



DAILY NEWS SUMMARY

Monday, April 21, 2008

RFA Member Op-eds

1. Windsor Beacon (CO)

Letter sent to the Editor

The writer, Dan Sanders Jr., is company manager at Front Range Energy, LLC. He wrote into the editor responding to Bob Berling's opinion piece that corn ethanol is not renewable energy. Please see .pdf for complete text.

International

2. How Biofuels Could Starve the Poor

Foreign Affairs

<http://www.foreignaffairs.org/20070501faessay86305/c-ford-runge-benjamin-senauer/how-biofuels-could-starve-the-poor.html>

Thanks to high oil prices and hefty subsidies, corn-based ethanol is now all the rage in the United States. But it takes so much supply to keep ethanol production going that the price of corn -- and those of other food staples -- is shooting up around the world. To stop this trend, and prevent even more people from going hungry, Washington must conserve more and diversify ethanol's production inputs.

3. Biofuels under attack as world food prices soar

AFP

http://afp.google.com/article/ALeqM5g-Ne1sszDrfWVIbhtdxhkIb_tGdQ

Hailed until only months ago as a silver bullet in the fight against global warming, biofuels are now accused of snatching food out of the mouths of the poor.

National

4. Biofuels getting bad press

American Public Media

http://marketplace.publicradio.org/display/web/2008/04/21/sloan_biofuels/

Biofuels are getting blamed for a global food crisis and a setback in anti-poverty efforts. Fortune magazine's Allan Sloan examines the wisdom of growing things to make them into ethanol and considers alternatives.

5. Asian Development Bank: Biofuels making food more expensive

Associated Press

<http://ap.google.com/article/ALeqM5hh1arb2u8-E9AfV0o7-zN914wZ9AD9065GEO0>

Developed nations should stop paying agricultural subsidies to encourage biofuel production because the payments are making staple foods more expensive, the Asian Development Bank said Monday.

6. Battling Ethanol-Propelled Food Prices

ABC News

<http://abcnews.go.com/Technology/story?id=4683795&page=1>

Ethanol is seen as one of the culprits causing rising food prices, however new technology creating ethanol from things such as wood chips and other cellulose could make ethanol more attractive.

7. Pondering fuels' true carbon costs

Los Angeles Times

<http://www.latimes.com/business/la-fi-fuels19apr19,1,5312955.story>

While much of the world argues over whether biofuels made from corn are worsening world hunger, the debate in California is shifting to new state rules that could revolutionize the way fuels are judged. Regulators will attempt to take into account the total carbon cost, in terms of global warming by looking at the entire fuel life cycle.

8. Corn-Based Ethanol Tied to Higher Food Costs

Wall Street Journal

http://online.wsj.com/article/SB120856165709227927.html?mod=googlenews_wsj

Energy Secretary Samuel Bodman said Friday that the growing emphasis on corn-based ethanol has contributed to higher food prices, and he said the nation should begin "moving away gradually" from ethanol made from food such as corn.

Regional

9. Instead of biofuel, other global trends starve Haiti

St. Petersburg (FL) Times

<http://www.tampabay.com/news/world/article465408.ece>

RFA's Matt Hartwig is quoted in the article defending corn ethanol. The article declares trade policy and droughts around the world as the real culprits.

10. Defeating OPEC, one ear of sustainable corn at a time

The Toronto Star (Canada)

<http://www.thestar.com/article/416066>

Robert Zubrin, president of Pioneer Astronautics writes about the global power force that is OPEC, and how using ethanol can help undermine its power.

11. Food shortages, prices pose big danger

Commercial Appeal (TN)

<http://www.commercialappeal.com/news/2008/apr/19/focus-food-shortages-prices-pose-big-danger/>

Rising costs of food for the world's poorest, blame placed on ethanol among other reasons, plus question and answer section with Josette Sheeran, executive director of the U.N. World Food Programme.

12. Does overplanting of ethanol crops cause higher food prices?

The Eureka Reporter

<http://www.eurekareporter.com/article/080420-does-overplanting-of-ethanol-crops-cause-higher-food-prices>

As seen in April 16, 2008 clips, we have already shown the "No" answer to this question from Bob Stallman from the American Farm Bureau, here is the "Yes" answer

by: David A. Ridenour, vice president of the National Center for Public Policy Research who focuses on subsidies and mandates in his response.

