

HIGH AND RISING FOOD PRICES

Why Are They Rising, Who Is Affected, How Are They Affected, and What Should Be Done?

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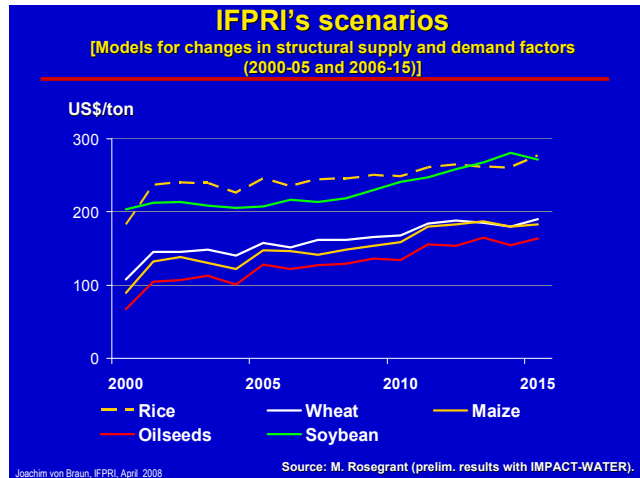
Presented at the U.S. State Department
Washington, D.C. • May 6, 2008

Slide 1



In 2007 the international food price index rose by nearly 40 percent, compared with 9 percent the year before, and in the first three months of 2008 prices increased further, by about 50 percent.

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IFPRI's scenario analysis suggests that structural forces will keep food prices high compared to the past decade for years to come, but the rise may not necessarily continue to be as steep as it has been recently.

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US\$ and EURO prices and ... so what?

January 2000- January 2008 change

Wheat US\$/ton nominal	+240 %
Wheat US\$/ton "real"	+172 %
Wheat EURO/ton	+134 %

What matters for the poor is purchasing power!

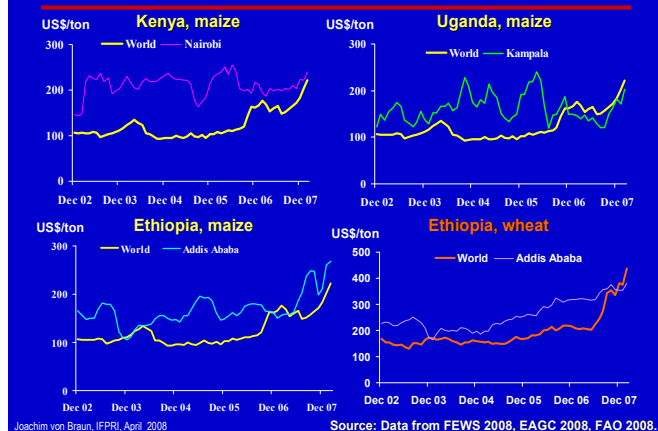
For instance approximated by the change in the ratio of: *poor peoples' food prices / unskilled wages*

Joachim von Braun, IFPRI, April 2008

When adjusted for inflation and the dollar's decline (by reporting in euros, for example), food price increases are smaller but still dramatic, with often serious consequences for the purchasing power of the poor.

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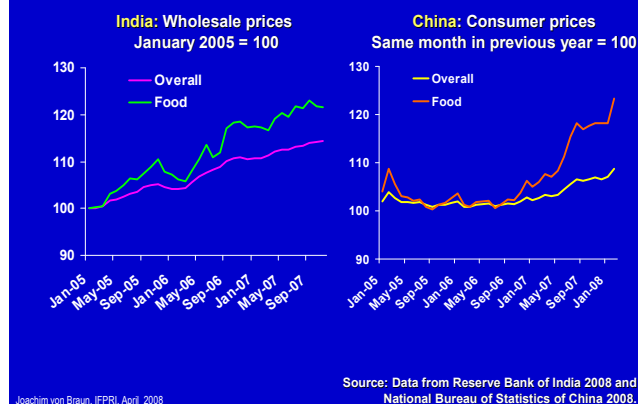
International prices reach into East African countries



Global prices are getting closer to domestic prices of poorer nations, who are often not in a position to shield themselves (i.e., their consumers) from global price shocks like some BRICs do.

