

Behind Grain Shortfalls, Speculation: Breakdown of the World's Food Chain

by Marcia Merry Baker

As of mid-February 2008, world wheat prices were up 83% over a year ago; dairy prices were up over 30%; and rice prices were 40% higher than at this time last year. On Feb. 13, the UN Food and Agriculture Organization (FAO) issued a press release, warning that because of the “heavy financial burden” on poor countries, food consumption will decline. That is, every day now, more and more people are unable to eat.

The FAO estimates that “low income food deficit countries” will have to pay 35% more, in dollar terms, for grain imports over the coming year, even while the volume they receive will drop 2% in absolute tonnage terms.

In part, the food price inflation reflects wild speculation on the Chicago Board of Trade, and the Kansas, Minneapolis, London, and other grain exchanges. Trades in “paper bushels” now far exceed the actual existence of the product. Betting on commodities is a great money-making “opportunity” amidst the financial crisis, advises the London *Financial Times* to its clientele. This occurs as part and parcel of the hyperinflation now hitting, across the board: fuel, transportation, housing, medical care, education, and all basics. Yet, putting a stop to agro-commodity speculation in particular, is simple: It should be banned altogether.

Overall, the soaring food prices are associated with dramatic shortages of grains and other staples, relative to need. In turn, this reflects decades of “successful” globalizing of farming and food supplies, which has downgraded agro-industrial potential to the point where world output is far below breakeven. The makings for famine, and a drastic fall in population are now in place.

The two latest reports on the world food situation, by the FAO and the U.S. Department of Agriculture (USDA)—usually pro forma updates—this year document the dimensions of the harm and danger. Overall, 2,102.6 million metric tons (mmt) of grains (of all kinds—wheat, corn, rice, barley, grain sorghum, and others) are projected to be produced worldwide, in the 2007-08 crop year (ending in July 2008). But nearly double that is required for decent levels of nutrition through direct consumption, and indirect consumption via the livestock food chain, and for reserves against disaster. Grain stocks are forecast to reach their lowest level in more than two decades.

Figure 1 is the first graphic from the FAO report, “Crop Prospects and Food Situation” (February issue, “Global Cereals Supply and Demand Brief”). In seven of the last ten years, world production of cereals (meaning grains of all kinds) *fell below consumption that year*. Consequently, there is a deep drawdown of the already inadequate level of grain stocks, or “carryover” reserves from one year to the next, to below crisis levels. For the current crop year 2007-08, utilization of grains is projected at 2,120.3 mmt, which is 17.7 mmt more than the projected production.

“World reserves are heading to yet another decline from their already low levels,” stated the FAO. “World cereal stocks by the close of the [crop] seasons ending in 2008 are expected to fall to just 405 mmt, down 22 mmt, or 5%, from their already reduced level at the start of the [crop] season and the smallest since 1982.” All grains are in short supply, as reviewed below for wheat, rice, and corn.

Capping the catastrophe is the “Gorey” fact that biofuels are increasingly taking grains and oilcrops away from the food chain. At present rates, in 2008, *12% of all the world corn crop will go into ethanol!* In tonnage terms, this is 95 mmt, according to the FAO. On top of that, another 10 million tons of wheat and other grains are also going into biofuels. This doesn’t count the capacity going into cane ethanol in Brazil, or Asian and European oil seeds for biodiesel.