13. Fuelish thinking

The Free Lance-Star (VA)

<http://fredericksburg.com/News/FLS/2008/042008/04212008/372410>

Alternative fuels are not the solution to our dependence on fossil fuels. If things continue the way they are, those new options may not even be a Band-Aid. Worst of all, the time spent trying to change our fuel source is distracting us from real solutions to our energy problems. Biofuel and ethanol are red herrings. Conservation is the real solution.

14. Crash could follow farm boom

Boston Herald

<http://www.bostonherald.com/business/general/view.bg?articleid=1088539>

Soaring land values, increasing debt and a reliance on government subsidies for ethanol production have prompted economists to warn that what some describe as a golden age of agriculture could come to a sudden end.

15. Pro-Con: Is the overplanting of ethanol crops responsible for soaring food prices? NO

Kansas City (MO) Star

<http://www.kansascity.com/273/story/584400.html>

Bob Stallman of the American Farm Bureau defends the use of ethanol and calls it an 'oversimplification' to blame ethanol for increasing food prices.

16. GM leader refutes biofuels critics

Detroit News

<http://www.detnews.com/apps/pbcs.dll/article?AID=/20080420/AUTO04/804200335/1147/AUTO02>

Politicians' claims that biofuels are driving up food prices are "shockingly misinformed," said General Motors CEO Rick Wagoner. Speaking at the Beijing auto show, Wagoner said the food price issue has become "a cause celebre without reason. Higher fuels costs are a far bigger driver of food prices."

17. Less corn in the ground could translate to higher grocery bills

Oshkosh Northwestern (WI)

<http://www.thenorthwestern.com/apps/pbcs.dll/article?AID=/20080420/FON03/804200440/1327/OSHbusiness>

Farmers are expected to plant less corn this year, which could mean continuing higher costs for consumers at the grocery store.

18. Area ethanol plant builders remain optimistic

Quad City Times

<http://qconline.com/archives/qco/display.php?id=383541>

Despite concerns over soaring corn prices, two ethanol plants are expected to be in operation by next spring, Patriot Renewable Fuels, LLC and Big River Resources, LLC (Ray Defenbaugh is quoted).

19. Ethanol: Environmental savior or snake oil?

MetroWest Daily News (MA)

<http://www.metrowestdailynews.com/news/x2124111855>

At least part of that answer could come by the end of this month, when the state's [Massachusetts] Advanced Biofuels Task Force publishes its report on the impact of biofuels in the state.

Opinions & Editorials

20. A Worsening Food Crisis

Washington Post

<http://www.washingtonpost.com/wp-dyn/content/article/2008/04/19/AR2008041901601.html>

The editorial board writes that the rising food prices and the increasing food shortage is being blame on ethanol, when much more blame needs to be assigned to other factors such as the drought in wheat-exporting Australia, rising prices of crude oil, and the increasing demand for food and meat in developing countries such as India and China.

21. Editorial: Need to rethink ethanol

Waco Tribune-Herald (TX)

<http://www.wacotrib.com/opin/content/news/opinion/stories/2008/04/21/04212008wacedit.html>

The Waco Tribune-Herald editorial board calls for a reduction or elimination of subsidies for corn-based ethanol.

22. Food or biofuel? Dumb question

Daily Inter Lake (MT)

<http://www.dailyinterlake.com/articles/2008/04/20/opinion/opinion01.txt>

The Daily Inter Lake editorial board blames ethanol subsidies as the primary reason for increasing food prices.

23. Planet needs a greater effort to break from fossil fuels

Detroit Free Press

<http://www.freep.com/apps/pbcs.dll/article?AID=/20080420/OPINION02/804200554/1070/OPINION02>

Tom Lyon, a professor of sustainable science, technology and commerce at the University of Michigan, calls for renewed optimism and investment in America to break free from fossil fuel use.

Blogs & Websites

24. Ethanol contributing to global food crisis

Wichita (KS) Eagle

<http://blogs.kansas.com/weblog/2008/04/ethanol-contributing-to-global-food-crisis/>

Ethanol making food prices soar, US needs to take lead in food aid.

Windsor Beacon
April 18, 2008

By: Dan Sanders Jr.

Editor,

I would like to respond to a letter to the editor in Saturday's (4/12) Windsor Beacon from Bob Berling who states that *corn ethanol is not renewable energy*.

