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EDITORIAL

The publication of this issue of the Food Security Bulletin coincides with the growing threat of the return of the food prices crisis in the global market. Some specialized international organizations, such as the Food and Agriculture Organization (FAO), started ringing the warning bell. This reminds us of the sharp rise in the prices of food in 2007-2008. It seems that the spiral of world food prices has become more intense, with the well-known consequences of that to food security in the world in general and the Occupied Palestinian Territory (OPT) in particular. The coming issue of the Bulletin will track food price changes.

This issue of the Food Security Bulletin addresses a number of topics, including the new methodology proposed by the Palestinian Central Bureau of Statistics to measure the levels of poverty in the OPT, focusing on the reasons behind the amendment to the methodology and the most significant drawbacks. The issue of the replacement of the methodology undoubtedly constitutes an essential subject because of its impact on policy implications and economic priorities.

Furthermore, this issue of the Bulletin contains the regular sections on food security updates and food prices in the Occupied Palestinian Territory. In addition, it illustrates the "Consolidated Appeal Process" food security requirements for 2011. This issue of the Bulletin also discusses the world food prices, which increased rapidly during 2010. Finally, this issue reviews a study that criticizes the changes in the measurements of the "Human Development Index" in 2010.

Lastly, we would like to reemphasize our commitment to keep in contact with people interested in the Food Security Bulletin in order to take their opinions into consideration to develop the Bulletin in a way which matches all stakeholders' needs and preferences.

HIGHLIGHTS

* The level of food insecure families in Gaza Strip reached 52% compared with 22% in the West Bank in 2010. In contrast, the level of food secure households in Gaza Strip reached a maximum of 19% compared with 41% in the West Bank during the same year.
* The average daily individual intake of energy in the Palestinian territories has deteriorated remarkably. It reached 1687 calories during 2009, compared with 2068 calories in 2007 and 2482 calories in 2006.
* Sugar prices recorded a huge increase during the second half of 2010, reaching 206 NIS/50 kg in December compared with 150 NIS/ kg in June.
* The total food sector requirements of the Consolidated Appeal Process (CAP) reached $204 million during 2011 compared with $183 million during 2010.
* World food prices witnessed a remarkable increase in the international markets during 2010 (an increase of 24% in December compared with 180 points in January of the same year).

DEFINITIONS

Food Security:
The World Food Summit (1996) defines food security as a general state "When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life". Four elements coexist in this definition:

- Food availability – whether produced locally or imported.
- Food accessibility – where all individuals have access to adequate resources to meet appropriate dietary needs.
- Food stability – where access to adequate food is permanently secured, with no risk of shocks.
- Food utilisation – the consumption of food with adequate sanitation, clean water and where health care is provided.

Food Security in the Palestinian Territories:
The World Food Programme (WFP), Food and Agriculture Organization (FAO) divide Palestinians families into four categories with respect to food security (2010):

- Food secure: Households with income and consumption above USD 6.2/adult equivalent/day.
- Marginally secure: Households with either income or consumption (not both) above USD 6.2/ adult equivalent /day.
- Vulnerable to food insecurity: Households with both income and consumption below USD 6.2/ adult equivalent /day.
- Food insecure: Households with income and consumption below USD 5.1/ adult equivalent /day.

Note: Food security or poverty are measured based on household consumption or income. Usually, household consumption is higher than household income due to the foreign assistance provided to needy families and the coping mechanisms adopted, (such as self-production of food).

Poverty in the Palestinian Territories:
The Palestinian Central Bureau of Statistics (PCBS) defines poverty using the budget of a standard household, (six members: two adults and four children). There are two poverty lines:

Deep poverty line: A standard household with a monthly budget below NIS 1,870 (2009) covering: food, clothing and housing costs.

Relative poverty line: A standard household with a monthly budget below NIS 2,278 (2009) covering: food, clothing, housing, health care, education, transportation and housekeeping supplies.

Note: The methodology used for measuring poverty lines in oPt has been modified during 2009. The two poverty lines has been fixed for the year 1997, then updating these two lines using the CPI (base year 2004) to monitor the inflation of the two lines during the period 2004-2009.

Consumer Price Index (CPI):
CPI is mostly used as a tool for measuring inflation and increases in the cost of living. It is calculated by taking price changes for the items in a predetermined basket of goods and averaging them. There are 568 items, (goods and services) used in calculating Palestinian CPI and the goods are weighted according to their importance. Food weighs around 40% of the total CPI, transport and communication around 12.7% and textiles around 10%.

Level of Living:
This is defined as a household's food consumption relative to their total consumption. The PCBS has divided Level of Living into three categories:

- Higher Standard of Living: food consumption to total consumption is less than 30%.
- Middle Standard of Living: food consumption to total consumption is between 30-44%.
- Lower Standard of Living: food consumption to total consumption is between 45-100%.