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Less of price transmission in India and China



Trends in wholesale prices in India and the consumer price index in China for products in general show less increases than food prices in both countries.

The domestic food price increase in low income African countries is much higher than in India and China (note that the scales in the above graphs are different by countries).

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The food equation: Changes

<p>Production</p> <ul style="list-style-type: none"> Land Water Inputs & Transport costs Workforce Climate change Farm size structure Technology 	<p>Demand</p> <ul style="list-style-type: none"> Income growth Poverty and inequality Consumer behavior Bioenergy Biomass (CO₂)
<p>Trade and Markets</p> <ul style="list-style-type: none"> Information & Standards Supermarkets 	

Joachim von Braun, IFPRI, April 2008

A combination of new, fast-moving and ongoing, as well as slow-onset forces are driving the world food situation and, in turn, the prices of food commodities upward. Three forces are central:

1. high food demand (due to high income growth),
2. high energy price, and
3. misguided policies, including ambitious biofuels policies and neglect of agricultural investment for productivity growth.

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Shift towards high-value commodities

2005/1990 ratios of per capita consumption

	India	China	Brazil	Nigeria
Cereals	1.0	0.8	1.2	1.0
Meat	1.2	2.4	1.7	1.0
Milk	1.2	3.0	1.2	1.3
Fish	1.2	2.3	0.9	0.8
Fruits	1.3	3.5	0.8	1.1
Vegetables	1.3	2.9	1.3	1.3

Future grain consumption is driven by income growth, population growth, and feed for meat and dairy production

Joachim von Braun, IFPRI, April 2008 Source: Data from FAO 2007.

A dominant force is rapid economic growth in many developing countries that has pushed up middle-class consumers' purchasing power, generated rising demand for food, and shifted food demand away from traditional staples and toward higher-value foods like meat and milk. This dietary shift is leading to increased demand for grains used to feed livestock.

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Global agri-food business chain (The whole chain must respond to price changes)

<p>Agricultural input industry</p> <p>top 10: \$40 bln</p> <ul style="list-style-type: none"> • Syngenta • Monsanto • Bayer C • BASF AG • Dow Agro 	<p>Farms</p> <p>Agricultural value added: \$1,592 bln</p> <p>No. of farms: ca. 450 mln</p> <p>Size distr. >100 ha: 0.5% < 2 ha: 85%</p>	<p>Food processors and traders</p> <p>top 10: \$409 bln</p> <ul style="list-style-type: none"> • Nestle • Cargill • ADM • Unilever • Kraft Foods 	<p>Food retailers</p> <p>top 10: \$1,091 bln</p> <ul style="list-style-type: none"> • Wal-Mart • Carrefour • Metro G • Tesco • Seven & I 	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Consumers</p> <p>\$4,000 bln</p>
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Joachim von Braun, IFPRI, April 2008 Source: von Braun 2008.

The farm sector today needs to be viewed in the context of the overall value chain. Supply response is to be facilitated in the context of that whole chain, not just on the farm. The broader private sector is to be part of a solution of the price problem.

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Biofuels: fundamental change in world food price determination

Energy prices always affected agricultural prices through inputs, i.e. price of fertilizer, pesticides, irrigation, transport

Now, energy prices also affect agricultural output prices strongly via biofuel-land competition

Elastic energy demand creates price bands for agricultural commodities

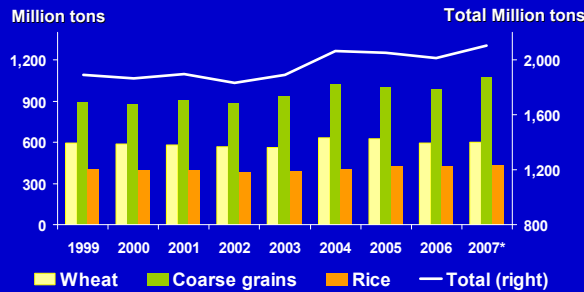
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Source: Schmidhuber 2007.