Front Range Energy, LLC is Windsor's local producer of ethanol that was founded and is operated & majority owned by a Windsor resident, so Bob's misinformed opinion hit a little to close to home.

Bob has seemed to fallen into the same rut that many have to simply blame ethanol for food price increases and excess energy consumption. What Bob is missing is the fact that while pointing his finger at ethanol he is attacking the exact industry that is helping to reduce our energy costs/demand from often hostile countries who control the price of the US gasoline market. While this is significant, the fatal flaw in his argument is that he states *corn ethanol is not renewable*. Unlike crude oil which someday will dry up, corn can be grown, harvested, and processed into clean burning renewable ethanol year in and year out.

Facts:

- Just 4% of the change in the food CPI can be attributed to fluctuations in the price of corn. The key driver of the consumer price index for food is due to rising energy and transportation costs. In addition, Front Range Energy here in Windsor only processes the available starch in the corn into ethanol, the remaining fats, fibers, and proteins go back into the food supply in the form of high quality distillers' grains cattle feed to local feedlots.
- From the USDA, every 1 Btu of petroleum fuel used in the production of ethanol generates 13.2 Btus of energy output, greatly enhancing U.S. energy security. Front Range Energy here in Windsor utilizes the most modern efficiencies to produce ethanol, and from one kernel of corn we produce 3 value added products: Ethanol, Distillers' Grains, and CO₂.
- Without the use of biofuels, including ethanol, in our transportation fuel blends, demand for oil would swell causing a 15% increase in crude prices and a **25% increase in America's gasoline prices**.
- In 2007 alone, the U.S. ethanol industry generated a surplus of \$1.2 billion for the Federal treasury and nearly \$3.6 billion of additional tax revenue for State and Local governments like Windsor, Colorado. Front Range Energy alone generates hundreds of thousands of dollars of tax revenue each year for the local Windsor community and also supports the local workforce, vendors, and suppliers.

Lets all get informed before we make ridiculous comments about ethanol like Bob Berling has unfortunately proposed. Lets work towards energy independence and be proud of home grown and locally owned renewable ethanol, Front Range Energy is.

Sincerely,

Dan Sanders, Jr.
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How Biofuels Could Starve the Poor

By: C. Ford Runge and Benjamin Senauer

Summary: Thanks to high oil prices and hefty subsidies, corn-based ethanol is now all the rage in the United States. But it takes so much supply to keep ethanol production going that the price of corn -- and those of other food staples -- is shooting up around the world. To stop this trend, and prevent even more people from going hungry, Washington must conserve more and diversify ethanol's production inputs.

C. Ford Runge is Distinguished McKnight University Professor of Applied Economics and Law and Director of the Center for International Food and Agricultural Policy at the University of Minnesota. Benjamin Senauer is Professor of Applied Economics and Co-director of the Food Industry Center at the University of Minnesota.

THE ETHANOL BUBBLE

In 1974, as the United States was reeling from the oil embargo imposed by the Organization of Petroleum Exporting Countries, Congress took the first of many legislative steps to promote ethanol made from corn as an alternative fuel. On April 18, 1977, amid mounting calls for energy independence, President Jimmy Carter donned his cardigan sweater and appeared on television to tell Americans that balancing energy demands with available domestic resources would be an effort the "moral equivalent of war." The gradual phaseout of lead in the 1970s and 1980s provided an additional boost to the fledgling ethanol industry. (Lead, a toxic substance, is a performance enhancer when added to gasoline, and it was partly replaced by ethanol.) A series of tax breaks and subsidies also helped. In spite of these measures, with each passing year the United States became more dependent on imported petroleum, and ethanol remained marginal at best.

Now, thanks to a combination of high oil prices and even more generous government subsidies, corn-based ethanol has become the rage. There were 110 ethanol refineries in operation in the United States at the end of 2006, according to the Renewable Fuels Association. Many were being expanded, and another 73 were under construction. When these projects are completed, by the end of 2008, the United States' ethanol production capacity will reach an estimated 11.4 billion gallons per year. In his latest State of the Union address, President George W. Bush called on the country to produce 35 billion gallons of renewable fuel a year by 2017, nearly five times the level currently mandated.

