

FOOD SECURITY BULLETIN

Issue 17, Winter 2017

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Biannual Bulletin Published by:



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EDITORIAL

The Palestine Economic Policy Research Institute (MAS) is pleased to publish the second 2017 issue of its biannual Food Security Bulletin. Unfortunately, no new data on food security and food insecurity in Palestine has been collected by the responsible Food Security Sector (FSS) partners since 2014 due to lack of funding for a number of years. The good news, however, is that the relevant stakeholders have been able to find funds to conduct another round of the Socio-Economic and Food Security Survey (SEFSec) in 2018, which means that new data will become available to track changes in the status of the Palestinian population with regards to food security.

Nevertheless, the present issue looks at such important matters as food prices in Palestine, tracks their movements in recent months, and compares them to global food prices. Moreover, data on the funds requested by the FSS partners to implement food security projects in the West Bank and the Gaza Strip is presented and analyzed. We also summarize the 2017 issue of the annual Global Hunger Index (GHI) report and highlight the main findings and the consequent policy recommendations to alleviate the suffering of the most vulnerable communities around the globe and to reduce the level of hunger in line with Sustainable Development Goal (SDG 2): “End hunger, achieve food security and improve nutrition, and promote sustainable agriculture” by 2030. The Literature Review section summarizes an article which analyzes the relationship between food security, structural transformation, markets, and government policy.

Meanwhile, after completing the “Strategic Review of Food and Nutrition Security in Palestine”, commissioned by the World Food Programme (WFP), MAS continues work related to food security and nutrition in Palestine, beyond the publication of this Bulletin. MAS has been commissioned by the Food and Agriculture Organization (FAO) to conduct three survey-based studies on food losses, food and nutrition security commitment and capacity profile of Palestine, and evaluation of social protection programs’ contribution to improving food security and nutrition outcomes. We hope to brief readers on the latest of MAS’s engagements in food and nutrition security in forthcoming issues of the Bulletin.

HIGHLIGHTS

- The FSS requested through the HRP a total of \$289 million for implementing 51 food assistance, cash assistance, and livelihood support projects in the West Bank and the Gaza Strip. This is \$11 million below the 2017 appeal;
- Between May and October 2017, Palestinian food prices increased by 0.6% as the PCBS FPI reached 106.2 points at the end of the period. Year-on-year, between October 2016 and October 2017 the Palestinian FPI rose by 0.8%;
- In the period 2000-2017, the GHI dropped by 27%, from 29.9 to 21.8. Despite overall improvements, major regional disparities persist, and some countries face particularly high levels of hunger, mostly due to man-made causes;
- Between May and October 2017, global food prices went up by 2.3%, while the increase between October 2016 and October 2017 was 2.6%;
- In the Literature Review section, the Bulletin looks at an article which discusses the importance of food prices to food security, the role of government policy in food security, the fundamental transformations needed to ensure food security, and the changing global environment driving food security.

DEFINITIONS

Food Security: The World Food Summit (1996) established that “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”. This widely accepted definition points out to the following dimensions of food security:

- **Food Availability:** The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid);
- **Food Access:** Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources);
- **Utilization:** Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. This brings out the importance of non-food inputs in food security;
- **Stability:** To be food secure, a population, household or individual must have access to adequate food at all times. They should not risk losing access to food as a consequence of sudden shocks (e.g. an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity). The concept of stability can therefore refer to both the availability and access dimensions of food security.

Food Security in Palestine: The Food Security Sector (FSS) in Palestine, co-led by the Food and Agriculture Organization (FAO) and the World Food Programme (WFP) in close cooperation with the United Nations Relief and Works Agency for the Near East (UNRWA) and the Palestinian Central Bureau of Statistics (PCBS), classify Palestinian households within four categories with respect to food security (2014):

- **Food Secure:** Households that have sufficient food consumption, which they will be able to maintain without use of coping strategies while meeting their essential food and non-food needs;
- **Marginally Food Secure:** Households that risk not being able to maintain sufficient food consumption, and households that have adequate financial means but did not adapt their diet to an acceptable level;
- **Moderately Food Insecure:** Households that face issues with either the quantity or quality of food consumed, which they cannot address due to their limited financial means or without resorting to irreversible coping options;
- **Severely Food Insecure:** Households with a severe or significant consumption gap that they cannot counter through economic means or coping mechanisms.