Global Hunger Index (GHI):
The GHI measures hunger and malnutrition with three equally weighted indicators: proportion of undernourished as a percentage of the population; prevalence of underweight children under the age of five; and mortality rate of children under five years. The index ranks countries on a 100 point scale. Less than 4.9 reflects 'low hunger', 5-9.9 is 'moderate', 10–19.9 is 'serious', 20–29.9 is 'alarming' and 30% is 'extremely alarming'. (International Food Policy Research Institute- IFPRI 2010).

FAO Food Price Index (FFPI):
The FFPI represents international prices of food commodities. It is calculated by taking the average of six commodity group price indices (meat, dairy, cereals, oils, fats and sugar). The indices are weighted with their average export shares.

Millennium Development Goals:
In the year 2000, the UN, G8 and other international organizations adopted a set of eight development goals, (18 targets) to be achieved by 2015. Goal 1 has three targets: to halve, between 1990 and 2015, the proportion of people whose income is less that $1 per-day, to achieve full and productive employment and decent work for all, including women and young people, and to halve, between 1990 and 2015, the proportion of people suffering from hunger.

Human Development Index (HDI):
The HDI is a composite index with the following sub-indices: life expectancy at birth, educational attainment(mean years of schooling and expected years of schooloing), and standard of living (measured by real GNI per capita). The index ranges between 0 and 1. In 2010, Norway had the highest value (0.938) and Zimbabwe, the lowest (0.140). The occupied Palestinian Territory has not been include on the ranking list.

Consolidated Appeal Process (CAP):
Every year a number of aid organizations, including UN institutions and NGOs, jointly plan, coordinate, implement and monitor their response to emergencies and appeal for funds together rather than competitively. This process is called the Consolidated Appeals Process (CAP). The total financial requirements of the CAP in the occupied Palestinian territory for the year 2011 amounted more than 575 million dollars. Food Security sector requirements amounted 204 million dollars, 35% of the total GAP requirments.

Food Security Updates in the Occupied Palestinian Territory

In 2009, the Palestinian Central Bureau of Statistics (PCBS), in partnership with the World Food Program (WFP) and the Food and Agriculture Organization (FAO), launched the "Food Security and Economic and Social Conditions for Palestinian Families" annual survey. For 2010, the survey was implemented between July and August. Figure 1 shows the variations in the food security status between the West Bank and the Gaza Strip in 2010. It is worth noting that no significant improvement in the food security status occurred during the year 2010, compared with previous years: 37% of the Palestinian families still suffered from food insecurity. In addition, at least 12% of the Palestinian families remained vulnerable to food insecurity.

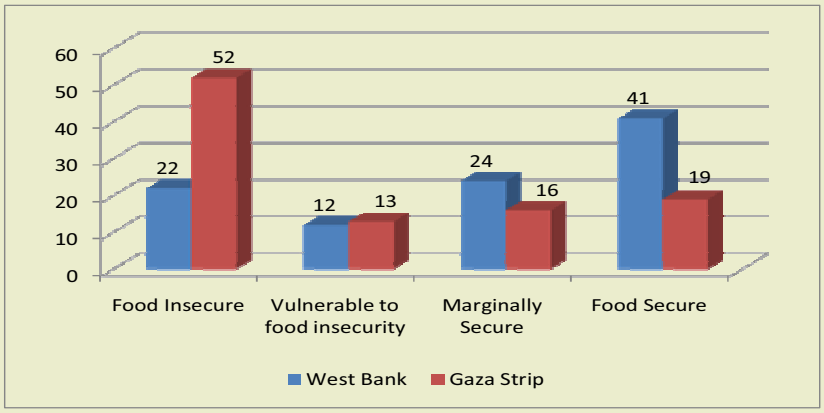
Figure 1 divides Palestinian families in the West Bank and the Gaza Strip into four separate groups according to their food security level (see the definitions page). Importantly, food insecurity levels are much higher in the Gaza Strip (52%) than in the West Bank (22%), mainly because of the continuing Israeli blockade on Gaza. The percentages of families vulnerable to food insecurity in the West Bank and in Gaza Strip are somehow similar: about 12%. In contrast, the disparity in the proportion of food secure families between the two regions is still big and needs to be contracted: while the percentage of food secure families in the West Bank reached 41%, it declined to 19% in the Gaza Strip.