The push for ethanol and other biofuels has spawned an industry that depends on billions of dollars of taxpayer subsidies, and not only in the United States. In 2005, global ethanol production was 9.66 billion gallons, of which Brazil produced 45.2 percent (from sugar cane)

and the United States 44.5 percent (from corn). Global production of biodiesel (most of it in Europe), made from oilseeds, was almost one billion gallons.

The industry's growth has meant that a larger and larger share of corn production is being used to feed the huge mills that produce ethanol. According to some estimates, ethanol plants will burn up to half of U.S. domestic corn supplies within a few years. Ethanol demand will bring 2007 inventories of corn to their lowest levels since 1995 (a drought year), even though 2006 yielded the third-largest corn crop on record. Iowa may soon become a net corn importer.

The enormous volume of corn required by the ethanol industry is sending shock waves through the food system. (The United States accounts for some 40 percent of the world's total corn production and over half of all corn exports.) In March 2007, corn futures rose to over \$4.38 a bushel, the highest level in ten years. Wheat and rice prices have also surged to decade highs, because even as those grains are increasingly being used as substitutes for corn, farmers are planting more acres with corn and fewer acres with other crops.

This might sound like nirvana to corn producers, but it is hardly that for consumers, especially in poor developing countries, who will be hit with a double shock if both food prices and oil prices stay high. The World Bank has estimated that in 2001, 2.7 billion people in the world were living on the equivalent of less than \$2 a day; to them, even marginal increases in the cost of staple grains could be devastating. Filling the 25-gallon tank of an SUV with pure ethanol requires over 450 pounds of corn -- which contains enough calories to feed one person for a year. By putting pressure on global supplies of edible crops, the surge in ethanol production will translate into higher prices for both processed and staple foods around the world. Biofuels have tied oil and food prices together in ways that could profoundly upset the relationships between food producers, consumers, and nations in the years ahead, with potentially devastating implications for both global poverty and food security.

THE OIL AND BIOFUEL ECONOMY

In the United States and other large economies, the ethanol industry is artificially buoyed by government subsidies, minimum production levels, and tax credits. High oil prices over the past few years have made ethanol naturally competitive, but the U.S. government continues to heavily subsidize corn farmers and ethanol producers. Direct corn subsidies equaled \$8.9 billion in 2005. Although these payments will fall in 2006 and 2007 because of high corn prices, they may soon be dwarfed by the panoply of tax credits, grants, and government loans included in energy legislation passed in 2005 and in a pending farm bill designed to support ethanol producers. The federal government already grants ethanol blenders a tax allowance of 51 cents per gallon of ethanol they make, and many states pay out additional subsidies.

Consumption of ethanol in the United States was expected to reach over 6 billion gallons in 2006. (Consumption of biodiesel was expected to be about 250 million gallons.) In 2005, the U.S. government mandated the use of 7.5 billion gallons of biofuels per year by 2012; in early 2007, 37 governors proposed raising that figure to 12 billion gallons by 2010; and last January, President Bush raised it further, to 35 billion gallons by 2017. Six billion gallons of ethanol are

needed every year to replace the fuel additive known as MTBE, which is being phased out due to its polluting effects on ground water.

The European Commission is using legislative measures and directives to promote biodiesel, produced mainly in Europe, made from rapeseeds and sunflower seeds. In 2005, the European Union produced 890 million gallons of biodiesel, over 80 percent of the world's total. The EU's Common Agricultural Policy also promotes the production of ethanol from a combination of sugar beets and wheat with direct and indirect subsidies. Brussels aims to have 5.75 percent of motor fuel consumed in the European Union come from biofuels by 2010 and 10 percent by 2020.

Brazil, which currently produces approximately the same amount of ethanol as the United States, derives almost all of it from sugar cane. Like the United States, Brazil began its quest for alternative energy in the mid-1970s. The government has offered incentives, set technical standards, and invested in supporting technologies and market promotion. It has mandated that all diesel contain two percent biodiesel by 2008 and five percent biodiesel by 2013. It has also required that the auto industry produce engines that can use biofuels and has developed wide-ranging industrial and land-use strategies to promote them. Other countries are also jumping on the biofuel bandwagon. In Southeast Asia, vast areas of tropical forest are being cleared and burned to plant oil palms destined for conversion to biodiesel.

