

Biofuels Are a Policy of Famine

by Marcia Merry Baker

As of the Spring 2007 planting in the northern latitudes, the disastrous impact of the global bio-energy craze could be seen in the huge expansion of U.S. corn acreage, the plunge of world grain stocks, and price shocks all along the food chain internationally. Transportation systems, water supply, and other infrastructure are strained to the breaking point. At the same time, speculation in grain futures—"paper bushels"—on the Chicago Board of Trade, is setting records. That's the point.

The "Great Biofuels Bubble" is a swindle, and is causing vast harm. All the rhetoric about energy independence, aiding the environment, or "reviving" dying farm regions, is the come-on. Before looking at the dimensions of the damage, consider the origins of what amounts to a *policy of famine*.

To begin with, energy from biomass is far below the energy density possible and required for modern society. (An industrial economy requires nuclear energy.) Despite widespread blindness on this point, the truth is that the "energy in" is more than the "energy out" for bio-ener-

gy. This has been thoroughly documented for all kinds of biomass, from Brazilian gasohol, to Illinois corn ethanol, to the pie-in-the-sky visions of cellulosic sources. (See accompanying article.)

In the United States, during 1960-1990, a certain number of ethanol operations were kept going by the two major corn processors, Archer Daniels Midland (ADM) and Cargill, plus a few farmer-owned ventures and others, under government per-gallon subsidies for blending ethanol into gasoline. Prior to the late 1990s, less than 3 percent of U.S. corn production went into ethanol.

Then, in the 2000s, the Biofuels Bubble was launched. Under heavy pressure from certain private financial interests, and institutional corruption, governments mandated national biofuels-usage quotas. For example, in September 2005, France mandated a government quota for having 5.75 percent of fuel come from biofuels in 2008, 7 percent by 2010, and 10 percent in 2015.

In the United States, the 2005 "EPAct"—the Energy Policy Act of 2005—decreed what are called the annual

Renewable Fuel Standards for the volume and make-up of biofuel that must be blended into gasoline. EPA Acting Assistant Administrator William Wehrum summarized the facts at a Senate hearing in September 2006: "The renewable volume [to be blended into gasoline] begins at 4 billion gallons in 2006, and increases to 4.7 billion gallons in 2007, 5.4 billion gallons in 2008, and continues to scale up to 7.5 billion gallons in 2012...."

On Sept. 7, 2006, EPA issued its new rules for 2007, which introduced a new feature: a "marketplace" for buying and selling under- and over-used allotments among the entities involved in meeting the Renewable Fuel Standards.

To reemphasize the swindle nature of the national mandate process: The 2006 U.S. output of nearly 5 billion gallons of ethanol, exceeding the Renewable Fuel Standards, amounts to barely 3 percent of the gasoline used nationally, but in bio-bubblenomics, size doesn't matter. What matters, in Wall Street lingo, is that there are the necessary laws to guarantee the climate for "market reliability" and "investor security," so that biofuels

can become a safe bet for speculators and the cartel players in the game. From Australia to Britain, national biofuels usage mandates have been set.

Biofools Rush In

Thus, a huge biofuels financial bubble is now aloft, with hedge funds, equity partnerships, and banks involved, as well as the long-time ADM, Cargill, Monsanto, and DuPont agro-cartel giants, plus a few local farmer-owned ventures. Morgan Stanley owns the second biggest private ethanol company in the world, Aventine Renewable Energy Holdings, LLC. U.S. state budgets have been throwing scarce revenues into the biofuels mania as well.

In 2006, U.S. corn went as feedstock into some 115 operating ethanol distilleries, in 20 states; an additional 79 facilities are now being planned, or under construction. Iowa and neighboring Minnesota, Nebraska, and Illinois are home to the leading corn counties of the nation, and lead also in number of ethanol facilities. But new projects are talked about for many of the outlying states. Five are actively proposed right now for Pennsylvania, for example.

ADM and Cargill still lead the pack, together controlling 34 percent of U.S. ethanol capacity in 2006. As of 1995, before the boom, 73 percent of a much smaller U.S. ethanol capacity was under ADM and Cargill, but now more players are in the game and ADM and Cargill are bigger than ever. ADM and Cargill are also leading the charge for biodiesel worldwide.