Poverty in Palestine: The PCBS defines poverty using the budget of a standard household (five members: two adults and three children). There are two poverty lines:

- **Poverty Line:** A standard household with a monthly budget below NIS 2,293 (2011) covering food, clothing, health care, education, transportation, and housekeeping supplies;

- **Deep Poverty Line:** A standard household with a monthly budget below NIS 1,832 (2011) covering food, clothing, and housing costs.

Standard of Living: The Standard of Living is defined as a household’s food consumption relative to its total consumption. The PCBS has divided the Standard 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 %30-44;
- **Lower Standard of Living:** Food consumption to total consumption is more than %45.

Global Hunger Index (GHI): The GHI (2015) measures hunger and malnutrition through four weighted indicators: undernourishment, child wasting, child stunting, and child mortality. The index ranks countries on a 100-point scale and divides them into five categories:

- **Low Hunger:** 0.0-9.9;
- **Moderate Hunger:** 10.0-19.9;
- **Serious Hunger:** 20.0-34.9;
- **Alarming Hunger:** 35.0-49.9;
- **Extremely Alarming Hunger:** 50.0-100.0.

Undernourishment: FAO defines undernourishment as being unable to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year.

Sustainable Development Goals (SDGs): In 2015, the UN countries adopted a set of 17 goals with 169 targets to end poverty, protect the planet, and ensure prosperity for all to be achieved between 2016 and 2030 under the 2030 Agenda for Sustainable Development.

Human Development Index (HDI): The HDI is a summary measure of average achievement in key dimensions of human development: enjoying a long and healthy life; being knowledgeable; and having a decent standard of living. It is calculated based on four indicators: life expectancy at birth, mean years of schooling, expected years of schooling, and GNI per capita (Purchasing Power Parity \$).

Consumer Price Index (CPI): The 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 by the PCBS in calculating the Palestinian CPI, and the items are weighed according to their importance. Food weighs around %40 of the total CPI, transport and communication %13, and textiles, clothing and footwear %10.

Food Price Index (FPI): The FPI compiled by FAO represents international prices of food commodities. It is calculated by taking the weighted average of five commodity group price indices: meat, dairy, cereals, oils, and sugar.

Food Security Sector Funding in Palestine

The main tool for fundraising for the Food Security Sector (FSS) in Palestine is the Humanitarian Response Plan (HRP). The HRP is comprised of seven sectors: education, coordination and support services, waste, sanitation and hygiene (WASH), health and nutrition, protection, shelters, and food security. The HRP allows for a high degree of coordination among the various sectors in the FSS as well as in other sectors in order to avoid duplication of efforts, to assist partnerships, and to facilitate the submission of funding requests to donors.

FSS Funding Appeal 2017

In 2017 the Palestinian HRP appeal amounted to \$547 million, of which 55% was requested by the FSS.¹ Education requested 4%, coordination and support services 3%, WASH 7%, health and nutrition 2%, protection 10%, and shelters 19%. The total funding requested by the FSS reached \$300 million: \$75 million for West Bank projects and \$225 million for Gaza Strip projects.

At the national level, 52% of the requested funding was allocated to food assistance projects, 28% to cash based programs, and 20% to livelihood support. The total number of beneficiaries was expected to reach 1.57 million, most of whom are located in Gaza, which faces a much direr food insecurity situation.

The majority of the funds were requested by UN agencies (85%), while international NGOs and local partners requested only 8% and 7% of the total, respectively. As much as 40% of the funding was requested for projects to be implemented through partnerships among the FSS actors.

FSS Funding Appeal 2018

In 2018 the HRP appealed for a total of \$540 million in funding. Once again, more than half of this funding is needed for projects within the food security sector (54%). The education sector requested 4% of the total appeal, coordination and support services 5%, WASH 7%, health and nutrition 5%, protection 8%, and shelters 17%. The total funding needs of the FSS dropped marginally from \$300 million in 2017 to \$289 million in 2018: \$61 million for projects to be implemented in the West Bank (21% of the total) and \$228 million for interventions in the Gaza Strip (79% of the total).