This trend has strong momentum. Despite a recent decline, many experts expect the price of crude oil to remain high in the long term. Demand for petroleum continues to increase faster than supplies, and new sources of oil are often expensive to exploit or located in politically risky areas. According to the U.S. Energy Information Administration's latest projections, global energy consumption will rise by 71 percent between 2003 and 2030, with demand from developing countries, notably China and India, surpassing that from members of the Organization for Economic Cooperation and Development by 2015. The result will be sustained upward pressure on oil prices, which will allow ethanol and biodiesel producers to pay much higher premiums for corn and oilseeds than was conceivable just a few years ago. The higher oil prices go, the higher ethanol prices can go while remaining competitive -- and the more ethanol producers can pay for corn. If oil reaches \$80 per barrel, ethanol producers could afford to pay well over \$5 per bushel for corn.

With the price of raw materials at such highs, the biofuel craze would place significant stress on other parts of the agricultural sector. In fact, it already does. In the United States, the growth of the biofuel industry has triggered increases not only in the prices of corn, oilseeds, and other grains but also in the prices of seemingly unrelated crops and products. The use of land to grow corn to feed the ethanol maw is reducing the acreage devoted to other crops. Food processors who use crops such as peas and sweet corn have been forced to pay higher prices to keep their supplies secure -- costs that will eventually be passed on to consumers. Rising feed prices are also hitting the livestock and poultry industries. According to Vernon Eidman, a professor emeritus of agribusiness management at the University of Minnesota, higher feed costs have caused returns to fall sharply, especially in the poultry and swine sectors. If returns continue to drop, production will decline, and the prices for chicken, turkey, pork, milk, and eggs will rise. A

number of Iowa's pork producers could go out of business in the next few years as they are forced to compete with ethanol plants for corn supplies.

Proponents of corn-based ethanol argue that acreage and yields can be increased to satisfy the rising demand for ethanol. But U.S. corn yields have been rising by a little less than two percent annually over the last ten years, and even a doubling of those gains could not meet current demand. As more acres are planted with corn, land will have to be pulled from other crops or environmentally fragile areas, such as those protected by the Department of Agriculture's Conservation Reserve Program.

In addition to these fundamental forces, speculative pressures have created what might be called a "biofuel mania": prices are rising because many buyers think they will. Hedge funds are making huge bets on corn and the bull market unleashed by ethanol. The biofuel mania is commandeering grain stocks with a disregard for the obvious consequences. It seems to unite powerful forces, including motorists' enthusiasm for large, fuel-inefficient vehicles and guilt over the ecological consequences of petroleum-based fuels. But even as ethanol has created opportunities for huge profits for agribusiness, speculators, and some farmers, it has upset the traditional flows of commodities and the patterns of trade and consumption both inside and outside of the agricultural sector.

This craze will create a different problem if oil prices decline because of, say, a slowdown in the global economy. With oil at \$30 a barrel, producing ethanol would no longer be profitable unless corn sold for less than \$2 a bushel, and that would spell a return to the bad old days of low prices for U.S. farmers. Undercapitalized ethanol plants would be at risk, and farmer-owned cooperatives would be especially vulnerable. Calls for subsidies, mandates, and tax breaks would become even more shrill than they are now: there would be clamoring for a massive bailout of an overinvested industry. At that point, the major investments that have been made in biofuels would start to look like a failed gamble. On the other hand, if oil prices hover around \$55-\$60, ethanol producers could pay from \$3.65 to \$4.54 for a bushel of corn and manage to make a normal 12 percent profit.

Whatever happens in the oil market, the drive for energy independence, which has been the basic justification for huge investments in and subsidies for ethanol production, has already made the industry dependent on high oil prices.

CORNUCOPIA

One root of the problem is that the biofuel industry has long been dominated not by market forces but by politics and the interests of a few large companies. Corn has become the prime raw material even though biofuels could be made efficiently from a variety of other sources, such as grasses and wood chips, if the government funded the necessary research and development. But in the United States, at least, corn and soybeans have been used as primary inputs for many years thanks in large part to the lobbying efforts of corn and soybean growers and Archer Daniels Midland Company (ADM), the biggest ethanol producer in the U.S. market.