In Spring 2006, a Vice President from Chevron, Patricia Woertz, became the new CEO for ADM, proclaiming that she intends to use the “oil company approach” for biofuels.

Attack on the World Food Supply

Among the most prominent shocks to the food system to date is the corn-for-tortillas crisis in Mexico, where as of December 2006, prices had spiked 60 percent! In the United States and elsewhere, prices are soaring for livestock feed—cattle, chickens, and pigs. World food relief agencies are trying to deal with the problem of skyrocketing prices for supplies. Nevertheless, at the present rate of U.S. ethanol expansion, *half* of the U.S. corn crop could be siphoned off into ethanol during 2008!

Iowa State University economist Robert Wisner calculates that if all the present and planned biorefineries in his



Corn tortillas, the Mexican food staple, went up in price 60 percent, because of the biofools grab of corn for fuel.

state come on line, 2.7 billion bushels of corn will be needed for ethanol in-state. But Iowa, the lead corn state in the nation, harvests “only” 2.2 billion bushels in a good year. Then what?

In 2000, about 6 percent of U.S. corn production went into ethanol. In 2005, this had jumped up to 14 percent of the corn crop for biofuels. In 2006, 20 percent was converted into motor ethanol, the same percentage of production that typically has gone into U.S. corn exports in recent years.

For 2007, the latest U.S. Department of Agriculture projection is that 27 percent of U.S. corn production will go to ethanol, and corn exports will decline to 19 percent. Given that the United States has accounted for some 40 percent of all corn traded worldwide, this decline automatically constitutes a major grain supply problem internationally.

The U.S. crop projections were released in the May 11 “World Agricultural Supply and Demand Estimates,” the first such USDA report of the year. (In July, these reports are issued monthly, after the wheat harvest, and during the growing season for other crops). The May 11 USDA report estimates that U.S. corn acreage planted will hit 90.454 million acres this year, a jump of 13 percent over last year’s 78.45 million acres, and back to the acreage of 1944, when corn yields per acre were far lower than today. Corn seed shortages

showed up regionally.

Some of this corn acreage is taking land out of soybean and wheat plantings. The USDA estimates that U.S. soybean production this year might drop by 14 percent from last year, given the switch over to corn in some states, plus other factors. Moreover, with the increase in soybeans going into biodiesel, the USDA projects that the U.S. ending stocks for soybeans at the close of the 2007 crop year, will drop by nearly half from the last period, falling from 610 million bushels down to 320 million bushels.

The plunge in ending stocks is one way to summarize the increased vulnerability of the world food supply. The May 11 USDA report projected that worldwide grain ending stocks of all kinds (wheat, rice, corn) for the 2007/2008 crop year will fall to 305.08 million metric tons, significantly below 319.79 mmt in the 2006/2007 crop year, and far below the 390.14 million metric tons for 2005/2006 ending stocks. Grain stocks per capita are at danger ratios.

The same kind of biofuels trade-offs reported here for corn and soybeans is hitting other crops and livestock around the globe. Only the particulars differ.

For example, Indonesia and Malaysia are in the throes of a mad rush to supply palm-oil biodiesel to Europe. In recent years, these two countries accounted for 85 percent of the world’s supply of crude

palm oil—a key part of which met the edible oil component of the Asian diet. But now, there is a diversion to biodiesel.