Table 1: Daily Average Food Energy and Nutrients per Capita in the Palestinian Territory

Nutrients	2006	2007	2009
Energy (calories)	2481.6	2067.7	1687
Proteins (g)	64.8	57	40.3
Fats (g)	63.4	57.4	55.2
Carbohydrates (g)	408	327	254.7
Water (g)	801.2	580	566.7
Calcium (g)	850.7	652.1	707.6
Vitamin "C" (mg)	178.8	122.3	125.9
Phosphate (mg)	965.3	841.7	720.3
Iron (mg)	16.6	14	13
Sodium (mg)	5544.8	5412.5	6008.3

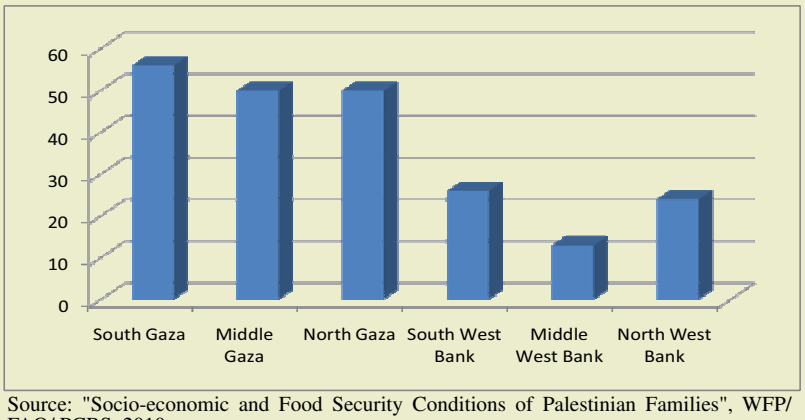
Source: "Consumption and Expenditure Survey 2009", PCBS, 2010.

Figure 1: Food Security Status in the Palestinian Territory, 2010 (%)



Source: "Socio-economic and Food Security Conditions of Palestinian Families", WFP/ FAO/ PCBS, 2010.

Figure 2: Food Insecurity Levels in the Palestinian Territory by Region, 2010



Source: "Socio-economic and Food Security Conditions of Palestinian Families", WFP/ FAO/ PCBS, 2010.

One should notice that the variation in food insecurity levels in the Palestinian Territory experienced a substantial increase at the regional level (see Figure 2). The highest food insecurity levels occurred among the South Gaza Strip citizens (56%), and the highest food insecurity levels in the West Bank were also recorded in the south (26%).

The West Bank middle governorates still exhibit the lowest food insecurity rate: 13%. The food insecure families in this region are likely to be in Area C. The last issue of this Bulletin highlighted the food insecurity levels in this area.

Nutrients Consumption in the Palestinian Territory

The classification of Palestinian families into four groups of food security levels was carried out based on income and consumption (see the definitions page) without addressing the kind of food consumed. The PCBS results published at the end of 2010 point to a decline in the average portion of energy and nutrients per capita in the Palestinian Territory during 2009, compared to previous years (see Table 1). The daily average portion of energy per capita in 2009 was 1,687 calories verses 2,482 calories in 2006 (a decrease of more than 32%). In addition, there was a drop in the daily average portion of other nutrients per capita. This decline may reflect a worsening situation in the food insecurity levels in the Palestinian Territory. Consequently, these figures need further revision by a nutrition and health specialist.

Food Prices in the Occupied Palestinian Territory

The Food Price Index in the Occupied Palestinian Territory (OPT) experienced considerable fluctuations during the second half of 2010. The Index continued to increase during the second half of 2010, reaching 149.5 points in October, and then started to decrease slightly, reaching 148 points in December. It is worth mentioning that the rise in the Food Price Index in the OPT mirrors the trends in the Food Price Index in the international markets, which witnessed a remarkable increase during 2010 (see page 7 of the Bulletin). Because Palestine imports most of the basic food commodities, the rise of food prices in the global markets was reflected directly in the Palestinian market.

Figure 1 shows a comparison between the Food Price Indices in the West Bank and the Gaza Strip. The Food Price Index for the Gaza Strip exceeded that in the West Bank during all months, mainly due to the Israeli siege. One should notice that the disparity in the Indices between the two regions reached its peak in July (138 in the West Bank verses 145 in the Gaza Strip).

Table 1 traces developments in the prices of basic food commodities in the OPT in the second half of 2010. Sugar recorded a significant increase in price in that period, reaching NIS 206, compared to NIS 150 in June, an increase by 37%. As sugar is imported into the Palestinian market, its price is expected to continue to increase, given that its price grew by two-thirds in the world market in the second half of 2010. This phenomenon occurs as a result of the major drop in sugar production in India, the world's second largest producer, because of the bad weather conditions.

Table (1): Average consumer prices of selected food commodities in the Occupied Palestinian Territory second half of 2010 (NIS)

	Unit	July	August	Sept.	Oct.	Nov.	Dec.
Rice "sunwhite"	25 kg	141	148.7	141.7	148	148.8	149
White flour	60 kg	160	161.9	160.8	156.4	158	160.33
White bread -local	1 kg	3.8	3.86	4.07	4.14	4.17	4.17
Tnova Milk 3% fat	1 kg	6.9	7	6.9	6.96	6.94	6.98
Fresh beef meant	1 kg	47.8	48	48.6	49	50.7	50.52
Olive oil	1 kg	35.61	35.26	36.23	34.61	33.8	3.87
Sugar Crystal	50 kg	165	166.6	181.5	186	190	206.26

Source: PCBS, 2010.