Since the late 1960s, ADM positioned itself as the "supermarket to the world" and aimed to create value from bulk commodities by transforming them into processed products that command heftier prices. In the 1970s, ADM started making ethanol and other products resulting from the wet-milling of corn, such as high fructose corn syrup. It quickly grew from a minor player in the feed market to a global powerhouse. By 1980, ADM's ethanol production had reached 175 million gallons per year, and high fructose corn syrup had become a ubiquitous sweetening agent in processed foods. In 2006, ADM was the largest producer of ethanol in the United States: it made more than 1.07 billion gallons, over four times more than its nearest rival, VeraSun Energy. In early 2006, it announced plans to increase its capital investment in ethanol from \$700 million to \$1.2 billion in 2008 and increase production by 47 percent, or close to 500 million gallons, by 2009.

ADM owes much of its growth to political connections, especially to key legislators who can earmark special subsidies for its products. Vice President Hubert Humphrey advanced many such measures when he served as a senator from Minnesota. Senator Bob Dole (R-Kans.) advocated tirelessly for the company during his long career. As the conservative critic James Bovard noted over a decade ago, nearly half of ADM's profits have come from products that the U.S. government has either subsidized or protected.

Partly as a result of such government support, ethanol (and to a lesser extent biodiesel) is now a major fixture of the United States' agricultural and energy sectors. In addition to the federal government's 51-cents-per-gallon tax credit for ethanol, smaller producers get a 10-cents-per-gallon tax reduction on the first 15 million gallons they produce. There is also the "renewable fuel standard," a mandatory level of nonfossil fuel to be used in motor vehicles, which has set off a political bidding war. Despite already high government subsidies, Congress is considering lavishing more money on biofuels. Legislation related to the 2007 farm bill introduced by Representative Ron Kind (D-Wis.) calls for raising loan guarantees for ethanol producers from \$200 million to \$2 billion. Advocates of corn-based ethanol have rationalized subsidies by pointing out that greater ethanol demand pushes up corn prices and brings down subsidies to corn growers.

The ethanol industry has also become a theater of protectionism in U.S. trade policy. Unlike oil imports, which come into the country duty-free, most ethanol currently imported into the United States carries a 54-cents-per-gallon tariff, partly because cheaper ethanol from countries such as Brazil threatens U.S. producers. (Brazilian sugar cane can be converted to ethanol more efficiently than can U.S. corn.) The Caribbean Basin Initiative could undermine this protection: Brazilian ethanol can already be shipped duty-free to CBI countries, such as Costa Rica, El Salvador, or Jamaica, and the agreement allows it to go duty-free from there to the United States. But ethanol supporters in Congress are pushing for additional legislation to limit those imports. Such government measures shield the industry from competition despite the damaging repercussions for consumers.

STARVING THE HUNGRY

Biofuels may have even more devastating effects in the rest of the world, especially on the prices of basic foods. If oil prices remain high -- which is likely -- the people most vulnerable to the

price hikes brought on by the biofuel boom will be those in countries that both suffer food deficits and import petroleum. The risk extends to a large part of the developing world: in 2005, according to the UN Food and Agriculture Organization, most of the 82 low-income countries with food deficits were also net oil importers.

Even major oil exporters that use their petrodollars to purchase food imports, such as Mexico, cannot escape the consequences of the hikes in food prices. In late 2006, the price of tortilla flour in Mexico, which gets 80 percent of its corn imports from the United States, doubled thanks partly to a rise in U.S. corn prices from \$2.80 to \$4.20 a bushel over the previous several months. (Prices rose even though tortillas are made mainly from Mexican-grown white corn because industrial users of the imported yellow corn, which is used for animal feed and processed foods, started buying the cheaper white variety.) The price surge was exacerbated by speculation and hoarding. With about half of Mexico's 107 million people living in poverty and relying on tortillas as a main source of calories, the public outcry was fierce. In January 2007, Mexico's new president, Felipe Calderón, was forced to cap the prices of corn products.

The International Food Policy Research Institute, in Washington, D.C., has produced sobering estimates of the potential global impact of the rising demand for biofuels. Mark Rosegrant, an IFPRI division director, and his colleagues project that given continued high oil prices, the rapid increase in global biofuel production will push global corn prices up by 20 percent by 2010 and 41 percent by 2020. The prices of oilseeds, including soybeans, rapeseeds, and sunflower seeds, are projected to rise by 26 percent by 2010 and 76 percent by 2020, and wheat prices by 11 percent by 2010 and 30 percent by 2020. In the poorest parts of sub-Saharan Africa, Asia, and Latin America, where cassava is a staple, its price is expected to increase by 33 percent by 2010 and 135 percent by 2020. The projected price increases may be mitigated if crop yields increase substantially or ethanol production based on other raw materials (such as trees and grasses) becomes commercially viable. But unless biofuel policies change significantly, neither development is likely.

