximize the share of water allocate for agricultural purposes.
- O Agricultural research should focus on generating viable strains of irrigation water high salinity, and other arable soil in the desert. Multiplicity and changing environments of arable area contribute significantly to the increase in agricultural area and the provision of appropriate amounts of crops.
- Work through agricultural research centers to reduce the cost of production of major agricultural crops, & raise farmer awareness about methods that would reduce those costs. It is important to return agriculture a lucrative career, especially for strategic crops.





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1.1

Indicator of the Monthly Price Burden

- Examining the monthly price burden, which represents the main measuring unit of the measured commodities basket, reveals a relative stability in prices during the period (from November-2011 to January 2012). However, it should be noted that these three months are the highest in the prices series, starting from January-2011.
- January-2012 prices increase rate came to 6.2% compared to prices in the 1st week of January-2011. This shows an increase in the nominal prices by nearly LE 28.3 per basket.
- Declining prices in Frontier governorates in December-2011 have continued. For the second time during the last six month (since July-2011), urban governorates witness semi-stability of prices, despite having the highest share of price increase among other regions, while Lower and Upper Egypt governorates have recorded semi-stability of prices since the last four month.
- A review of the prices to macroeconomic indicators shows that the overall rate of inflation has increased again slightly, although it is still below the level achieved during the same month in the last year. The price index of food and beverages has risen slightly.



Source: Central Agency for Public Mobilization and Statistics, CAPMAS.

Figure (1) Indicator of the monthly price burden¹ L.E. 490483.7

¹ Reference line of the monthly burden has been updated upon the completeness of price data in different governorates. **Source**: Field Monitoring Network, Cabinet-Information and Decision

Total monthly price of the commodities basks

Reference line of the monthly burder





Source: Field Monitoring Network, Cabinet's Information and Decision Support Center.



Source: Central Agency for Public Mobilization and Statistics, CAPMAS.

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Section One Price Indices of Food Commodities

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Figure (5)

1.2 Indicator of the Accumulated Price Burden

- section • This reviews total expenses incurred by the Egyptian household for purchasing the basket once a month as of January-2011. The indicator results show that total cost of the measured food commodities basket during the last thirteen months have amounted to L.E 6048.5.
- A comparison between this cost and the cost in case prices were fixed at the level of the 1st week of Januray-2011 showed that total cost difference has amounted to L.E161.0, which have caused the household to incur, an additional average cost of L.E 13.4 each time it purchases the basket.

1.3 Average Commodity Prices in the Regions

- Shifting from the holistic to the micro-view reveals an increase in the prices of some commodities in question during January; however, most of these increases took a slowing trend.
- Price hikes took a lesser upward curve in all regions compared to the previous month. A number of large decreases in prices indicates the stability of prices during January-2012.
- In contrast to the change in prices between November and December-2011, prices of eggplants have shown a remarkable increase in all regions.
- Flour prices have witnessed an increased trend in all regions despite its decreased trend during the last month in 2011.
- Poultry prices have declined in urban governorates, but they have increased again in Frontier governorates and Lower Egypt.
- Rice prices have declined in all regions except Lower Egypt governorates.



Source: Field Monitoring Network, Cabinet's Information and Decision Support Center.

Table (1) Average prices of January-2012 and change rate compared to December-2011 prices of some food commodities

EGP/Kg

				EGP/ Kg (%)
Goods	Urban	Lower	Upper	Frontier
Beef	65.4	60.1	56.4	60.0
	(0.5)	(−1.6) ↓	(1.6)	(0.0)
Poultry ¹	15.6 (-2.0)	15,8 (4.0) 1	$^{16.5}_{(-0.2)}$	$(2.8)^{16.6}$
Tilapia fish	11.0 (-15.2)	$^{10.9}_{(4.5)}$	^{13.7} (−2.3) ↓	12.3 (-4.9)
Eggplants	3.3	2.8	2.7	3.1
	(22.0)	(29.4)	(26.3)	(18.6)
Potatoes	2.5	2.2	2.0	2.4
	(-22.9)	(-26.1)	(-33.0)	(-11.1)
Onions	2.7	2.3	2.3	^{2.7}
	(-5.9)	(-2.3)	(-14.0)	(−9.6) ↓
Tomatoes	2.3	2,2	2.2	2.2
	(-18.3)	(-29.7)	(-42.0)	(-21.1)
Local beans ²	7.9	7.7	^{8.6}	^{8.3}
	(-0.9)	(-2.4)	(−0.2)	(−2.3) ↓
Yellow lentils ³	$^{10,6}_{(-4.5)}$	$^{10.2}_{(-3.0)}$	9.1 (−1.9) ↓	9.1 (1.6)
Flour ³	4.9	4.8	3.8	4.2
	(2.2)	(3.2)	(0.1)	(8.4)
Rice ⁴	5.0	4.6	4.6	5.1
	(-1.2)	(1.6)	(-6.4)	(−5.5) ↓
Macaroni ⁵	5.7	4.7	4.5	4.2
	(1.2) 1	(0,3) 1	(-2.4)	(-4.0)
sugar ⁶	6.4	6.1	5.8	^{5.8}
	(-1.1)	(0.4) 1	(−1.1) ↓	(−2.1) ↓
Corn oil ⁷	14.5 (1.5)	$^{14.0}_{(1.5)}$ 1	13.8 (1.4)	13.7 (-2.1)