Consequently, the supply curve shifted to the left, developing a shortage, as stated in the FAO Food Outlook (November, 2010).

Rice prices reached NIS 149 per 25 kg in December, compared to NIS 141 per 25 kg in July 2010. One should note that rice prices witnessed a remarkable increase in the Gaza Strip NIS 160 per 25 kg in November, yet a decrease of 13% in the West Bank in November compared to June. Prices of other goods witnessed slight increases or decreases with no significant differences between the Gaza Strip and the West Bank.

Tomato Prices in the OPT during 2010

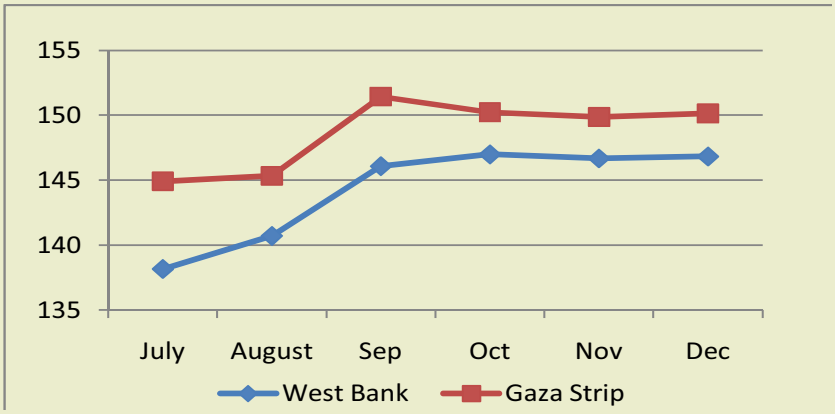
Palestine experienced a sharp increase in the tomato price in September and October. While the price of tomatoes stood at NIS 3 per kilogram at the most until July 2010, it increased rapidly to reach more than NIS 8NIS per kilogram in October. This drastic growth in the price occurred mainly due to the effect of the *Tuta Absoluta lesion* on harvest. In addition, the unusually high temperatures destroyed the exposed tomatoes. At the same time though, the increased temperatures had a positive effect as they decreased the insect activity and its impact on the harvest. The tomato price started to go down in November and is expected to decrease even further.

Food Expenditure

According to the "Palestinian Expenditure and Consumption Survey 2009", released by the PCBS in October 2010, food expenditure as a portion of total expenditure in 2009 amounted to 36%: 35% in the West Bank verses 38.6% in the Gaza Strip. This percent reflects a "middle standard of living" in both the West Bank and Gaza, based on the PCBS definition of standard of living.

On the other hand, the WFP and the FAO used the "Food Security and Economic and Social Conditions for Palestinian Families Survey, 2010" to measure household food expenditure. They concluded that the ratio of household expenditure on food to total expenditure in 2010 was 53%: 48% in the West Bank and 61% in Gaza. This percent reflects a "lower standard of living" in both the West Bank and Gaza, according to the PCBS definition of standard of living. However, it is unlikely that food expenditure increased so noticeably in one year. This discrepancy most probably occurred due to different methodologies used in the two surveys.

Figure 1: Food Price Index in the West Bank and the Gaza Strip (Base year: 2004 = 100)



Source: PCBS, 2009.

Food Aid Activities in the Occupied Palestinian Territory

The UNRWA and the WFP are the most vital international organizations providing food aid in the occupied Palestinian territory (oPt). UNRWA directs its aid to more than 1.7 million refugees in the West Bank and Gaza Strip, while the WFP, working alongside local and international NGOs, is the primary provider of food aid to non-refugee families in the oPt. The estimated financial requirements for UNRWA and WFP food aid operations in 2011 are more than 35% of the total requirements of the Consolidated Appeal Process (CAP), which has projected a cost of more than $ 575 million (see table 1).

Table 1 presents the estimated financial requirements for UNRWA and the WFP's 2011 food aid operations, as well as the organizations' actual financial resources for the previous year. Table 1 illustrates the following points:

* UNRWA's resources secured during 2010 were around 44 million dollars; 47% of UNRWA's total requirements for the food security aid sector. It is worth noting that UNRWA secured funding for 2009 was also around 45% (see issue 3 in this bulletin). This prompted Flippo Grandi, the Commissioner General for UNRWA, to urge all donors to support the full scope of UNRWA's humanitarian requirements for 2011 as reflected in their appeal. In UNRWA's Emergency Appeal, 2011, Flippo Grandi warned (Emergency Appel 2011, UNRWA).