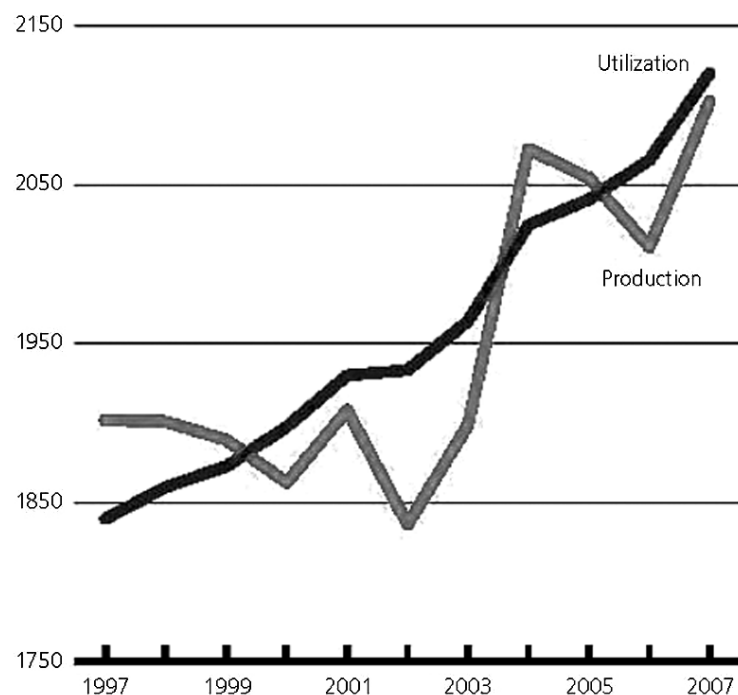
Emergency Food Defense Measures

National governments are now resorting to various defensive measures, absent an international effort to restore sound farm/food security policies along with emergency actions to deal with the international financial blow-out.

For the first time in 20 years, the government of Egypt has relaxed the rules on who can receive subsidized food. Moreover, in Egypt, the world’s largest importer of wheat, the costs of domestic bread subsidy rose last year by \$820 million, to reach \$2.45 billion; and now the international wheat price is soaring much higher. Pakistan and Oman have likewise been meeting rising subsidy costs.

In China and Russia, the governments have imposed retail price freezes, and reduced import tariffs for grains. On Dec. 20, China scrapped tax rebates on grain exports, and instead,

FIGURE 1
World Cereal Production and Utilization (1997-2007)
 (Million Tons)



Source: FAO, Crop Prospects and Food Situation, No. 1, February 2008.

as of early January, imposed temporary taxes on exports of 57 categories of grains, ranging between 5% and 25%. For example, exports of wheat, rye, barley, and oats now have a 20% surcharge.

On Feb. 7, India's Ministry of Commerce and Industry issued a ban on rice exports, in attempt to check price rises for its own population. This followed lesser limitations imposed on various categories of rice imports over prior months. Now, only the special basmati type—the fragrant, expensive long-grained strain—can be exported; and certain government-to-government export contracts will be honored.

Vietnam, in Fall 2007, suspended rice exports, to protect domestic supplies.

Shortages, Low Stocks—Wheat, Rice, Corn

Some of the basic statistics on the grains crisis are given by the Feb. 8 issue of the USDA *World Agriculture Supply and Demand Estimates* report. (The USDA and FAO data series differ slightly, because of differing crop year measures, but are coherent).

Wheat. World wheat stocks can be expected to sink to 110 mmt, continuing the downward slide from 148 mmt in 2005-

06. World wheat production for the 2007-08 period is forecast to be in the range of 604 mmt—down from the 2005-06 output of 622 mmt.

In the United States, one of the top five wheat exporting nations in recent years, wheat stocks remaining at the end of the 2007-08 season are expected to fall to 7.4 mmt, the lowest since 1948. This means that ending stocks as a percentage of use (stocks-to-use ratio) will be 12%, which is the lowest ratio since 1946, at the end of World War II.

Rice. World rice ending stocks for 2007-08 are projected at 72.1 mmt, the lowest level since 1983/84. Production this year and thereafter, is not projected to make up for the drawdown. World rice production is projected at 421 mmt for 2007-08, up from 417.6 mmt for each of the past two years. Some 3 billion of the world's population depend on rice as their primary grain.

Corn. World stocks of corn (maize) and other coarse grains (sorghum, barley, oats) are projected to fall to 39.4 mmt, down from 55 mmt in 2005-06. The massive diversion of corn from the food chain, to fuel use in the United States in only the past three years, is the major factor.