¹ Poultry prices are defined as average local, and white live and frozen poultry. ² Unpacked bean ³ Packed ⁴ Include packed and bulk ⁵ Ordinary Packed ⁶ Packed by private sector ⁷ L.E./ liter

Source: Field Monitoring Network, Cabinet-Information and Decision Support Center.





- Macaroni prices continued rising in urban and Lower Egypt governorates, but they have a notable decline in Upper Egypt governorates and slight decline in Frontier governorates.
- Prices of tomatoes, onions, and potatoes continued to decline, Also the prices of sugar with the exception of Lower Egypt governorates, have witnessed a slight increase.
- Local beans prices recorded a decline in all regions in contrast to the increasing trend since December-2011.
- Prices of yellow lentils continued to decrease in urban and Lower Egypt governorates. The decline extended to include Upper Egypt governorates, but they are still increasing successively in Frontier governorates.

1.4 Price Variation Between Urban and Rural Areas

- A comparison to prices of food commodities between urban and rural areas were done in the 5th week of January-2012 in some Egyptian governorates, where prices had been monitored in both urban and rural areas (Giza, Ismailia, Gharbya, Assuit and Qena). A number of observations were noticed involving many inquiries related to the role of whole sale dealers & retailers in unjustified variations creating in prices commodities within the same governorate.
- The price per kg of local beans is higher in urban than rural areas in governorates of Ismailia and Gharbya by about L.E 2.7 and 2.0 respectively. Contrary to Giza governorate, the price of a kg of local beans is higher in rural than urban areas by about L.E 2.0.

- Price of yellow lentils is higher in urban areas of Gharbya than rural areas by about L.E 2.5 per kg. However, Assuit's rural areas are higher in price than urban areas by about L.E 2.0 per kg.
- The price of Black lentils is higher in urban compared to rural areas in both Ismailia and Gharbya governorates by around L.E 5.3, 2.3, respectively. The price per kg in Assuit's rural areas is higher than urban areas by around LE 3.0 per kg.
- Garlic prices is higher in rural areas of Ismailia compared to urban areas by about L.E 2.6 per kg, while the price is higher in urban areas of Qena and Assiut than rural areas, by about L.E 4.1, 2.4 per kg, respectively.
- Price per kg of eggplants is higher in Ismailia and Giza rural areas than urban areas by about L.E 1.8, 1.7, respectively. At the same time, the price is higher in Assiut and Qena urban areas than rural areas by about L.E 1.7, 1.5, respectively.
- Poultry prices are higher in urban than rural areas of targeted governorates, with a difference ranging between L.E 1.2 and L.E 4.0 per Kg on average.
- Tilipia prices are higher in Gharbya and Giza rural areas compared to urban areas by about L.E 2.7, 1.7, respectively. While, the price of Catfish is higher in Qena and Gharbya rural than urban areas by about L.E 12.0, 3.7 per kg, respectively, the price per kg of catfish in Assiut urban areas is higher than rural areas by about L.E 4.0 per kg.
- Veal prices are higher in Gharbya, Giza and Ismailia urban areas compared to rural areas with a difference that ranged between L.E 10.0 and 24.3 per kg.



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Global Prices of Selected Food Commodities

• Reviewing global prices that have a direct impact on the Egyptian market, either through imports or due to the alignment of local prices to global prices, has revealed a price increase of poultry, and beef.

• Fluctuation witnessed by garlic prices have continued, prices have resumed its decline.

• Wheat, rice, sugar, and potatoes have witnessed a stability of prices in January-2012.



Figure (6) Global price developments of selected food commodities

¹ Source: Stock Exchange of Kansas City Council of Commerce.

² Source: Stock Exchange of Chicago Council of Commerce.

³ Source: New York Stock Exchange.

⁴ Source: International Monetary Fund, http://www.imf.org.

⁵ Values of the 3rd week of January, the 3rd and 4th weeks of February, March and the 1st and 3rd weeks of October had been estimated using moving average because they are unavailable in the source.

⁶ Source: U.S.A Department of Agriculture, http://www.ams.usda.gov.