In the West Bank the focus is on livelihood support as 40% of the funds are needed for

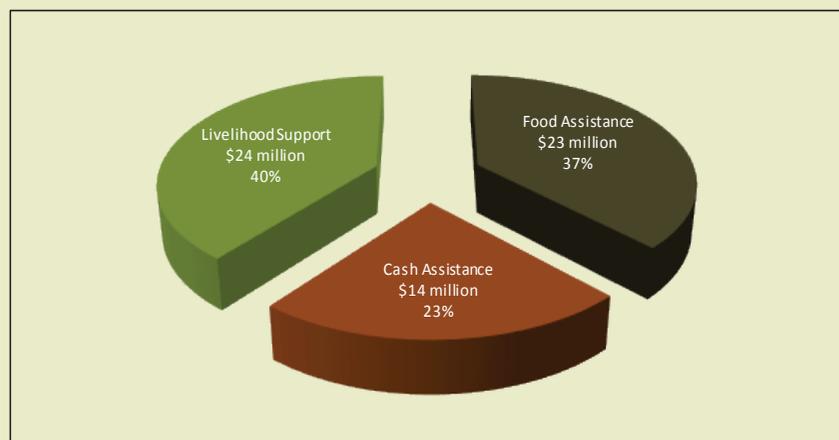
projects of this type. Food assistance requires 37% of the West Bank appeal and cash based programs 23%. In the Gaza Strip, the total requested funds are to be distributed in a very different matter in terms of type of project. Food assistance remains the largest need in Gaza, as it requires 56% of the total funds, followed by cash based programs (33%) and then livelihood support (11%).

FSS projects submitted for funding in 2018 through the HRP target 250,000 food insecure people in the West Bank. There are a total of 22 projects planned in the West Bank (9 Palestinian and 13 international), to be implemented by 17 FSS partners (7 Palestinian and 10 international). Of the \$61 million funds requested, \$7 million are for Palestinian projects and \$54 million for international projects. In specific, the three UN Agencies active in the food security sector plan to implement five projects, which require 67% of the total funds for the West Bank. Meanwhile, six international NGOs

have submitted seven projects for 21% of the funding appeal, and eight national NGOs have submitted ten projects for 12% of the total funds. In terms of geographical distribution of the appealed funds, 70% are needed in Area C, 15% in Areas A and B, 10% in East Jerusalem, and 1% in Hebron-H2.

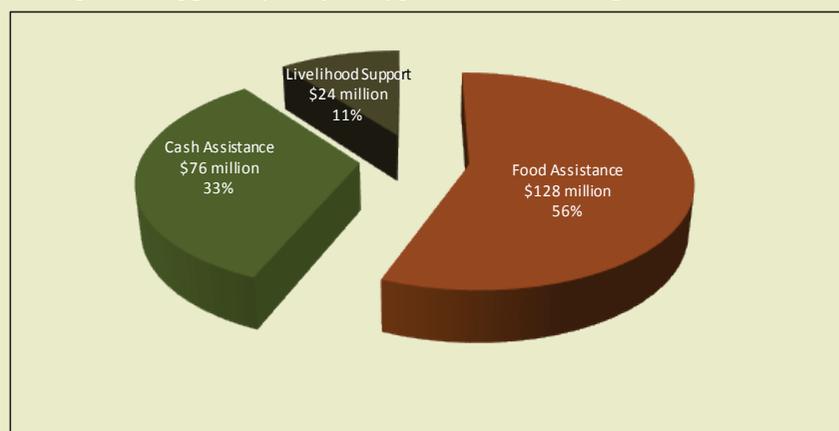
In regard to the distribution of local and international projects, the situation in the Gaza Strip is somewhat similar. The requested funding will target 1.2 million food insecure individuals through a total of 30 food security projects: 8 Palestinian and 22 international. These interventions are to be implemented by 22 partners: 8 Palestinian and 14 international. Of the total \$228 funds requested, only \$7 million is for Palestinian managed projects, while the remaining \$221 million is for international agency projects. In Gaza, projects are also mostly dominated by UN Agencies. The three main UN Agencies in the FSS submitted eight projects for 67% of the total appealed funds. Eleven international NGOs submitted 14 projects and requested 7% of the funds, while eight national NGOs proposed eight projects for 3% of the total appeal. Most funds are allocated to the Gaza governorate: \$75.8 million.

Figure 1: Appeal by Project Type in the West Bank, 2018 (\$ and %)



Source: FSS, 2017.

Figure 2: Appeal by Project Type in the Gaza Strip, 2018 (\$ and %)



Source: FSS, 2017.

1 <http://fscluster.org/state-of-palestine/documents>

Food Prices in Palestine

Palestinian food prices, as measured by the Palestinian Central Bureau of Statistics (PCBS) Food Price Index (FPI), a component of the Consumer Price Index (CPI), have gone up in the most recent period. After a major drop of 3.1% between May and June 2017, local food prices went up by 0.5% in July, 1.5% in August, 1.4% in September, and 0.4% in October. Consequently, between May 2017 (the last month reported in Food Security Bulletin 16) and October 2017 (the last month reported in this issue), the FPI in Palestine increased by 0.6% as it reached 106.2 points at the end of the period. The index rose by 0.8% year-on-year between October 2016 and October 2017.