The production of cassava-based ethanol may pose an especially grave threat to the food security of the world's poor. Cassava, a tropical potato-like tuber also known as manioc, provides one-third of the caloric needs of the population in sub-Saharan Africa and is the primary staple for over 200 million of Africa's poorest people. In many tropical countries, it is the food people turn to when they cannot afford anything else. It also serves as an important reserve when other crops fail because it can grow in poor soils and dry conditions and can be left in the ground to be harvested as needed.

Thanks to its high-starch content, cassava is also an excellent source of ethanol. As the technology for converting it to fuel improves, many countries -- including China, Nigeria, and Thailand -- are considering using more of the crop to that end. If peasant farmers in developing countries could become suppliers for the emerging industry, they would benefit from the increased income. But the history of industrial demand for agricultural crops in these countries suggests that large producers will be the main beneficiaries. The likely result of a boom in cassava-based ethanol production is that an increasing number of poor people will struggle even more to feed themselves.

Participants in the 1996 World Food Summit set out to cut the number of chronically hungry people in the world -- people who do not eat enough calories regularly to be healthy and active -- from 823 million in 1990 to about 400 million by 2015. The Millennium Development Goals established by the United Nations in 2000 vowed to halve the proportion of the world's chronically underfed population from 16 percent in 1990 to eight percent in 2015. Realistically, however, resorting to biofuels is likely to exacerbate world hunger. Several studies by economists at the World Bank and elsewhere suggest that caloric consumption among the world's poor declines by about half of one percent whenever the average prices of all major food staples increase by one percent. When one staple becomes more expensive, people try to replace it with a cheaper one, but if the prices of nearly all staples go up, they are left with no alternative.

In a study of global food security we conducted in 2003, we projected that given the rates of economic and population growth, the number of hungry people throughout the world would decline by 23 percent, to about 625 million, by 2025, so long as agricultural productivity improved enough to keep the relative price of food constant. But if, all other things being equal, the prices of staple foods increased because of demand for biofuels, as the IFPRI projections suggest they will, the number of food-insecure people in the world would rise by over 16 million for every percentage increase in the real prices of staple foods. That means that 1.2 billion people could be chronically hungry by 2025 -- 600 million more than previously predicted.

The world's poorest people already spend 50 to 80 percent of their total household income on food. For the many among them who are landless laborers or rural subsistence farmers, large increases in the prices of staple foods will mean malnutrition and hunger. Some of them will tumble over the edge of subsistence into outright starvation, and many more will die from a multitude of hunger-related diseases.

THE GRASS IS GREENER

And for what? Limited environmental benefits at best. Although it is important to think of ways to develop renewable energy, one should also carefully examine the eager claims that biofuels are "green." Ethanol and biodiesel are often viewed as environmentally friendly because they are plant-based rather than petroleum-based. In fact, even if the entire corn crop in the United States were used to make ethanol, that fuel would replace only 12 percent of current U.S. gasoline use. Thinking of ethanol as a green alternative to fossil fuels reinforces the chimera of energy independence and of decoupling the interests of the United States from an increasingly troubled Middle East.

Should corn and soybeans be used as fuel crops at all? Soybeans and especially corn are row crops that contribute to soil erosion and water pollution and require large amounts of fertilizer, pesticides, and fuel to grow, harvest, and dry. They are the major cause of nitrogen runoff -- the harmful leakage of nitrogen from fields when it rains -- of the type that has created the so-called dead zone in the Gulf of Mexico, an ocean area the size of New Jersey that has so little oxygen it can barely support life. In the United States, corn and soybeans are typically planted in rotation, because soybeans add nitrogen to the soil, which corn needs to grow. But as corn increasingly displaces soybeans as a main source of ethanol, it will be cropped continuously, which will require major increases in nitrogen fertilizer and aggravate the nitrogen runoff problem.