Exchange Rate of the Egyptian 2. Pound Versus the US Dollar

- In addition to the aforementioned concerns regarding the price increase of some commodities in the global market, the exchange rate of the Egyptian Pound versus the US dollar appears to have increased sequentially. This adds up price burden by imports to the Egyptian citizen.
- The Egyptian Pound exchange rate versus the US dollar increased by 4.0% in January-2012 compared to January-2011.

⁷ Source: Ministry of Agriculture and Land Reclamation.

⁸ Values of September and November have been estimated using moving average because they are unavailable in the source 9 Prices of November and December refer to the $1^{\rm st}$ week of November and the $2^{\rm nd}$ week of December.

¹⁰ Values of the 3rd and 4th weeks of February as well as values of March have been estimated because they are unavailable in the source. ¹¹ Values of the 1st week of October have been estimated because they are unavailable in the source.





Source: The Central Bank of Egypt.



ection

Three Assessment Indicators of the Vulnerable Households

71 +

Total

3.1 Demographic Characteristics o the Surveyed Households	
Poverty rate increased to 25.2% in 2010/2011 compared to 21.6% in 2008/2009, and 16.7% in 1999/2000 However, the proportion of extreme poverty decreased from 6.1% in 2008/2009 to 4.8% in 2010/2011.	1 •

Source: CAPMAS, indicators of poverty, according to research data income, spending, and consumption, 2010/2011.

- Total sample size came to 540 households (2388 persons) equally distributed over 10 governorates.
- Female headed households constitute 25.7% of total household in the sample.
- About two thirds of the sample (65.2%) are in the age range of 30 years or less.
- Around 25.9% of the total sample (6+ years old) are not enrolled in education and enrollment rates increase concurrently with the young age. This indicates an improved awareness of the vulnerable households regarding the importance of education.
- Around 28.7% of the total sample (6+ years old) who were enrolled in schools had dropped out of basic education (before preparatory). Drop out rates concurrently increase with the progress in age. In this regard, drop out rates came to 0.4% among the age group (6-10) compared with 19.7% in the age group (11-20) and 69.3% in the age group (41-50).
- Around 35.7% of total household heads are unemployed.
- Around 10.6% of total household heads work as sellers, 11.5% work as farmer (not holding property).
- Around 8.6% of female heads of households work as sellers.
- Around 11.2% of male heads of households work as sellers, and 11.5% as carrier/ janitor or office boy.

out rates by	age groups	(%)
Age Distribution	Enrollment Rate ¹	Drop out Rate ²
25.3	92.7	0.4
22.0	93.9	19.7
17.9	86.9	24.5
12.4	64.9	43.2
9.7	49.1	69.3
7.0	33.3	82.1
4.3	31.4	93.8
	Age Distribution 25.3 22.0 17.9 12.4 9.7 7.0	Distribution Rate1 25.3 92.7 22.0 93.9 17.9 86.9 12.4 64.9 9.7 49.1 7.0 33.3

Table (2) Break down of the sample, enrollment and drop

¹Enrollment rates had been calculated for individuals who are 6+. ²Drop 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, January 2012.

33.3

74.1

1.4

100.0

100.0

28.7

Table (3)Proportional break down of heads of households
by employment and gender(%)

			(,)
Employment status	Male	Female	Total
Unemployed	19.0	84.2	35.7
Farmer (not holding property)	15.5	0.0	11.5
$Seller^1$	11.2	8.6	10.6
Carrier	6.5	0.0	4.8
Janitor or office boy	5.0	2.9	4.4
Fisherman	5.7	0.0	4.3
Painting worker	5.2	0.0	3.9
Construction worker	4.5	0.0	3.3
Driver ²	4.5	0.0	3.3
Other	22.9	4.3	18.2
Total	100.0	100.0	100.0

¹Seller includes (vegetables and fruits - ready-made garments - cattle - cigarettes - grocery ...).

²Includes truck, microbus, private car, & taxi.

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.



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Section Three Assessment Indicators of the Vulnerable Households

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3.2 Income and Expenditure

3.2.1 Expenditure

Average monthly expenditure of the vulnerable households amounted to L.E 667.2, reflecting a per capita daily expenditure of around L.E 5.4.

3.2.2 Sources of Income & Its Sufficiency

- Compared to the month prior to the survey, 93.7% of the households reported that their income remained unchanged, whereas 5.6% reported a decrease in their income.
- With a slight drop in prices continued from previous month, this result calls for optimism. However, it depends on the continuity of price reduction.
- Around 48.7% of the sampled households reported having additional source of income apart from their main job.
- Retirement/ insurance pension constituted 32.2% of additional sources of income whereby households generate income apart from their current job.
- Charity assistance constituted one third of the additional sources of income; 11.9% from philanthropy community assistance and 15.1% from family assistance.
- Results of the first five rounds of Egyptian Food Observatory has confirmed the importance of charity work in securing the vulnerable households against the risk of hunger.
- Results revealed an increased percentage in recipients of government assistance/ social solidarity pension, as an additional source of income, in the following governorates: New Valley (40.7%), Asuit (37.9%); however, Cairo experienced the lowest percentage that amounted to (17.8%).