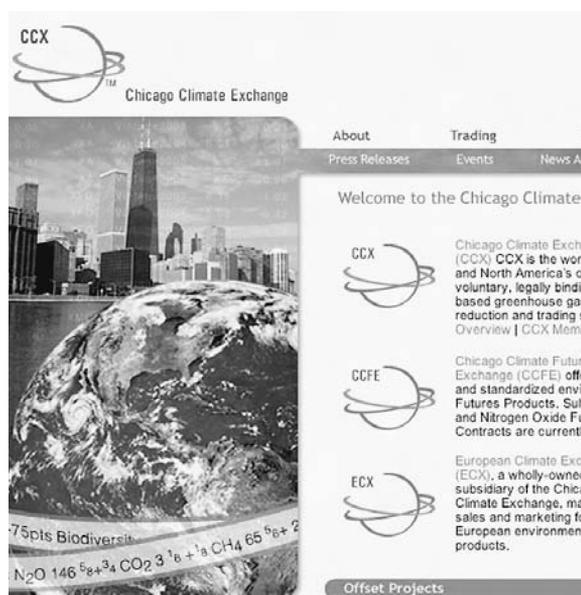
Malaysia has undergone so much deforestation for new palm oil plantations, that the nation is considered to have reached its land area limit for cultivated palm. So much new land in Indonesia is going into oil palms, or other biofuel related crops (sugar cane, jatropha), and so much of that is peatland, that gigantic clouds of smoke are created as the land is cleared and burned in preparation for palm planting.

Famine Threats

On May 8, the United Nations released a report warning of the harmful impact of the biofuel craze on the food supply, and on the poor generally. The document, “Sustainable Energy: A Framework for Decisionmakers,” quantified the sweeping increases under way in bio-energy crop plantings of various kinds—palm oil, corn, sugar cane and oil seeds—dislocating local practices, and taking over new land areas. While otherwise towing the U.N. line supporting “alternative” energy for a “sustainable environment,” the report states: “Use of large-scale mono-cropping could lead to significant biodiversity loss, soil erosion and nutrient leaching. Even varied crops could have negative impacts if they replace wild forests or grasslands.”

Given the radical biofuel crop shifts, and low food reserves, a famine is set to happen if a bad weather episode or crop disease hits one of the world’s breadbasket areas. The Australian wheat crop was cut by more than half from drought during the 2006-2007 crop season.

On the disease front, an outbreak long dreaded by wheat experts has occurred. Wheat stem rust, *Puccinia graminis*, has shown up in East Africa, first appearing in Uganda in 1999. Dubbed Ug99, the disease has since spread to Kenya and Ethiopia, and as of late 2006 into Yemen, heading into south Asia. At least 25 percent of the world’s wheat lies in the spread path of the fungus.



A page from the fantasy land of the Chicago Climate Exchange (CSX) where you can buy and sell dispensations for climate emissions.

Scientists have known for decades that such a disease might occur, once some mutant microbe infected the formerly rust-resistant wheat varieties grown the world over for the past 40 years. These varieties were produced by breeding breakthroughs in the Green Revolution research centers, set up on the initiative of FDR’s Henry Wallace, Vice President and Agriculture Secretary.

If monitoring and germ plasm contingency plans had been pursued, the Ug99 appearance would not spell such danger. But under the past four decades of globalization and control by agro-cartels, funding has been drastically cut for plant and animal diseases. The International Maize and Wheat Improvement Center (CIMMYT) in Mexico, home of the Green Revolution, has a chronic budget crisis. Its founder, Dr. Norman Borlaug, Nobel Prize-winning creator of the Green Revolution, has issued warnings repeatedly: “If we fail to contain Ug99, it could bring calamity to tens of millions of farmers and hundreds of millions of consumers.”

Gulliver’s Travels and Carbon Farming

On top of this food supply vulnerability, comes the havoc in agriculture capacity caused by the lunatic proposals for “carbon farming” and buying and selling carbon “allowances.” Even Gulliver, with all his Travels, would be amazed.

The Agriculture Department, the National Farmers Union, and other institutions that should know better, are getting on board the Al Gore/Arnold Schwarzenegger bandwagon, that calls for government capping of CO₂ emissions and a system where privateers are allowed to buy and sell CO₂ “allowances.”

The name of the game is “cap-and-trade.” Behind it, and the Al and Arnie frontmen, are the very same financial networks that push the biofuels bubble.

The Chicago Climate Exchange (CCX) was set up in 2003 as the U.S. CO₂ trading venue, run in connection with the London-based InterContinental Exchange Inc. (ICE), whose subsidiary is the International Petroleum Exchange, infamous as the speculative venue for running up the cost of oil, by an estimated 25 percent per barrel.