Food Prices versus Consumer Goods Prices

As usual, the changes in the monthly FPI generally coincided with the changes in the monthly CPI in Palestine in the past few months. The reason for this is the fact that the

FPI has a weight of about one third in the composition of the CPI. Nonetheless, the variations in food prices were more pronounced on a monthly basis. Overall, between May and October 2017, the CPI went up by 0.3%, compared to an increase of 0.6% in the FPI. In October 2016-October 2017, consumer goods prices increased by 1%, compared to a rise of 0.8% in food prices.

Domestic Food Prices versus World Food Prices

Palestinian food prices, measured by the PCBS FPI, and world food prices, measured by the Food and Agriculture Organization of the United Nations (FAO) FPI, are depicted in Figure 3. Palestinian and global food prices continued moving generally independently. The Palestinian FPI is mostly comprised of locally produced food items, which isolates it somewhat from changes in global food prices. In the period May 2017-October 2017, world food prices

experienced a significant rise of 2.3%, much above the increase of 0.6% in Palestinian food prices. The year-on-year increase in the FAO index of 2.6% also exceeded the rise in the PCBS FPI of 0.8%.

Food Prices by Region

The PCBS FPI is the weighted average of three geographical indices: for the West Bank (0.59 of the total weight), the Gaza Strip (0.34), and East Jerusalem (0.07). Thus, on monthly basis the nationwide food price levels follow mostly closely the variations in the West Bank FPI. In the five months covered in this Bulletin, food prices in the West Bank went up by 0.8%, while they dropped by 1.7% on annual basis. In the Gaza Strip, the FPI increased merely by 0.02% in May-October 2017 and by 5.3% year-on-year. Meanwhile, the East Jerusalem faced a decline of 1.0% in the five-month period and of 0.8% on annual basis.

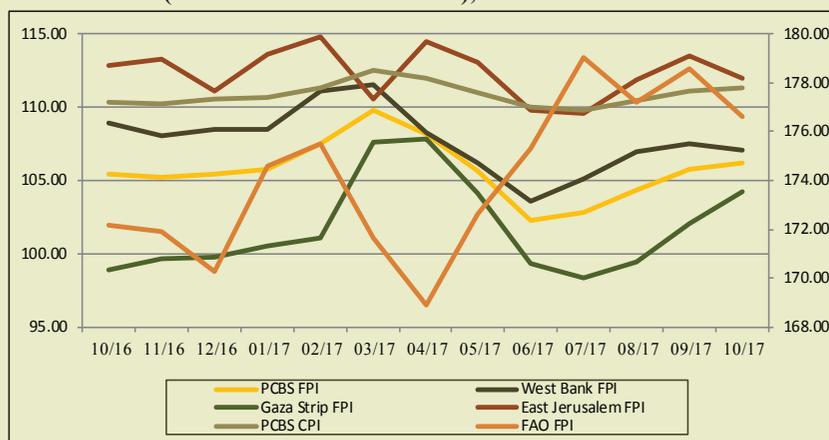
Basic Food Items Prices

The monthly prices of the nine basic food items in the Palestinian consumer basket over the past year are illustrated in Table 1. The table also shows the changes in the prices of these food items in May-October 2017 and October 2016-October 2017.

Over the past five months, the prices of five basic food items dropped. The most significant declines were in the price of white sugar (17.1%) and rice (8.9%), followed by olive oil (2.3%), fresh chicken (2.2%), and white flour (1.7%). The price of white bread and milk remained unchanged. Meanwhile, the price of chicken eggs went up by 6.9% and the price of fresh beef by 6.3%.

Year-on-year, all basic food items' prices went down, except for the price of milk, which remained the same. The largest price drops were in white sugar (26.6%), rice (13.9%), and fresh beef (9.5%).

Figure 3: PCBS FPI by Region, PCBS CPI (Base Year 2010=100) and FAO FPI (Base Year 2002-2004: 100), October 2016-October 2017



Source: PCBS, 2017 and FAO, 2017.