Why not just produce more? The immediate answer is that vast parts of the world farm capacity have been oriented for what and how they produce, to serve the "world market" dominated by the agro-cartels, instead of for meeting food security needs determined by sovereign governments. For example, Cargill, ADM, Monsanto, Bunge, and a few others have moved so extensively in Brazil and Argentina to create a monoculture of soybean cropping, that the share of soy production as a percentage of total arable land in Argentina is now 47%, and in Brazil, 36%, according to the FAO's "Food Outlook Global Market Analysis," last November. The processed soy is then marketed worldwide by the cartel. Meantime, the national needs of Argentina, Brazil, and the rest of the region are not met; and the danger from pests, loss of soil fertility, and other threats is vastly increased from the imposed monoculture.

There are variations of this pattern on all continents. In particular, the outsourcing of the U.S. and European fruit and vegetable supplies to East Asia, Central and South America, and Africa, has undermined national food and farm security in those source regions, and undercut farm productivity in the import countries.

In India, the crisis in agriculture is dramatically manifest in the rate of suicides among farmers. In the decade since 1997, a total of 166,304 farmer suicides have been officially recorded by the National Crime Records Bureau (NCRB). In 2006, India had 17,060 farmer suicides, with 4,453 in the state of Marashtra alone. This reflects the results of the government undercutting the agriculture sector by allowing



An IRRI researcher in the Philippines monitors his crop of flood-resistant rice. A variety called Swarna Submergence 1, which can be submerged for 17 days, could be in use by 2009.

IRRI

debt, price instability, and lack of support, while funneling federal funds into the IT and foreign exchange-earning services sector.

Add to all this, the worldwide deficit in providing agriculture infrastructure—water, power, transportation, and advanced technology for family farming—that has characterized the last 40 years of increasing “global sourcing” for food, and the full scope of today’s crisis becomes clear.

Expect the Unexpected

Agronomists warn that we face threats to the farm/food chain from the fact that during the past few decades of free trade, R&D for new crop strains has been undermined, and standard precautions have not been taken against the prospect of new pests. Two examples make the point.

In 1999, a new wheat blight—a fungus called black stem rust, or UG99 (*Puccinia graminis*), was identified in Uganda. Since then, it has spread regionally in East Africa, and also across the Red Sea to Yemen. Wind patterns can be expected to carry it to the Indian subcontinent.

Scientists are scrambling to find a germplasm resistant to this new strain, and then to disseminate it on a crash basis, but the support system for consistent R&D work over the years, for such a contingency, was taken down. The last major rust episode was in North America in the 1950s, when 30% of the U.S. wheat crop was lost in one season. At the time, Dr. Norman Borlaug, the eminent crop scientist, headed a team which soon identified and spread a resistant strain globally, which has lasted until recently. That response capacity to safeguard agriculture, is an essential

part of infrastructure, but it has been undercut and underfunded.

Continued strides in improving rice yield are urgent. The pre-eminent rice research center, IRRI—International Rice Research Institute—in Manila, estimates that by 2025, annual world rice production should be in the range of 880 mmt, up from today’s 520 mmt. Some 3 billion people now rely on rice as their staple food.

The IRRI is nearing completion of R&D trials for a new “golden rice,” a nutritionally superior strain of rice that has been precision-engineered for beta-carotene, which the body converts to vitamin A, which can help to prevent blindness. Also, IRRI has succeeded in critical work on a rice strain that will tolerate floods. It estimates that one quarter of all the world’s rice is now grown in rain-fed, lowland areas, prone to seasonal flooding. A new rice variety that can tolerate submergence for an extended period, will be a food supply breakthrough. The IRRI has ongoing work on another rice variety that will tolerate drought.

But the IRRI, and counterpart world-class research centers—for wheat, corn, potatoes, other root crops, beans, fruit, etc.—need consistent funding, which they have not had. In January, the announcement came that the IRRI will receive close to \$20 million over the next three years from the Bill and Melinda Gates Foundation. With funding from governments for unrestricted, long-term research approximately cut in half over the past decade, such a private grant is welcome. But “privatizing” funding for the R&D required to feed the human race is a prescription for genocide.