The CCX/ICE in turn is connected to the European Climate Exchange (ECX). The CCX CEO is Richard L. Sandor, former head of the Chicago Board of Trade, and pioneer of all kinds of wild speculative instruments, including weather futures, and the infamous CMOs—collateralized mortgage obligations, now exploding. Among the major financial interests involved in CCX, is Goldman Sachs, a principal owner, that also in 2004 set up Al Gore’s very own hedge fund in London, Generation Investment Management.

The participating members of the CCX, which is running as a pilot project for being a full-scale CO₂ exchange include the Iowa Farm Bureau and Kentucky Corn Growers Association, approved to verify farm carbon “offsets” for trading. The USDA explains how the carbon trade works for farmers in its promotional brochure, “Growing Carbon: A New Crop That Helps Agricultural Producers and the Climate Too.” It states that credits can be given “to agricultural producers who increase their stores of carbon in the soil or in trees. Producers can then save the credits or sell them to others (for example, to electric power companies) that want them in order to offset their own greenhouse gas emissions.”

Why would farmers, most of whom know better, go for the green claptrap on CO₂, or biofuels? For the green. The USDA brochure says outright of carbon trade, “It could also create opportunities for farmers to supplement their income.”

Relative to their costs of production,

farmers everywhere have been consistently *underpaid* for their output for decades, by the cartels dominating “free” (rigged) trade. Even the much publicized 2007 run-up in the futures price of U.S. corn to \$4 per bushel, double the price of 18 months ago, doesn’t cover the farmer’s cost of production, for which a parity price of \$7-8 is required.

Yet, for the family farmer who produces livestock, and gets underpaid for his meat, \$4 a bushel feed-corn is a killer. This typifies the interconnectedness throughout the farm/food situation, which has been undermined by years of policies serving low-cost globalization, not the interests of national food security. “Ag-flation” is not the cause of rising prices for food and other costs-of-living. Today’s hyperinflation is across the board, associated with the blowout of the financial system.

If the biofoolery policies are allowed to continue, the swindles, the science hoaxes, and the physical economic effects add up to a *policy of famine*.

Marcia Merry Baker is economics editor of Executive Intelligence Review.

Ampère

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of the 1845 Gauss-Weber correspondence shows that Gauss had already entertained the idea of electrical waves in the ether, but rejected it only on the grounds that a “constructible representation” of the phenomena was lacking.

Riemann recognized the deep significance of the 1855 Weber-Kohlrausch experiments, and in an 1858 paper, “A Contribution to Electrodynamics,”⁶ whose publication was suppressed by Rudolf Clausius, Riemann formulated a relativistic wave theory, based on a concept of retarded propagation of potential.

Whoever should suppose that Maxwell’s cleverness of physical-geometric insight surpassed Gauss and Riemann in this respect would surely be unserious. The problem lay not in formulating a geometric picture of wave propagation, but in resolving the underlying epistemological and ontological paradoxes, which had

6. Bernhard Riemann, *Collected Papers*, translated from the 1892 edition by R. Baker, C. Christenson, and H. Orde (Heber City, Utah: Kendrick Press, 2004), pp. 273-278.

been buried by the promoters of the Newton hoax. These were to erupt again as the crises in physics around the paradox of wave versus particle, the imposition of an acausal, statistical interpretation of atomic phenomena, and its extension into the nuclear and subnuclear domain. The solution to such problems lies outside the realm of mathematical physics *per se*, at least as so narrowly conceived today.

A rebirth of the spirit of Nicholas of Cusa, Johannes Kepler, and Gottfried Leibniz, the founders of all modern science, accompanied by a conscious, joyful, and determined overturning of the Sarpi-Newton hoax will accomplish that task.

The treatise, which now appears for the first time in English, was first published in Leipzig in 1846 on the 200th anniversary celebration of the birth of Gottfried Leibniz. The translation is the result of an 1996-97 collaboration of the late Susan P. Johnson and Laurence Hecht. Prof. Andre Koch Torres de Assis of the State University of Campinas in Brazil recently completed the work of equation editing and reviewing the entire manuscript.

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