Table 1: Prices of Nine Basic Food Items in Palestine, October 2016-October 2017(NIS)

Items	Unit (kg)	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Change May 2017-Oct 2017 (%)	Change Oct 2016-Oct 2017 (%)
Rice	25	133.8	130.3	129.3	128.9	129.8	128.9	128.6	126.4	121.5	122.8	121.2	120.4	115.2	-8.9	-13.9
White Flour	60	137.8	137.5	137.2	124.9	138.2	139.5	141.4	134.6	137.8	136.6	136.3	132.0	132.3	-1.7	-4.0
White Bread	1	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	0.0	-2.7
Fresh Beef	1	52.4	50.8	45.7	45.1	45.4	44.9	46.2	44.6	46.0	46.4	47.0	46.7	47.4	6.3	-9.5
Fresh Chicken	1	13.6	13.8	13.9	13.5	15.3	16.6	13.8	13.7	13.9	13.8	14.6	13.3	13.4	-2.2	-1.5
3% Milk	1	7.4	7.4	7.3	7.4	7.4	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	0.0	0.0
Chicken Eggs	2	14.1	15.0	15.7	15.8	15.3	15.1	14.2	13.1	12.4	12.7	14.5	14.0	14.0	6.9	-0.7
Olive Oil	1	30.8	31.0	31.4	30.8	30.8	31.0	30.9	30.9	30.7	30.9	31.1	30.4	30.2	-2.3	-1.9
White Sugar	50	149.0	151.4	148.6	144.8	141.9	142.6	124.3	131.8	128.0	125.1	122.5	115.0	109.3	-17.1	-26.6

Source: PCBS, 2017.

Global Hunger Index 2017

In October 2017 the International Food Policy Research Institute (IFPRI), Concern Worldwide, and Welthungerhilfe (WHH) published the twelfth annual Global Hunger Index (GHI) report, for the year 2017, under the title “The Inequalities of Hunger”.¹ The GHI is a multidimensional measure of hunger at the global, regional, and national levels.

GHI Methodology

The GHI looks at hunger as a complex issue with numerous elements and aspects. The GHI scores are based on a formula which captures three dimensions of hunger – 1) insufficient caloric intake, 2) child undernutrition, and 3) child mortality – using four component indicators:

- **Undernourishment:** The share of the population that is undernourished, reflecting insufficient caloric intake;
- **Child wasting:** The share of children under the age of five who are wasted (low weight-for-height ratio), reflecting acute undernutrition;
- **Child stunting:** The share of children under the age of five who are stunted (low height-for-age ratio), reflecting chronic undernutrition;
- **Child mortality:** The mortality rate of children under the age of five.

The GHI score is based on a 100-point scale, where 0 is the best score (meaning no hunger) and 100 is the worst score. The GHI scale is divided into the following categories:

- 0 - 9.9: Low hunger;
- 10.0 - 19.9: Moderate hunger;
- 20.0 - 34.9: Serious hunger;
- 35.0 - 49.9: Alarming hunger;
- 50.0 - 100: Extremely alarming hunger.

Global GHI

Globally the levels of hunger and malnutrition have declined over the long term. The average GHI score dropped from 29.9 in 2000 to 21.8 in 2017, which is a decline of 27%. Improvements have been achieved in all four component indicators

listed above. The share of undernourished people declined from 18.2% in 1999-2001 to 13.0% in 2014-2016. Child wasting decreased from 9.9% in 2000 to 9.5% in 2017, while child stunting dropped from 37.7% to 27.8% over the same period. Meanwhile, child mortality went down from 8.2% in 2000 to 4.7% in 2015.

Nevertheless, efforts so far have been insufficient to eradicate hunger and undernutrition worldwide due to deep and persistent inequalities. In early 2017, according to the UN, more than 20 million people in four countries (Nigeria, Somalia, South Sudan, and Yemen) were at the risk of famine. The reasons for these critical situations are largely man-made, including violent conflict and internal strife preventing people from accessing food and clean water and keeping aid organizations from reaching people.

Regional GHI

Although the average global hunger level has decreased, some regions of the world continue to struggle with hunger more than others. In specific, South Asia and Sub-Saharan Africa are the two regions with the highest GHI scores: of 30.9 and 29.4, respectively. These scores mean that these regions on average experience serious hunger. The serious level of hunger in these two regions is driven by different factors. In South Asia, the main reason for this level of hunger is child undernutrition as measured by child stunting and child wasting. In Sub-Saharan Africa, on the other hand, the main drivers of hunger are undernourishment (reflecting overall calorie deficiency among the population) and child mortality. Rising food prices, droughts, and political instability have been driving hunger there.

