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The Oil Food Price Spiral in the Middle East

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The turmoil cascading back and forth across the Middle East is pushing up the price of oil. That in turn is one of the main factors causing food prices to rise, adding to already substantial economic and political tensions in the region and elsewhere. On February 24, the OPEC basket price for crude oil reached \$111.01, a rise in six months of over 30 percent. This figure was more than double that of 2005 and over four times what it was ten years ago. The price has jumped because of fears about stable supplies from the Middle East in light of the violent regime-opposition conflict in Libya, the continued uncertainty in post-Mubarak Egypt (Gulf oil supplies from Europe are transported through the Suez Canal), and the popular protests and challenges to ruling regimes in Yemen, Bahrain and elsewhere. The high oil prices are, of course, welcome in Iran and in other oil producing countries, where they bring higher revenues.

The background to rising prices is the economic recovery in the US and Europe from the financial collapse of 2008 and the slump of 2009. Earlier in 2008, food and other prices rose rapidly as a result of the boom in demand in China, India and other developing countries. The financial crisis brought that to an end but inflationary pressures resumed in 2010. There are also a number of structural factors at work: food prices are ever more influenced by fuel costs; bio-fuels have diverted agricultural production away from food; and low

interest rates have encouraged speculation in commodities. The unwillingness of many countries, especially the United States, to adopt policies to reduce global warming sends a strong signal about future demand for oil and therefore prices. Finally there is increasing talk that Saudi Arabian production has peaked and that its oil reserves are smaller than once thought.

The World Bank's food price index rose by 15 percent between October 2010 and January 2011: if this pace continues for one year the rise will come to almost 75 percent. The price of wheat has risen fastest, doubling between June 2010 and January 2011; maize prices are over 70 percent higher; and sugar, edible oils and other foodstuffs have also gone up sharply. As a result, since June 2010, some 44 million people have been driven into poverty in developing countries. According to the UN's Food and Agriculture Organisation (FAO) price rises have had serious consequences on nutrition. The main way people cope is by reducing their food intake and shifting consumption away from healthy foods to cheaper and less nutritious ones. This increases health risks such as malnutrition among the poor.

Agriculture depends heavily on the use of oil in every stage of production and distribution. Oil prices are increasingly important in determining the price of cereals. Seed fertilizer technology is energy intensive because the production of food is heavily dependent on chemical fertilizers that use oil as a primary input. The increase in fuel prices raised the cost of some fertilizers. Higher costs for fertilizer, fuel, and seeds could cause farmers lacking access to credit to produce less than they otherwise would have, or to shift to crops with fewer input requirements. Fertilizer production is also energy intensive as the mining, manufacture, and international transport of phosphates and potash all depend on oil. Gasoline and diesel fuel are heavily used throughout the irrigation and production processes. Finally, freight rates have increased and so the cost of transporting food to also has been affected.

A new dimension is the demand for biofuel, particularly ethanol that uses maize as a feedstock. As a result, maize production increased at the expense of wheat and led to the current price hikes of these two commodities. This

explains the relatively faster response of maize and wheat to changes in petroleum price compared to rice that is largely used as a foodstuff. The weather has also played a role. In the United States, corn supplies this year may hit a 15-year low, and corn diverted to ethanol production takes up some 40 percent of that crop. China — the world's biggest wheat grower — has suffered a major drought while Russia's wheat production has also been affected by drought. Some governments have been buying up scarce supplies, thus adding to pressure on prices.

The world's population has continued to rise, and economic development has resulted in dietary changes. In particular, more Asians are consuming more meat. That increases the demand for grain which is a major animal feed. Hence, food prices are unlikely to fall in the short or even medium term unless the world economy plunges back into recession.

Middle East countries are being affected by the global food crisis because they are large net food importers and have to rely on imports to meet about 50% of their food needs. Net food imports, the most important of which is wheat, account for about 5-10 percent of total imports. Gulf countries import all of their staple foods, but have the cushion of oil revenues. In Yemen, where 40 percent of the population exists below the poverty line, 80% of cereals are imported.