Energy and agricultural prices have become increasingly intertwined. High energy prices have made agricultural production more expensive by raising the cost of cultivation, inputs —especially fertilizers and irrigation — and transportation of inputs and outputs. In poor countries, this hinders production response to high output prices. The main new link between energy and agricultural prices, however, is the competition of grain and oilseed land for feed and food, versus their use for bio energy.

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World cereal production: Not growing enough



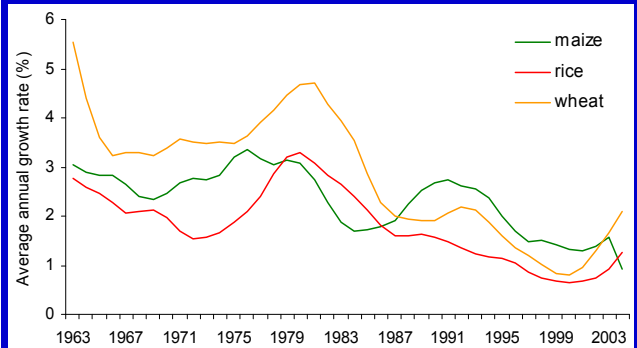
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Source: Data from FAO 2003, 2005-08. * Forecast.

The neglect of agriculture in public investment, research, and service policies over the past decade has undermined its key role for economic growth.

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Productivity growth is declining



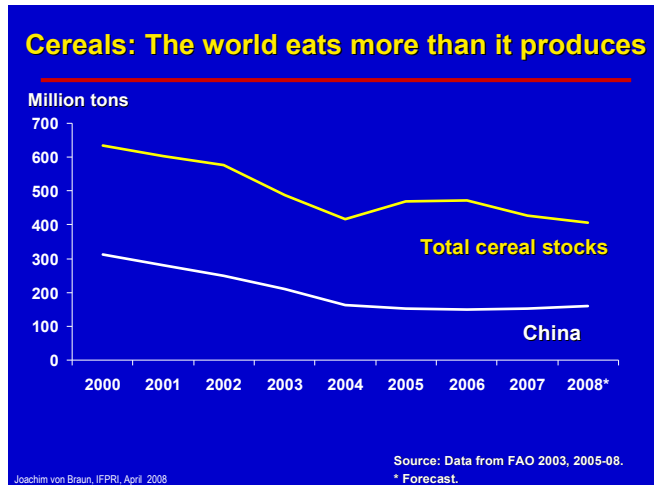
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Source: World Development Report 2008.

As a result, agriculture productivity growth has declined and is too low to meet the present challenges. This is only slowly being corrected at the country level and in development assistance. China and India, however, increased their agricultural budgets by 20 to 30 percent this year.

More volatile weather patterns related to climate change are expected to increase over the coming decades and negatively impact agricultural production. This is happening at a time when strong population growth in many parts of the world continues to contribute to the difficulty of supply keeping up with demand.

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Bans on exports - leading to volatile markets

In the recent past, export bans for selected products were imposed for example by:

- Argentina
- Cambodia
- China
- Egypt
- Ethiopia
- India
- Kazakhstan
- Pakistan
- Russia
- Vietnam
- Zambia
- etc.

Stocks are down, and governments increasingly react with trade distortions in the already nervous markets, such as with export bans.

Higher food prices have radically different effects across countries and population groups. At the country level, net food exporters can in principle benefit from improved terms of trade, although some of them are missing out on this opportunity by banning exports to protect consumers. Net food importers, however, will struggle to meet domestic food demand. Given that almost all countries in Africa are net importers of cereals, they are hit by rising prices.

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Summing up: causes of imbalances and volatility in the world food equation

1. Income growth and demand
2. Biofuels (energy price)
3. Underinvestment in agricultural productivity and technology
4. Trade policy and low stocks
5. Production shocks (emerging climate change)
6. High input and transport costs (energy price)
7. Population growth

Summing up the causes (size of print suggests size of cause) ...see slide.