The other four regions of the world, investigated in the GHI report, include Near East & North Africa, East & Southeast Asia, Latin America & the Caribbean, and Eastern Europe & the Commonwealth of Independent States. They exhibit low to moderate levels of hunger with scores ranging from 7.8 to 12.8.

Country-Level GHI

Major differences continue to persist among the 119 countries included in the 2017 issue of the GHI report, both within and across regions. In 2017 there was one country suffering from extremely alarming hunger. The Central African Republic scored the worst in 2017, with a GHI score of 50.9. This score marks no improvement from 2000 despite a temporary advancement to 47.0 in 2008. The subsequent reversal after 2008 is the result of instability, sectarian violence, and civil war since 2012. Another seven countries (Chad, Sierra Leone, Madagascar, Zambia, Yemen, Sudan, and Liberia) face extreme hunger although they all have experienced major improvements in the past years.

Meanwhile, 44 countries face serious level of hunger at the moment. The good news is that they all have experienced major drops in the prevalence of hunger since 2000. For example, Rwanda's GHI score dropped from 56.3 in 2000 to 31.1 in 2017; Ethiopia's from 56.0 to 32.3; Mozambique's from 48.7 to 30.5; Lao PDR from 48.1 to 27.5; and Burkina Faso from 47.9 to 27.6.

In addition, 24 out of the 119 investigated countries faced moderate hunger, and 43 countries low level of hunger.

Policy Recommendations

As usual, the 2017 issue of the GHI report concludes with policy recommendations for alleviating the situation of the most vulnerable populations around the world. The report highlights the fact that hunger persists even though enough food is produced to feed the global population. Hunger is rooted in the uneven power relations, perpetuated and exacerbated by laws, policies, attitudes, and practices. In face of this situation, the report proposes the following:

- Foster democratic governance of the national food systems by including underrepresented groups, such as small-scale farmers, in the policy-making process;

¹ <http://www.globalhungerindex.org/pdf/en/2017.pdf>

- Broaden the meaningful participation of people's movements and civil society organizations from all parts of the world in international food policy debates;
- Guarantee civil society space at the national level to hold decision-makers accountable on their obligation to protect and ensure the Right to Food;
- Create and enforce regulatory frameworks by governments to safeguard citizens, especially the most vulnerable ones, from the negative impacts of international trade and agriculture agreements as well as the actions of private companies which could endanger citizens' food sovereignty and food and nutrition security;
- Analyze how power inequalities affect different groups in society;
- Build the capacity of small-scale producers, particularly women, by ensuring access to public services;
- Provide equal access to education, health, and income security;
- Address data gaps with respect to hunger and inequality to monitor progress towards Sustainable Development Goal (SDG 2) Zero Hunger and to hold governments accountable;
- Fund adequately efforts to achieve the SDGs.

Global Food Prices

Global Food prices, as measured by the FAO FPI, continued going up until July 2017. They started their upward move at the beginning of 2016 after significant declines in 2014 and 2015. In June and July 2017, the global FPI went up by 1.6% and 2.1%, respectively, before dropping by 1.0% in August. Then world food prices increased by 0.8% in September and declined by 1.1% in October. Overall, the increase in the five-month period amounted to 2.3%, while the annual rise was 2.6%.

The November 2017 edition FAO's "Food Outlook: Biannual Report on Global Food Markets"¹ highlights that global food commodity markets are well supplied and that the global food import bill is expected to reach its second highest level on record due to sharp increases in freight rates, strong import demand, and firmer prices of food commodity goods.

Global Food Prices of Basic Food Commodities

Figure 4 shows the trends in the FAO FPI over the last two years as well as in the five basic food commodity group indices which make up the overall index. These food commodity groups include meat, dairy, cereals, oils, and sugar. As the table shows, the separate food commodity group price indices behaved differently over the last few months. A brief description of the movements in each of them follows below.

Meat Price Index

The global price of meat continued to go up, a trend which started in April 2016. In the period May-October 2017, the meat price index increased by 0.9%, while the rise year-on-year was 6.9%. In June 2017 the global meat price index reached its highest level (175.6 points) since February 2015 (176.9 points).