* WFP recorded the largest share of resources secured during 2010, reaching around 82% of their total requirements for food security sector. However, Josette Sheeran, the head of WFP, describes the struggles and difficulties which are arising in securing adequate access to food for the poor people in the West Bank and Gaza because of the shortage in the secured funds. Sheeran said (See Haaretz, Jan 18th 2011).

* Although the total CAP requirements for 2011 decreased by around 5% compared to the total CAP requirements for 2010, the CAP food security sector requirements in 2011 increased by $20.8 million compared to 2010 levels. This may be related to the rapidly increasing price of food in international markets. The FAO food price index averaged 231 points in January 2011. The FAO stated that this is the highest level (both in real and nominal terms) since they started measuring food prices in 1990.

Although CAP food sector requirements for 2011 has increased, the total number of food aid beneficiaries of UNRWA and WFP assistance has slightly decreased compared with 2010 (from 1.87 million in 2010 to 1.65 million in 2011).

The number of beneficiaries of the UNRWA food assistance in 2011, is distributed as 650 thousand beneficiaries in Gaza Strip and 32.7 thousand beneficiaries in the West Bank (as shown in the UNRWA Emergency Appeal, 2011). The UNRWA also aims to provide meals for UNRWA school students (at least 213 thousand students) within its school feeding program. Summing up, UNRWA will provide food aid to about 896 thousand refugees (47% of the total number of refugees in the Occupied Palestinian Territory).

The WFP, on the other hand, will continue its (EMOP 108170) project in Gaza Strip during 2011, which has been executed since the Israeli invasion on Gaza Strip in December 2008. The number of beneficiaries of this project during 2011 is about 298 thousand non-refugee beneficiaries in Gaza Strip. In addition, the WFP has been executing the (PRRO 200037) project in the West Bank since the beginning of 2011. This project targets about 454.5 thousand beneficiaries during this year. In conclusion, the WFP will provide food aid for about 752 thousand non-refugee beneficiaries in the Occupied Palestinian Territory. Table 2 shows the nature of the WFP projects and the number of beneficiaries in the West Bank during the year 2011.

Table 2: The WFP projects and the number of beneficiaries in the West Bank during 2011, (thousand beneficiaries)

Project title	# of beneficiaries
Relief projects	
Assistance for the destitute families	126
Institutional feeding	10
Food vouchers for most vulnerable urban families	55
Assistance for the most vulnerable rural families	108.5
Assistance for marginalized herders in Area C	35
Emergent food assistance	20
Recovery Projects	
School feeding	75
Vouchers for training/Vouchers for work	25
Total	**454.5**

Source: The WFP document "Protracted Relief and Recovery Operation in the West Bank in 2011", (PRRO 200037).

Table 1: CAP Food Security Sector Requirements (Million Dollars)

	Revised Requirments 2010	Funded 2010	Secured funding 2010 (%)	Original Requirments 2011
UNRWA	93.2	43.7	47	117
WFP	84.7	69.3	82	78.6
Other Organizations	5.3	3.5	66	8.4
Total Food Security Sector Requirments	183.2	116.5	63.6	204
Total CAP Requirments	603.4	312.7	51.8	575.5

Source: CAP 2010, 2011

Poverty in the Occupied Palestinian Territory

In November 2010, the Palestinian Central Bureau of Statistics (PCBS) suggested that the methodology used to measure poverty in the OPT be replaced. The introduction of a new methodology has effectively reduced the number of families that are considered to be living in poverty. This paper will first explain and clarify the previously used methodology, before later bringing to light the controversy and challenges inherent to the implementation of the newly devised methodology.

Determining poverty rates using the old methodology

In 1997 a specialized team was contracted by the PNA to formulate a methodology that would establish an officially recognized framework and definition of poverty in the OPT. The team suggested assigning two poverty lines to the methodology, the deep poverty line and the relative poverty line. These two lines were used to distinguish the relationship between the goods and the services contained in the 'consumption basket' the calculations are based on. The deep poverty line was determined according to the expenditure on the 'primary basket' (primary goods only - food, clothing and housing). Conversely, in addition to primary goods, the 'relative poverty basket' was representative of other vital goods such as medication, education, transportation etc.

Using the old methodology, the poverty levels were calculated using a 'reference family' (2 parents and 4 children). Consequently, the calculation of the poverty level is family-based and not individual-based. The poverty rate was determined by using the following methodology: families were sorted and divided into 20 equal groups according to the data collected from a consumption and expenditure survey (each group contains 5% of the total expenditure) - beginning with the poorest (the least expenditure on consumption) and ending with the wealthiest family. Next, the percentage of the families using less than 60% of the average total household expenditure on the primary basket' or the 'relative poverty basket' is determined. Families that consumed less than 60% of the average expenditure were considered to be poor or living in poverty.

The average expenditure of all the Palestinian families on the primary consumption basket was about 1,900 NIS per month in 1997. Sixty percent of this average was considered the boundary for the deep poverty line (1,141 NIS). The relative poverty line in the same year was 1,390 NIS.