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Increased tradeoffs in food, energy, and political security risks

Food security risks ↔ Political security risks

↙ ↘

Energy security risks

- Mass protests against rising prices in more than 30 countries
- The poorest suffer silently, the middle class protests and lobbies

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The food price problem has become a security / political stability issue in many countries. Of note is that when energy security is addressed by domestic biofuels production, it creates a tradeoff with food security and political security. That link has been underestimated.

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Impacts of high prices on the poorest

The consequences of increased prices for the poorest and hungry are driven by some *initial conditions* and by *adjustments* in labor, finance, and goods markets...

- Level of inequality below the poverty line (up)
- Level of diet (low) and nutritional deficiencies (high)
- Wage rate adjustments among unskilled labor to changing prices (slow)
- Capability to respond to market opportunities (small)

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At the household level, surging and volatile food prices affect those who can afford them the least — the poor and food insecure. The few poor households that are net sellers of food will benefit from higher prices, but households that are net buyers of food — which represent the large majority of the world's poor — will be harmed. Adjustments in wages, employment, and in capital flows to the rural economy, which can create new income opportunities, will take time to reach the poor, but opportunities do exist to transform the challenge into gains for the poor.

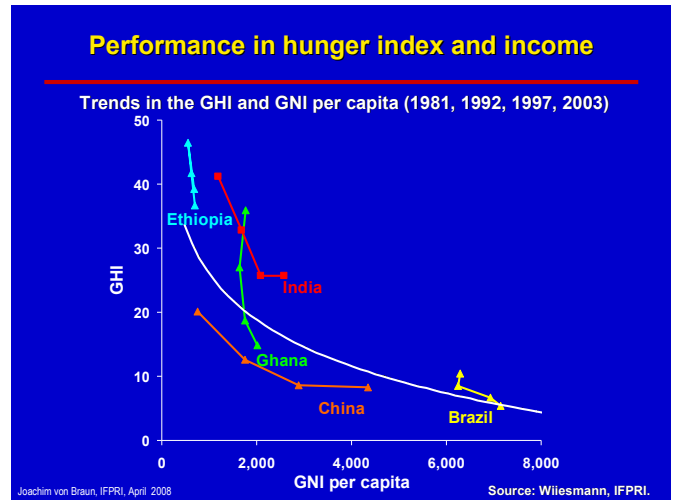
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Global Hunger Index and its components (for identical countries), 1981 - 2004

	1981	1990	1992	1997	2003	2004
Proportion of undernourished (%)	28.3	19.9	19.9	17.4	16.3	16.5
Underweight in children (%)	36.6	32.8	32.0	27.1	26.3	26.0
Under-five mortality rate (%)	13.0	9.9	9.6	8.9	8.0	7.9
Global Hunger Index	26.0	20.9	20.5	17.8	16.9	16.8

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Progress in hunger reduction was low in the past 15 years and almost stagnant in the past 8 years (see on the left IFPRI Global Hunger index). There is highly variant progress by countries relative to their expected progress given their income position (see on right). The price shock poses nutritional threats in countries that have limited programs in place with which to respond.

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Beneath the \$1 a day poverty line (2004)



Poor
(\$.75 cents – \$1)
485 million people



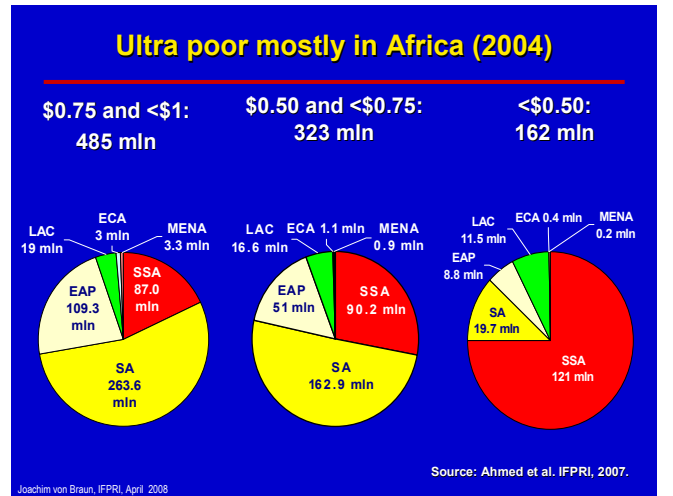
Medial poor
(\$.50 cents – \$.75 cents)
323 million people



Ultra poor
(less than \$.50 cents)
162 million people

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For the monitoring of the MDGs it is necessary to look below the poverty line. The poorest, living on less than 50 cents a day, are left behind, and are mostly in Africa. Higher food prices lead poor people to limit their food consumption and shift to even less-balanced micronutrient deficient diets, with harmful effects on health in the short and long run.