Figure (9) Proportional break down of the sources of households' additional income apart from the main job



Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, December 2011, January 2012.

Percentage of recipients of retirement/ insurance pension is highest in Cairo (48.9%), Asuit (37.9%) and Ismailia (35.9%).



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- Percentage of vulnerable households who reported that their monthly income is insufficient for meeting their monthly needs decreased from 70.2% in December to 66.3% in January.
- Percentage of households whose income is insufficient for meeting their monthly needs recorded its highest level in Suez (75.9%), then Giza and Kafr El Sheikh (74.1%), followed by Ismailia (72.2%).
- This percentage recorded its lowest value among households in New Valley (57.4%), then Asuit (59.3%).

3.2.3. Coping Strategies Approaches

- Examining the results of the 5th round, it reveals that households whose monthly income is insufficient for meeting their needs resort to various means to bridge the gap between their income and needs. About 6.7% of these households resort to overtime (through any of its members), whereas about 10.1% of these households get assistance from their families, whether financial or in-kind in the form of food commodities.
- About 27.9% of the households whose monthly income is insufficient for covering monthly needs rationalize their consumption.
- Borrowing and purchasing on credit make up 48.6% of the means adopted by the vulnerable households for securing the minimum monthly food needs.
- Borrowing scored its highest level as a mitigation measure used by households to cover the gap between income and expenditures in the following governorates: Qena (70.6%) and Asuit (68.8%).
- Rationalizing consumption recorded its highest value among the households whose income is insufficient in the following governorates: Ismailia (53.8%), and Suez (48.4%).



Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, December 2011, January 2012.

Figure (11) Means used by the households whose income is insufficient for the monthly needs



Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.

"Decreasing the normal amount of food" topped the list of the means adopted by households for facing commodities price rise (49.6%), followed by being obliged to buy the commodity (40.3%). This situation applied to the different commodity groups¹.

¹ It includes meat, poultry and fish, vegetable and fruit, legumes, grain, flour and bread, oil, ghee and butter, egg, cheese and dairy products in addition to other commodities.



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3.3 Vulnerable Households Consumption of Food Commodities

- It is very important for decision makers & development or assistance oriented civil society organizations to get acquainted with consumption patterns of the vulner-able households as they are most probably exposed to the risk of food insecurity.
- Results from the matrix of consumption pattern in the 5th round reveal that vegetables, salt, sugar, tea, local beans, rice, mixed oil, and subsidized Baladi bread are the most frequently consumed commodities by the majority of the vulnerable households throughout the month.
- More than three quarters of the vulnerable households consume white beans, yellow lentils, fruits, poultry, tilapia fish, and macaroni once or twice per week.

- The vulnerable households rarely purchase meat (except for beef), fish (except for tilapia), sunflower oil, corn oil, butter, and natural ghee.
- The vulnerable households try to maintain buying egg, cheese and milk three times per week in order to ensure sufficient protein consumption. This explains protein replacement by consuming such commodities.

The similarity of findings in the first five rounds on consumption patterns of the poor in terms of the most used food items or consumption rates confirms effectiveness of providing commodities on ration cards. As such, this makes ration cards highly feasible economically and socially.



Break down of the vulnerable households by pattern of consumption from the food commodities basket



¹Average number of days of monthly consumption is calculated for households that consume the commodity. **Source**: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.



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- Regarding households realization of the change in prices of the commodities, the 5th round reveals a decline in the percentage of vulnerable households who realized the stabilization of prices of most commodities compared to November-2011.
- The percentage of vulnerable households who reported their realization of increased prices has increased. Almost one third of the households reported realization of price increase in fruits, vegetables (except for onion and potatoes), chick peas, white beans, yellow lentils, sugar, eggs, cheese and diary products.
- The majority of households reported their realization of the stabilization of prices for local beans, salt, unsubsidized baladi bread, corn, mixed oil and packed tomato paste.

- About half of the vulnerable households in Gharbya and Kafr El Sheikh governorates realized the increase in prices of all food commodities, that is the highest among all targeted governorates in current round.
- At least half of the households in the targeted governorates reported a realization of poultry price increase during December-2011, compared to the previous month.

Compared with the previous four rounds, there was an increase in the percentage of vulnerable households who realized price increase in almost all food commodities, after the witnessed decline in the previous round (round four).