An exposition of the old methodology shows that poverty rates change according to the fluctuations of expenditure on consumption from year to year, and that poverty in this methodology is a relative concept. The PCBS has rightfully argued that the use of this methodology hinders policy maker's ability to measure the effects of their policies directed at alleviating poverty.

Table 1: Poverty levels in the OPT according to the old and new methodologies

	According to the old methodology				According to the new methodology			
Year	Poverty line (NIS)	Poverty Rates in OPT (%)	Poverty Rates in WB (%)	Poverty Rates in GS (%)	Poverty line (NIS)	Poverty Rates in OPT (%)	Poverty Rates in WB (%)	Poverty Rates in GS (%)
2005	2,143	29.5	22.3	43.7	1,907	24.3	24.3	28.4
2006	2,300	30.8	24	50.7	1,981	24	23.3	30
2007	2,362	30.3	19.1	51.8	2,017	31.2	22.3	49.5
2009	-	45.7	37.9	65.1	2,278	21.9	17	33.2

Source: Old methodology data (2003, 2006, 2007), different poverty reports, PCBS. New methodology data & data in 2009, PCBS, most important poverty features according to the new methodology, November 2010.

Determining poverty rates using the new methodology

The PCBS has suggested the use of a new methodology to determine the poverty rate in the OPT. This methodology is based on the position that the poverty line in 1997 should be fixed and specified as a national poverty line (the deep poverty line= 1,141 NIS per month for the reference family and the relative poverty line= 1,390 NIS monthly for the reference family).

This approach leaves open the possibility of using different price levels in different regions of the OPT. Because residents of the West Bank face higher prices than the those residing in the Gaza Strip, the average prices of the OPT are neither representative of the West Bank nor the Gaza Strip; however, when using this methodology, the value of the national nominal poverty line can vary from area to area as the real value remains constant. Furthermore, the new methodology is considered to hold intrinsic value because it takes into consideration that the purchasing power of the NIS may decrease the number of families that live below the poverty line. Additionally, the new methodology prefers calculating poverty rates for individuals rather than families. Statistics show that low income families are often larger than those with higher economic standing.

The application of the new methodology in the OPT has significantly reduced the number of families considered to be living below the poverty line. Table 1 shows poverty line values and poverty rates according to both the new and old methodologies. The figures represented in the table below are indicative of families living under poverty when the old methodology is used, and individuals when figures collected using the new methodology are presented. In 2006 the poverty line value for a family decreased from 2,300 NIS to 1,981 NIS. As a result, the poverty rates in the OPT declined from 30.8% of the families to 24% of the individuals. These figures bring to attention the fact that the reduction of poverty levels in the OPT were predominantly confined to the Gaza Strip, while the poverty rate in the West Bank witnessed only a slight decrease.

When considering that the application of the new methodology has drastically decreased the poverty level in the OPT, it is not surprising that concerns have risen to the surface. For instance, according to data calculated using the old methodology, there were 312,000 families in the OPT living in poverty (694 thousand total Palestinian families X 45%). Because the average number of family members in each Palestinian family was 5.8 in 2009, about 1.8 million OPT residents were considered to be living in poverty during this period (312 thousand families X 5.8 members). Contrastingly, according to the new methodology, the poverty rate among individuals was 22% in 2009, and the number of OPT residents living in poverty was 880,000 (four million citizens in Palestine X 22%). Taken from this, the question must be raised: does the disparity of figures represented by the rivaling methodologies represent clinical error or the economic improvement of those residing in the OPT?

In logical terms, poverty reduction should be accompanied with the amelioration of other well-being indices such as a decreased unemployment rate. However, in this instance, there is evidence that the standards of living in the OPT has deteriorated in recent years - most notably in the Gaza Strip. Moreover, experts must be made aware of both the new and old methodologies so that policy makers do not come under false presumption that poverty in the OPT is a less critical issue now than it has been in recent years. Using the new methodology brings with it completely new figures and data that cannot in any way be compared with figures and data gathered using the old methodology. This reality may very well have influenced the PCBS's decision to postpone the introductory publication of the new poverty measuring methodology in the OPT.

World Food Security

World food prices have returned to the high levels last seen during the 2008 food crisis. In December 2010, the FAO Food Price Index (FFPI) reached 223 points; an increase of 11.7%, compared with its average in 2008. Keeping in mind that already one sixth of the world's population suffers from hunger and starvation, the threat of a second world food crisis becomes more serious. Moreover, FAO economist and grains expert Abdolreza Abbassian stated *"theses high prices are likely to persist in the months to come"**. As shown in figure 1, world food prices continued to increase during the second half of 2010recording an increase of 24% in December, compared with the 180 point level in January of the same year.