Many in the Middle East are vulnerable to increases in food prices because they spend an unusually high proportion of their income on food. Egyptians spent more on food than the population in any other emerging economy — about 40 percent of their monthly income, compared with 17 percent in Brazil or 20 percent in China and Saudi Arabia.

In many countries the price increases impose a heavy fiscal burden on governments because basic commodities are subsidized. While the Egyptian government subsidizes bread and other staples for the poor, most Egyptians buy more bread than is covered by the subsidies. They are therefore exposed to the rise in the international price of wheat.

Most governments have adopted measures designed to pacify their restive publics. For example, in February 2011, the Syrian government announced that it would cut taxes on basic foodstuffs and imports in a bid to offset rising food prices and help low-income households. Syria's social aid fund has just started distributing \$250 million of financial aid to 420,000 poor families. According to the UN Development Program, 14 percent of the country's 22 million people live in poverty and the average Syrian family spends about 50 percent of its income on food.

Kuwaiti citizens, for their part, are to be granted a cash transfer of about \$3,600 and 13 months of free food rations from February 2011. The cash transfer program threatens to accelerate the inflation rate as demand increases. In the same month, [King Abdullah of Saudi Arabia announced a \\$35bn package of handouts](#), including the introduction of unemployment benefits.

In 2008, the FAO stated that 31 million people in the Arab countries (10 percent of the population) suffer from hunger. This represents an increase of six million since 1990-92. The prevalence of hunger is notably high in Yemen and Sudan, at 32 percent and 21 percent respectively. In 2010, the FAO estimated that the recent food price shock led to an increase of some four million undernourished people in the Arab countries.

Taken together, Arab countries import more than 50 percent of the food they consume. Over the last 30 years, per capita production of cereals, which are the main staple food in Arab countries fell by 0.3 percent annually, while consumption increased by 0.6 percent. In 2008, they exported 64 million tons, a rise by 170 percent over the 1980 level. The region's cereal import bill stood at \$25.5 billion in 2007/08, compared to \$11 billion in 2003/04.

The disparity in access to food among the countries of the Arab League is huge, and made more acute by the conflict zones such as Iraq, Lebanon, Gaza, Somalia, and now Libya.

In addition, the global financial crisis could have serious implications for food security in many countries of the region. The tight credit situation may restrict access by some countries to finance, thus limiting their ability to import food. Arab countries could have difficulty financing their cereal imports through debt and may face increased fiscal pressure.

Demand and supply factors are increasing the risks of food insecurity in Arab countries. Urbanization (that often involves converting cultivated land to housing), population and income growth are such that the demand for food will continue to rise. On the other hand, supply-side constraints in the Arab countries could limit their ability to increase cereal production.

Limited water and land resources represent the main obstacle to increasing agricultural production in the Arab region. With less than two percent of the world's freshwater resources and rapid increases in its use, water has become increasingly scarce in the region. The region's per capita renewable water is projected to fall to below 500 cubic meters by 2050, compared with a world average of 4,800 cubic meters per capita. This could be further aggravated by climate change.

The region has very little fertile agricultural land, which is rapidly degrading because of urban expansion, soil erosion and salinization. Projections suggest that by 2050, arable land will fall to 0.12 hectare per capita, 63 percent lower than its level in the 1990s. The world average is 0.21 hectares per capita.

Investment in agriculture from both domestic and external sources remains low in most countries of the region. In the Middle East, external aid to agriculture has declined since 1995. External assistance to agriculture in Arab countries fell from \$1.6 billion dollars in 1994 to \$0.6 billion in 2004 (in constant prices), a reduction of 62 percent in real terms. Aid from Arab donors, including OPEC, fell by 28 percent over the same period.

The rise in food prices is like a tax that consumers pay to producers. Food-importing countries, including many in the Middle East, will pay more to major food exporting countries. They in turn will pay more for the fuel that they use to produce the food. As a result some of the funds will return to the Middle East, but not to the poor countries that are heavily dependent on these imports and which are insignificant oil exporters. In so far as high and rising food prices provoke or maintain tension, instability and conflict within the countries of the region, oil prices will remain high. That, in turn, will prevent food prices from falling.

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