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Which policy response should not be chosen to deal with high prices?

Not:

- Export stops (starving your neighbor)
- Import subsidies
- Subsidies only for vocal middle class
- Public underinvestment in agriculture
- Policing and threatening the traders
- Attempting to curb the specific food price inflation with general macro policies

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Many countries are taking steps to try to minimize the effects of higher prices on their populations, and these steps can add up to policy failures. Import subsidies and export taxes or bans may reduce risks of shortages for national consumers in the short term. But these policies are likely to backfire by making the international market smaller and more volatile, and they distort incentives globally and at home.

The food price increases have a dominant role in increasing inflation in many countries now. It would be misguided policies to address these inflation causes with general macroeconomic instruments. Instead, specific market and productivity-related policies are mostly needed to deal with the causes and consequences of the high food prices.

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Policy actions to correct and mitigate the food price problem (2)

Global policies and international aid

1. **Trade:** Eliminate agricultural trade barriers, and export bans; revisit grain based biofuels
2. **Agriculture growth:** Expand aid for rural infrastructure, services, agricultural research and technology (CGIAR)
3. **Protection of the vulnerable:** Expand food and nutrition related development aid, incl. safety nets, child nutrition, employment programs

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This new situation calls for an international pact to achieve food security with actions in three areas, all of which have short- and long-term dimensions and need sequencing; the most efficient policy packages take more time as they require institutional strengthening:

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1) trade policy action, which requires multilateral action and understanding;

2) investment in agriculture, particularly in agricultural science and technology and for market access, at a national and global scale to address the long-term problem of boosting supply; rural investments have been sorely neglected in recent decades, and now is the time to reverse this trend.

3) comprehensive social protection and food and nutrition initiatives to meet the short- and long-term needs of the poor; (that is, safety net programs like food or income transfers and nutrition programs focused on early childhood) for the poorest people—both urban and rural.

Elements of action include strong engagement of diverse actors; example in Africa is the CAADP, which offers scope for stakeholders to rally around and advance it.

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An international “Pact for Food Security”

Taking global action with international organizations, national governments, regional and sub-regional organizations, private sector now

1. Crash programs for key production areas with subsidized seeds, fertilizer, and credit, and guarantee the purchase of outputs. [Worked in the early Green Revolution. A start, but not sustainable, not viable]
2. Rely on the current high food prices to give a jump start in the short run, but immediately move to a big investment plan for agriculture: agricultural research, rural roads, irrigation infrastructure
3. Set up an agricultural production investment fund for developing countries that is additional to existing plans

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What will it cost?

Investments for rapid agriculture production growth to meet MDG 1 (which requires a boost of 50% in agricultural productivity growth):

2005 IFPRI estimate:

Incremental investments: \$16 billion per year, 2005-15 for agricultural research, rural roads, irrigation infrastructure [assumes continued policy reform and enhanced economic growth]. Of this approximately \$8 billion for SSA and \$5 billion for South Asia, \$3 billion for others

2008 updated estimate would need to take account of:

- **changed US\$ value**
- **changed economic and poverty circumstances**
- **might be up to twice the above quoted values**

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Fast expansion of supply is needed; some redistribution within the global scarcity is not enough. Move quickly from crash programs to big and efficient investment plans for agricultural growth. The incremental investment needs are large; about 20 to 30 billion USD per annum.

In conclusion, the global agricultural imbalances are a serious problem for the poor, but this is also an opportunity to overcome the undervaluing of natural resources, of the food produced from these resources, and of the developing-country labor engaged in producing that food, which includes many of the world's poorest people.