Table 1 tracks the developments in the price index of the five main basic food categories that represent the food price index in international markets. Analysis of each category demonstrates that the:

* Sugar price index sky-rocketed in 2010, compared with 2009, recording almost a doubling in price. The sugar price index kept on increasing during the second half of 2010, but the most overwhelming increase occurred in September (an increase of 55 points compared with August of the same year). This is due to the fact that leading global exporters, Mexico and India, suffered from unfavorable weather conditions leading to a decrease in output.
* Oils price index recorded an increase by almost 43 points from 2009 to 2010. In addition, it increased from July till November, 2010, then started to decrease in December of the same year reaching 163 points compared with 243 points in November of the same year.

Table 1: Main Food Commodities Price Index (base year 2002-2004=100)

	Sugars	Oils	Cereals	Dairy	Meat
2009	157	150	174	142	118
2010	302	193	183	200	135
July 2010	247	174	163	198	134
August 2010	263	192	185	193	138
September 2010	318	198	208	198	137
October 2010	349	220	220	203	140
November 2010	373	243	223	208	141
December 2010	398	163	238	208	142

Source: http://www.fao.org/worldfoodsituation/

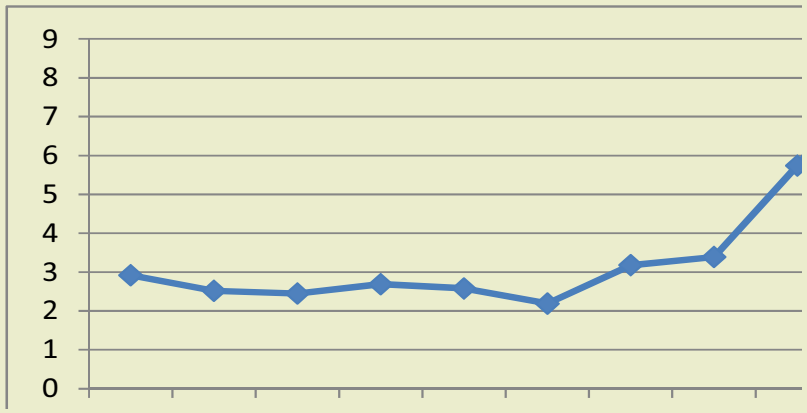
Table 2: World Cereal Market (Million tons)

	2009/2008	2010/2009 Estimated	2011/2010 Forecast	2010/2011 over 2009/2010
Production	2,285.5	2,263.4	2,216.4	%2.1-
Trade	281.3	273.6	267.3	%2.3-
Utilization	2,181.8	2,226.0	2,253.8	%1.3

Source: FAO food outlook, November 2010

* Cereals price index continued to increase during the second half of 2010 to reach a peak of 238 points in December, 2010. On the other hand, the cereals price index registered a slight difference (9 points) from 2009 till 2010 among sugars, oils, dairies and meat. Unfortunately, this may not be the case in periods to come, especially for wheat prices. According to the FAO Food Outlook (Nov, 2010), the stem rust pathogen which devastated wheat harvests in many countries in the past, has re-emerged in a new virulent form, designated as Race Ug99. It must be noted that wheat rusts are unlikely to destroy the entire global wheat crop. However, if left uncontrolled, they can cause severe periodic production shortfalls in some affected countries or regions. The very serious yellow rust epidemics observed in 2010, serves to highlight the reality of this threat.
* Dairies price index recorded an increase from 2009 till 2010, reaching 200 points. On the other hand, dairies witnessed minor fluctuations during the second half of 2010.
* Meat prices were almost stable during the second half of 2010, with slight increases compared with 2009.

Figure 1: World Food Prices during 2010 (base year 2002-2004=100)



Source: http://www.fao.org/worldfoodsituation/

World Cereal Production

Unexpected production shortfalls driven by weather changes negatively influenced the outlook for global cereal supply. By referring to table 2, we can see that FAO's forecast for world cereal production in 2010/11 stands at 2,216 million tons. This is 2 percent below 2009/2010 levels. As production numbers were trimmed over years (see table 2), policy responses in the form of export restrictions by some countries (such as Russia) also contributed to a rapid increase in international prices. On the other hand, total world utilization of cereals is expected to increase by 1.3% in 2010/11.

For stocks to be replenished and prices to return to more normal levels, FAO assesses that large production expansions are needed in 2011, especially for wheat and major coarse grains.

*http://www.fao.org/news/story/en/item/50519/icode/

Literature on Food Security

Troubling Tradeoffs in the Human Development Index By: Martin Ravallion

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Since 1990, the Human Development Index (HDI) has served as a more accurate measure of the development of countries than using national income per capita alone. To achieve this goal, the HDI aggregates country-level attainments in life expectancy, education, and income. Between 1990 and 2009, the Human Development Index used to calculate the average of the three selected indicators - life expectancy, education, and income - by dividing the sum of the three respective measures by three. This method gave equal weights to the functions employed to calculate life expectancy, education, and income. In contrast, the Human Development Report of 2010 moved away from the original more straight-forward function to a new one, which multiplies the three factors and then takes the root. Allegedly, the United Nations Development Programme (UNDP) made this change in order to relax the necessity for perfect substitutability across the three dimensions which the original equation provided. However, critics of the new UN approach correctly point out that this made the new calculations unnecessary complicated and the relationship among the three variables - unapparent.