Break down of the vulnerable households according to their opinion regarding price change of food commodities between November-December 2011



Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.



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Commodities Adequacy of Food Prices to the Vulnerable Households

- Prices of meat, poultry, followed by fish are not affordable by the majority of the vulnerable households.
- Prices of local beans, mixed oil, corn, corn flour, wheat flour, potatoes, onion, tea, and packed tomato paste are adequate to almost half of these households.
- January-2012 recorded inadequacy of fruits, vegetables (except for potatoes), legumes (except for local beans), oils, ghee and butter (except for mixed oil), dairy products, eggs, cheese and sugar prices for the majority of the vulnerable households.

In spite of the decline achieved in food commodities prices, which was reflected in the price index as well as in the reduction of percentage of households that reported an increase in food commodities prices compared to the previous month. The majority of those households see that prices of most food commodities are beyond their purchasing power.

Red line-

When will the poor find adequate prices for food commodities in Egypt?

(%)

100

80

60

40

20

Poultry

Beel

14.2



Break down of the vulnerable households according to their opinion on price adequacy of food commodities





(%)











Catfish

Tilapia

Lann

Jeal

Meat, Poultry & Fish

122

35.9

81.1

Packedfish



Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.

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3.6 Ration Cards

- Around one fifth of the vulnerable households (19.1%) are not ration card holders.
- About 99.5% of the vulnerable households that own ration cards use them for obtaining the subsidized rationed commodities.
- Gharbya governorate is the highest (in the survey sample) in terms of ration cards holders among the vulnerable households (98.1% of total sampled households in the governorate), followed by Kafr el Sheikh governorate (87.0%)
- The lowest percentage was recorded in Cairo governorate (70.4%) followed by Suez (74.1%).
- The limited subsidy provided to macaroni and tea has drawn their prices near market prices, and as such turned the vulnerable households to evade having them through ration cards.

The percentage of vulnerable households who receive insufficient quantities of rationed rice & sugar, and are obliged to buy additional quantities to meet their consumption, still exceed two thirds of total vulnerable households.

- Percentage of vulnerable households that receive insufficient rice quantity on ration card and are obliged to buy extra quantities came high in the following governorates: Gharbyah (83.0%), New Valley (80.5%), Ismailia (79.5%) compared to other governorates and the overall level.
- Percentage of vulnerable households that receive insufficient sugar quantity on ration card and are obliged to buy extra quantities is high in the Upper governorates, especially in: Qena (90.9%), Asuit (86.4%).

Results of the 5th round, which were compatible with findings of the four previous rounds, revealed that one fifth of the vulnerable households are not ration card holders. This allows us to frequently <u>stre</u>ss the need for comprehensive review the of beneficiaries from subsidy system to ensure effective targeting of the poor and food insecure.





Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, December 2011, January 2012.

Figure (16) Sufficiency of the subsidized commodities on the (%) ration cards



 * Macaroni is not one of the ration food items, and that it is only available when rice is short in supply

Source: Assessment Survey of the Vulnerable Households, Egyptian Food Observatory, January 2012.

Three quarters of the vulnerable households who receive oil on ration cards in Qena governorate reported insufficient quantities and in turn they buy additional quantities from the market.



Section

Egyptian Food Observatory

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Four Civil Society Role in Fighting Poverty & Food Shortage



Caritas Egypt was established during the Arab-Israel conflict in 1967 as an "Emergency Aid-sector" providing Egyptians with essential needs. The government's appreciation for Caritas active humanitarian contribution enabled it to be officially registered as a non-governmental organization at the Ministry of Social Affairs. In addition to its headquarters in Cairo, Caritas has five other branch offices in the governorates of Alexandria, Minia, Assiut, Sohag and Qena.

Most important areas of action

• Small enterprises: Providing loans to poor households for the implementation of small enterprises.

• Street children: Rehabilitation and reconciliation of street children with their families as well as offering them financial support.

• Vocational training: Establishing vocational training centers targeting youth whose technical and professional skills would be improved in order to overcome the unemployment problem. Examples of the training centers include computer and mobile phone maintenance.

• **Rural women development:** Establishing women clubs, holding workshops, and developing training programs aimed at activating women's role and building their capacity in some villages.

 \circ Housing: Assisting the poor and vulnerable households in finding an adequate house.

oAfrican refugees: Providing financial and in kind assistance to African refugees in many areas including: health, education, food and travel cost.

o Health: Developing awareness campaigns on harmful effects of drug addiction and contributing to the rehabilitation of rehabilitation drug addicts through centers outpatient and clinics. In developing and addition. conducting awareness programs on HIV/AIDS and Leprosy including financial assistance to patients.