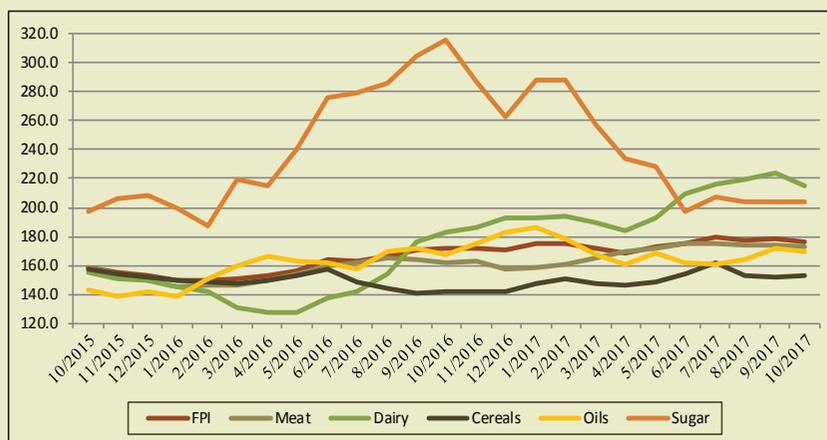
According to FAO, the reasons for the increase in meat price between January and June 2017 included a lively demand for import and short availabilities for export. Since July 2017, increased competition and slower import demand resulted in international food prices leveling off.

Dairy Price Index

The global dairy price index experienced the highest increase in recent months. Between May and October 2017, the price of dairy products went up by 11.3%, whereas it rose by 17.5% between October 2016 and October 2017. In August 2017 the FAO dairy price index reached its highest level (224.2 points) since July 2014 (226.1 points).

FAO forecasts the world production of dairy products in 2017 to exceed 2016's levels due to favorable weather conditions and more attractive global prices.

Figure 4: FAO FPI and Five Basic Food Commodities Price Indices, October 2015-October 2017 (Base Year 2002-2004=100)



Source: FAO, 2017.

Cereals Price Index

There has been no particular trend in the price of cereals on the global markets in recent months. Overall, the FAO cereals price index went up by 3.1% over the past five months, while it increased by 7.3% on annual basis. In July 2017 the index reached its highest level (162.2 points) since July 2015 (166.5 points).

FAO forecasts that world wheat production will fall below 2016's record level, but wheat supply will remain relatively large in 2017/2018. Wheat stocks are projected to reach an all-time high. Meanwhile, the global production of coarse grains is expected to reach a record high level, resulting in an all-time high world stock. The world rice inventories are also forecast to increase as a result of supplies exceeding utilization.

Oils Price Index

The world price of oils was also unstable in recent months. In the period May-October 2017 the FAO oils price index increased by 0.8%, and it went up by 1.3% between October 2016 and October 2017.

According to FAO, world oilseed production will remain flat in 2017/2018. However, due to the large carry-in stocks, world supplies of meals/cakes and oils/fats will expand further. Output is expected to match demand, leaving closing stocks steady at comfortable levels.

Sugar Price Index

The global sugar price index is the only one which experienced a decline, following a trend which started in March 2017. Between May and October 2017, the global price of sugar fell by 10.7%, whereas it declined by as much as 35.5% year-on-year. In June 2017 the FAO index reached its lowest level (197.3 points) since February 2016 (187.1 points).

FAO explains the further drop in the world price of sugar with the potential for higher supplies in 2017/2018, including prospects for a larger beet crop in the EU and larger output in Russia.

Literature Review

Food Security, Structural Transformation, Markets and Government Policy¹

By C. Peter Timmer

Asia & the Pacific Policy Studies,
Vol. 1, No. 1, pp. 4-19

This article looks at the importance of food prices to food security, the role of government policy in food security, the fundamental transformations needed to ensure food security, and the changing global environment driving food security.

Food Prices

Food prices are a major indicator of the state of food security through two indicators: average price level and price volatility. The effect of food price levels on food security, especially among the poor, is obvious: food security is more achievable with low food prices, while high food prices undermine the food security situation of vulnerable groups. However, price stability is equally important as sudden changes in the price level – both up and down – pose risks and threaten to increase poverty among consumers and farmers even in cases of affordable average food prices. First of all, highly unstable prices affect negatively households at the micro level. Second, they have a major macro impact as they slow down economic growth and the structural transformation leading rural communities out of poverty. Consequently, price instability hurts the poor in the short as well as in the long term.

The Role of Government Policy

This article develops a simple model of food security which focuses on the short run and on the macro level (policy-makers rather than household decision-makers). When both the global economy and food prices are stable, national policy-makers can focus their political and financial capital on the long-term process of inclusive growth. In such a world it is easier and less costly to prevent the poor from falling into irreversible poverty traps. Furthermore, the poor themselves can use their resources and entrepreneurial skills to achieve long-run sustainable food security.