Life expectancy at birth remained the only unchanged core dimension in the 2010 HDI. While the old model used literacy and the gross enrolment rate to measure education, the new one employs mean years of schooling and expected years of schooling, given by the years of schooling which a child can expect to obtain according to the current enrolment rate. This choice is partially motivated by the decision of the UNDP to switch from measures in percentages (literary and gross enrolment rates) to measures in years (mean and expected years of schooling). Finally, instead of computing income on the basis of the gross domestic product (GDP) per capita, the new calculations utilize the gross national income (GNI) per capita, still at purchasing power parity (PPP). In an increasingly globalized world, the level of domestic production (GDP) does not constitute an accurate measure of the amount of money at disposal for a nation's population. Remittances from abroad and international assistance can significantly increase the funds available to people, especially in the poor states. Both in the past and in the present, the three factors of the HDI are first put on a common scale between 0 and 1, taking into consideration the minimum and the maximum values assigned to each dimension.

Prior to 2010, life expectancy was bounded below by 25 years of age and above by 85 years, whereas now it varies between 20 years and 83.2 years. The new education variables - mean years of schooling and expected years of schooling - can obtain values from zero to 13.2 years and 20.6 years respectively. The GNI per capita, on the other hand, can vary between US $163 and US $108,211.

The analysis provided in the article unmistakably shows that the new HDI significantly lowers the weight on longevity for 164 of the 169 countries included by the UNDP. Plotting the new and old weights on life expectancy against national income per capita illustrates that the new method gives a very low importance to life expectancy in poorer countries and a very high significance to longevity in richer countries. As a result, while the HDI attaches a value of US $0.52 per year to an extra year of life expectancy in the poorest country, Zimbabwe, this figure jumps to US $9,000 per year in the richest one. These numbers account for a difference of 17,000 times between the highest and the lowest valuations of longevity. The most worrying concern in this respect stems from the possibility of the HDI to promote wrong domestic and international policy-making. The imbedded tradeoff between life expectancy and income suggests that the governments of poor countries should only want to pay a minimum amount of money in order to increase the expected lifespan for their citizens, while the governments of richer countries would be ready to spend 17,000 times bigger sums for the same improvement.

The new aggregation method of calculating the HDI has important implications on the education dimension as well. The author argues that the new HDI puts a higher weight on schooling for 119 of the 169 countries, compared to the old method of calculations. Moreover, similarly to longevity, one observes that education seems significantly more important in richer than in poorer countries from an economic point of view. While now the HDI values an extra year of schooling at US $1.68 per person per year in Zimbabwe, or at about 1% of the national income, it puts it at US $53,000 per capita per year in the country with the second highest GNI per person, or at about 67% of that country's GNI. The author points that the new HDI makes education seem significantly more important in richer countries than what standard economic theories consider. Nonetheless, the most striking characteristic of the HDI's implicit valuation of schooling is how much it surpasses the implicit valuation of longevity, suggesting that the designers of the new HDI recommend a shorter but better schooled life. Apparently, such an implication could have very serious negative policy-making consequences, especially in the poorest countries of the world.

Finally, the article offers an alternative index. Most importantly, this alternative index avoids the troubling property of the new HDI, whereby the marginal effect of an extra year of life on the HDI increases so much with per-capita national income. While the alternative index still assigns higher monetary valuations on longevity and schooling in richer countries, the difference between their importance in rich and poor countries decreases significantly.

The author concludes that the new approach substantially devalues longevity in poor countries. Life expectancy in the poorest country accounts for only 0.006% of its value in the richest one, which significantly exceeds their difference in income: the poorest country has a per-capita income of 0.2% of the national income of the wealthiest. Although most likely it was not the intention of the UNDP to place a higher value on the life of the rich than of the poor, one needs to pay special attention when interpreting the results of the new HDI, especially considering the traditional policy implications of the Index. Furthermore, the new model inflates the valuations of additional education in most countries, which in some cases exceeds the valuations typically placed by the labor market on extra schooling by four times. In conclusion, one should keep in mind the fact that the Human Development Index was designed and has been used not only to measure the quality of life across nations and to compare countries with regards to their social and economic progress. More importantly, it has served as a crucial tool in driving change through policy stimulation, especially in the poorest countries around the globe. This feature makes the new Index so problematic due to the implications which it might have on the value of human life, suggesting that elongating the life of the richer is more important than elongating the life of the poorer for a country's well-being, and suggesting that schooling is more important than longevity.