• Providing food assistance: Developing food projects aimed at overcoming food deficiency in Egypt directly (offering food assistance) and indirectly (reclaiming and cultivating desert land).

orld Food

«Developing Rural Women»



«Health Centers»



«Illiteracy Project»



«Funding Small Projects»



Most Important Projects

«Food for Work Project»

Project goal:

The project contributes to solving the food shortage problem in Egypt in addition to the wide spread of poor households which are directly at risk of hunger. For this purpose the project takes:

A direct approach:

To provide food assistance to poor households and participants of the vocational training centers. It is intended to motivate the target group for continuing with the training. Food is also distributed to NGOs (suffering poor financial resources) to ensure its sustainability.

Indirect approach:

To use the youth who belong to small farmers' households in the reclamation and cultivation of desert land in Nubaryah. This ensures increasing the cultivated areas and thus providing food. For the purpose of this objective, Caritas prepares several studies on water. pollution, systems, irrigation and improving agricultural services. As such, Caritas contributes to the remedy of food shortage in Egypt by applying instant superficial as well as radical treatments of the crisis reflected in positive participation in the agricultural development. Project achievements:

Number of project's beneficiaries exceeds 400 households (around 3000 persons) with focus on the priority groups (children and women).

Combating Worst forms of Child Labor by Reinforcing Policy Response and Promoting Sustainable Livelihoods and Educational Opportunities in Egypt (CWCLP)

- The project is launched through the joint collaboration between the WFP, UNICEF, and ILO.
- CWCLP contributes to combating child labor in Agriculture through an innovative and integrated approach that involves increasing children's access to quality education as a means of reducing worst forms of child labor, promoting sustainable livelihoods for their households.
 - The Project covers16,000 children in Sohag,

Assiut, Menya, Fayoum and Sharkeya governorates through its immediate objective in providing direct educational services allowing 8,000 at risk children to attend school, 3,000 apprentices address root causes of child labor.

- It promotes sustainable livelihoods of 5,000 target households.
- The Project is funded by the US Department of Labor (USDOL) with a total budget of US\$ 9,500,000 for the duration of 2011 – 2014.
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ection \mathcal{F}_{ive} Using Desalinated Sea Water for **Agriculture in Israel**

Agriculture in Israel¹

- The agriculture sector stands among the most important productive sectors in Israel. It has a strategic significance due to considerations. political The Israeli Government pays paramount attention to the agriculture sector for the purpose of attaining self sufficiency and maintaining sustainability in the region.
- The agriculture sector faces multiple challenges in Israel, mainly: scarcity of water resources, climate and drought factors, in addition to the State's limited area.
- The agriculture sector employed 1.7% of total labor in Israel in 2009². It is worth noting that Israel attained self sufficiency in terms of food except for grain³.

Main agricultural crops in Israel¹

- Vegetables, cotton, wheat, citrus and fruit are among the most important agricultural crops in Israel. In addition, citrus tops the list of Israeli exported crops to the international markets.
- ♦ Araba Valley, and Jordan Valley are among the most important agricultural regions in Israel as they enjoy sufficient water resources, fertile land and proper climate.
- O The Israeli Government adopted modern techniques, and applied science in irrigation approaches, in addition to providing the necessary support to farmers.

Source:

¹ US- Israel Cooperation Program website:

² World Bank website: www.albankaldawli.org

www.jewishvirtuallibrary.org/jsource/brief/Agriculture

Irrigation Systems in Israel⁴

- The agricultural sector in Israel consumed 1.016 million m³ of water per year out of a total of 1.811 million m³ in 2009.
- Israel introduced a number of irrigation approaches that had been designed in order to achieve optimal benefit from its limited water resources, concurrently with cultivating the largest possible area. The said approaches include drip irrigation used in intensified cultivation and glass green houses, sprinkle irrigation, water recycling, and alternative resources of water.

Strategic Plan for Developing Irrigation Systems⁵

• The Israeli Government conducts strategic studies reflecting the Hebrew State's national plan on the long term, the last of which, is Israel 2020. In relation to the agricultural sector, the study indicates that by 2020, a population growth is expected leading to a significant rise in demand on agricultural products. This situation would be concurrent with a regression of water resources which requires identifying new mechanisms to provide alternative water resources. The study included important recommendations, most important which, is developing the approach of using desalinated sea water for agriculture especially for cultivating strategic crops.



³ US- Israel Cooperation Program website

www.jewishvirtuallibrary.org/jsource/History/ciaisrael.html The Israel Central Bureau of Statistics website: www.cbs.gov.il

 $^{\rm 5}$ US- Israel Cooperation Program website:

www.jewishvirtuallibrary.org/jsource/agriculture/agg.htmlrowth

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Water resources in Israel

- Water resources in Israel are diversified including rain. evaporation, surface streams, underground water, draining, and springs. Underground water stands among the most important water resources in Israel⁶.
- Israeli water company Mekorot represents the government sector in addition to many other private companies operating in the water area. However, the government sector represented by Mekorot retains the largest share of production⁷.
- Percentage of water consumption varies among sectors with agriculture scoring the highest share. According to 2009 statistics, the agriculture sector consumes about 56.1% of total water consumption in Israel⁸.