In the opposite scenario, where the food economy is dictated by instability and ongoing crisis, policy-makers have to dedicate all efforts, budget resources, and leverage towards the goal of stabilizing food prices and providing food nets for the poor populations. Vulnerable families deplete all their human and financial capital in order to get fed and survive. Donors also find themselves trapped in this crisis mode and forced to allocate their human and financial resources to emergency relief rather than to investments in long-term development. Thus, policies should focus on creating inclusive economic growth with the aim of achieving sustainable food security, characterized by sustained poverty reduction and regular access to nutritious and healthy food.

To this end, analytical and policy flexibility is required in order to understand how to deal with both high-price and low-price environments in order to cope with market instability. The first step in this process is to understand the food marketing system, which transforms agricultural outputs into food on the table. Traditionally food marketing systems have been driven by the so-called middlemen, frequently blamed for exploiting farmers as well as consumers. Under pressure from more diversified and more productive farmers and from more demanding consumers in urban areas, the traditional food marketing systems have evolved into modern supply chains. These not only changed the nature of the farm-market-consumer interactions and provided for consumers' increased concerns over food safety and origin but have also become an important source of income growth and job creation in both rural and urban areas. The process of rapid change from traditional to modern food marketing systems has enabled three basic transformations which have paved the path out of rural poverty: 1) structural, 2) agricultural, and 3) dietary.

Effective food policies achieve rapid and sustained poverty reduction through four objectives: 1) faster economic growth (efficiency); 2) more equal distribution of new income (welfare); 3) guaranteed nutritional floor for the poor (safety net); and 4) food availability and price stability in food markets (food security). These four simultaneous objectives lead to the food price dilemma, meaning that a single market-clearing food price cannot achieve

¹<http://onlinelibrary.wiley.com/doi/10.1002/app5.161/epdf>

them all at the same time, so additional policy instruments are needed.

In conclusion to this section of the article, while markets play an important role in price discovery (what a commodity or service is worth in monetary terms) and in the allocation of society's scarce resources to meet the unlimited needs of consumers, government policies and markets have to work together to bring poor households into a growing economy based on a productive, sustainable, and stable food system.

Required Fundamental Transformations

As mentioned above, three basic transformations are needed to connect economic development and food security: 1) structural, 2) agricultural; and 3) dietary.

The structural transformation requires the share of agriculture in GDP and employment to decline, caused by and resulting in a higher productivity of agricultural labor. This change is tightly associated with urbanization as the share of urban economic activities in industry and modern services accompanied by the dropping share of agricultural activity drives the migration of rural workers to urban centers. Meanwhile, traditionally this structural transformation has been accompanied by falling food prices due to gains in agricultural productivity. The resulting higher productivity in all sectors is what secures sustainable poverty reduction and sustainable improvements in food security.

The agricultural transformation, at the same time, is driven by changes in the domestic demand for food, opportunities for international trade, commercialization of decision-making, and technical advances. The result is enhanced productivity in terms of both labor and land. In this respect, rapid gains have been achieved in recent decades in most regions of the world, while land consolidation has barely begun at the global level. Further major increases in labor productivity are needed in order to achieve the Sustainable Development Goals (SDGs) by 2030.

The dietary transformation is a complex issue which cannot be captured by any single measure. Generally speaking, four major changes have happened worldwide. First, the total caloric intake rose by 0.8% per year between 1961 and 2011, while hunger became uncommon and obesity turned into a rising problem over that period. Second, the nutritional quality of the diet improved majorly as the starchy staple ratio fell from 75% to 61%, and the intake of animal protein more than tripled. Third, the increases in the consumption of animal products would require the development of a modern feed industry. Fourth, calories from wheat increased by 8% per year, while the importance of rice dropped.

Changing Global Environment

Since the mid-20th century, the global environment for domestic food policy decision-making has changed dramatically. First of all, the fast economic growth in Asia highlighted the link between higher productivity of rural laborers and the sustainable elimination of poverty and hunger. Second, the communications revolution has pushed marketing margins down due to reduced transaction costs and better access to knowledge, benefiting both farmers and consumers. In addition, the rapid emergence of China and India as global growth engines caused a shift in the drivers of demand for commodities and natural resources. It became clear that the primary driver of commodity prices – from energy to food – is developing countries. Finally, the high energy prices became a game changer for agriculture and the food economy. High oil prices justified the use of sugar, maize, cassava, and vegetable oils to produce gasoline and diesel substitutes, which linked agricultural commodity prices to oil prices.

This Issue was funded by:



Arab Fund for Economic and Social Development (AFESD)