Figure (18)



Source: Calculated from the data of The Israel Central Bureau of Statistics: www.cbs.gov.il

Source :

- www.aljazeera.net/specialfiles/pages/aa9cb10b dff2-4eaa-9494.
- ⁷ Mekorot Company website: www.mekorot.co.il/eng.
- ⁸The Israel Central Bureau of Statistics website www.cbs.gov.il.
- ⁹ Israel National Newspaper website:



Source: The Israel Central Bureau of Statistics website: www.cbs.gov.il

Desalination of sea water in 5. Israel⁹

- Israel ranks first worldwide in the field of water desalination and recycling sea followed by Spain (according to 2010 statistics). Due to the limited water resources in Israel coupled with increasing needs of water especially in light of the orientation State's towards Hebrew industrial development, thus, Israel pays optimal attention to the technological methods for providing alternative resources of water. Sea water desalination stands among the most important techniques used in Israel.
- Water desalination process is defined as removing all or part of the excessive salt and minerals from water. Thus, it would be possible to use the treated water in other purposes such as agriculture, drinking, industry and medications.
- Israel entered the field of sea water desalination and water recycling in 2005. In this regard, it established the first desalination plant in Ascalon which provided in 2007 around 150 million m³ of desalinated water.



Figure (17) Israeli water production by produces

⁶ Al Jazeera.net website:

www.israelnationalnews.com/News/News.aspx/137666.



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- Ratio of desalinated water to total water in Israel according to Israeli statistics of 2009 reached 8.0%.
- It is worth noting that the size of desalinated sea water is growing every year support of the due to the Israeli coupled with government the Israeli companies' use of advance technologies in this area.

Most important Israeli companies in the water desalination area

- Israeli Ackerstein Industries Ltd is among the most important private companies operating in water desalination field. In November 2011, the company launched a project in "Beit Sourik" north west of AlQuds costing 1.5 billion shekel. It stands among the prominent Israeli projects in this field¹¹.
- C The European Investment Bank will offer financial support of € 120 million aimed at designing and building a sea water desalination plant. The project is intended to contribute additional water resources of 100 million m³ per year to strengthening the sustainability of Israel's water sector¹².

5.5 Wheat as a strategic crop in Israel

• Wheat stands as a significant strategic crop in Israel because the area of cultivated land is around 48.7% of total agriculture land in 2010. In this context, the Hebrew State adopts a policy aiming at attaining self sufficiency of strategic commodities, especially wheat¹³.



Source:

¹⁰The Israel Central Bureau of Statistics website: www.cbs.gov.il
¹¹ Al Youm7 website: www.youm7.com/News.asp?NewsID=538220&



Source: Calculated from The Israel Central Bureau of Statistics website www.cbs.gov.il.



Source: The Israel Central Bureau of Statistics website www.cbs.gov.il.

Figure (21) Ratio of the wheat cultivated land to total cultivated land in Israel in 2010



Source: Calculated from The Israel Central Bureau of Statistics website www.cbs.gov.il.

¹² ENPI Information and Communication Support Project website: www.enpi-info.eu/main.php?id=27354&id_type=1&lang_id=470
¹³The Israel Central Bureau of Statistics website: www.cbs.gov.il.

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.5 Wheat as a strategic crop in Israel-Continued

- Wheat retains almost half of the cultivated area in Israel; therefore, it consumes the largest share of Israeli water resources. This motivated the Hebrew State to identify alternative techniques for providing the necessary water for cultivating wheat, on top of which, came sea water desalination.
- Wheat and rice stand as essential Israeli exports whereby they constitute together about 99.8% of total Israeli grain exports (according to 2010 statistics).
- Wheat production in 2010 reached about 107.7 million shekel¹⁴.



Source: The Israel Central Bureau of Statistics website www.cbs.gov.il.

Sea water desalination in Egypt and Arab world¹⁷

- During the recent years, Egypt began to consider adopting sea water desalination technique. In this context, several specialized research centers carry out researches and studies on developing the sea water desalination technique. In addition, Egypt began expanding on the establishment of water desalination plants in coastal and remote governorates.
- The west desert is the primary suggested location for the agricultural expansion by using sea water desalination technique during the next decade.

Challenges facing the sea water desalination technique

- Several problems emerge consequent regarding the sea water desalination technique. A number of researches and specialized studies are attempting to problems, the said overcome most important of which, is high level of sea water saline around the desalination plants. This causes shortage of fish, contamination of the sea and therefore negatively affects fishing¹⁵.
- Sea water desalination technique requires high advanced technology cost and because the process depends on consuming and burning increased amount of fuel specially oil. This in turn causes problems environmental due to the increased percentage of Carbon Dioxide in the atmosphere which in turn leads to high temperature (global warming). In addition, problems also include high cost of disposing of the desalination waste.
- Israel occupies an advanced position in terms of the progress in using sea water desalination technique and overcoming relevant challenges. In this regard, Israel carries out pioneer projects aimed at overcoming environmental problems associated with the sea water desalination system¹⁶.

Some Arab countries occupied global position in the area of sea water desalination. For example, total capacity of the Gulf desalination plants came to about 60% of global capacity in 2010. A number of the said plants produce more than 100 thousand m³ per day. The largest plants in terms of capacity are located in Kuwait, Kingdom of Saudi Arabia and United Arab Emirates. As for the other countries, they produce limited quantities of desalinated water.

- ¹⁷ Al Ahram digital website: :
- www.digital.ahram.org.eg/articles.aspx?Serial=241435&eid=841

Source :

¹⁴ The Israel Central Bureau of Statistics website: www.cbs.gov.il

¹⁵Al Ahram online website:

www.digital.ahram.org.eg/articles.aspx?Serial=241435&eid=841

¹⁶ General Electric website:

www.gewater.com/what_we_do/water_scarcity/desalination.jsp



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Annex (1) The Methodology of Developing the Price Monthly and Accumulated Burden Indicator



Methodology of the Survey on the Vulnerable Households

In each round the survey targets 10 governorates including two urban, three Lower Egypt and three Upper Egyptian governorates (north and central Upper Egypt), in addition to two frontier governorates in the Eastern and Western regions. The ten governorates are changed in each round in order to demonstrate the scale of differences nationwide. In each governorate, one urban and one rural areas are targeted except urban governorates where two urban areas are targeted. In addition, informal or poor areas are targeted where the vulnerable households are identified within each target area.

Second The Methodology of the Rural Prices Observatory

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 households in all governorates except urban ones.

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d Methodology of the Indices of Monthly and Cumulative Burdens

🗞 Index of the Monthly Price Burden

Index of the "Monthly Price Burden" reflects differences between the prices of basic food commodities basket in each one of the months subject to observation, as well as their prices based on a specific reference time point. Development of the index depended on selecting a basket of commodities representing the main food groups (26 commodities) which, the Egyptian household uses in its meals. This basket would include one measuring unit from each one of the selected commodities that contains:

1.Meat, poultry and fish group including a kilo of: beef, veal, lamb, poultry, catfish, 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), 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 equation:

$$X_{jk} = \sum_{i=1}^{n_j} x_{ijk} / n_j$$

Since:

 $X_{ik}\!:$ 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.

 $\boldsymbol{n}_j\!\!:$ is the number of weeks in the month j.

Then total monthly prices of the commodities basket is calculated (26 commodities) in each of the months subject to measuring by using the equation:

$$X_j = \sum_{k=1}^{26} X_{jk}$$

Since:

 $X_{j} \colon$ 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 2011¹ which is calculated using the equation:

$$Y = \sum_{k=1}^{26} x_{11k}$$

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.

^t♦Index of the Price Cumulative Burden

In order to measure the cumulative burden of prices of the same group of commodities, the cumulative sum of prices of this basket is calculated as of the beginning of January 2011 until the month or time point subject to measuring. This reflects total amount paid by the Egyptian household for the selected basket as of January 2011 until the month subject to measuring assuming buying the basket once a month: n

$$Z_j = \sum_{j=1}^n x_j$$

Since:

 $Z_{j}{:}$ is the cumulative sum of what the household paid for the commodities basket in month j.

This actual cumulative sum is then compared with the cumulative sum of the prices of the same basket of commodities which could have been achieved in case it stabilized at the selected reference point, i.e first week of January 2011. It is calculated using the following equation:

$$W_j = X_{11} * n$$

Since:

 $W_j\!\!:$ is the cumulative sum of what the household would have paid in the commodities basket in month j in case prices stabilized on the same level of the first week of January 2011.

 X_{11} : is total monthly average price (L.E.) of the commodities basket in the first week of January 2011.

n: is the number of months between month j and January 2011.

¹*The 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.*



1,Magless El Shaàb st., Kasr El Einy, Cairo, Egypt Postal code: 11582 P.O.Box: 191 Magless El Shaàb Tel.: (202) 27929292 Fax: (202) 27929222 e-mail: info@idsc.net.eg URL: www.idsc.gov.eg Toll-Free Internet Number: 07773040