Nor is corn-based ethanol very fuel efficient. Debates over the "net energy balance" of biofuels and gasoline -- the ratio between the energy they produce and the energy needed to produce them -- have raged for decades. For now, corn-based ethanol appears to be favored over gasoline, and biodiesel over petroleum diesel -- but not by much. Scientists at the Argonne National Laboratory and the National Renewable Energy Laboratory have calculated that the net energy ratio of gasoline is 0.81, a result that implies an input larger than the output. Corn-based ethanol has a ratio that ranges between 1.25 and 1.35, which is better than breaking even. Petroleum diesel has an energy ratio of 0.83, compared with that of biodiesel made from soybean oil, which ranges from 1.93 to 3.21. (Biodiesel produced from other fats and oils, such as restaurant grease, may be more energy efficient.)

Similar results emerge when biofuels are compared with gasoline using other indices of environmental impact, such as greenhouse gas emissions. The full cycle of the production and use of corn-based ethanol releases less greenhouse gases than does that of gasoline, but only by 12 to 26 percent. The production and use of biodiesel emits 41 to 78 percent less such gases than do the production and use of petroleum-based diesel fuels.

Another point of comparison is greenhouse gas emissions per mile driven, which takes account of relative fuel efficiency. Using gasoline blends with 10 percent corn-based ethanol instead of pure gasoline lowers emissions by 2 percent. If the blend is 85 percent ethanol (which only flexible-fuel vehicles can run on), greenhouse gas emissions fall further: by 23 percent if the ethanol is corn-based and by 64 percent if it is cellulose-based. Likewise, diesel containing 2 percent biodiesel emits 1.6 percent less greenhouse gases than does petroleum diesel, whereas blends with 20 percent biodiesel emit 16 percent less, and pure biodiesel (also for use only in special vehicles) emits 78 percent less. On the other hand, biodiesel can increase emissions of nitrogen oxide, which contributes to air pollution. In short, the "green" virtues of ethanol and biodiesel are modest when these fuels are made from corn and soybeans, which are energy-intensive, highly polluting row crops.

The benefits of biofuels are greater when plants other than corn or oils from sources other than soybeans are used. Ethanol made entirely from cellulose (which is found in trees, grasses, and other plants) has an energy ratio between 5 and 6 and emits 82 to 85 percent less greenhouse gases than does gasoline. As corn grows scarcer and more expensive, many are betting that the ethanol industry will increasingly turn to grasses, trees, and residues from field crops, such as wheat and rice straw and cornstalks. Grasses and trees can be grown on land poorly suited to food crops or in climates hostile to corn and soybeans. Recent breakthroughs in enzyme and gasification technologies have made it easier to break down cellulose in woody plants and straw. Field experiments suggest that grassland perennials could become a promising source of biofuel in the future.

For now, however, the costs of harvesting, transporting, and converting such plant matters are high, which means that cellulose-based ethanol is not yet commercially viable when compared with the economies of scale of current corn-based production. One ethanol-plant manager in the Midwest has calculated that fueling an ethanol plant with switchgrass, a much-discussed alternative, would require delivering a semitrailer truckload of the grass every six minutes, 24 hours a day. The logistical difficulties and the costs of converting cellulose into fuel, combined

with the subsidies and politics currently favoring the use of corn and soybeans, make it unrealistic to expect cellulose-based ethanol to become a solution within the next decade. Until it is, relying more on sugar cane to produce ethanol in tropical countries would be more efficient than using corn and would not involve using a staple food.

The future can be brighter if the right steps are taken now. Limiting U.S. dependence on fossil fuels requires a comprehensive energy-conservation program. Rather than promoting more mandates, tax breaks, and subsidies for biofuels, the U.S. government should make a major commitment to substantially increasing energy efficiency in vehicles, homes, and factories; promoting alternative sources of energy, such as solar and wind power; and investing in research to improve agricultural productivity and raise the efficiency of fuels derived from cellulose. Washington's fixation on corn-based ethanol has distorted the national agenda and diverted its attention from developing a broad and balanced strategy. In March, the U.S. Energy Department announced that it would invest up to \$385 million in six biorefineries designed to convert cellulose into ethanol. That is a promising step in the right direction.

AFP
April 20, 2008

Biofuels under attack as world food prices soar

PARIS (AFP) — Hailed until only months ago as a silver bullet in the fight against global warming, biofuels are now accused of snatching food out of the mouths of the poor.

Billions have been poured into developing sugar- and grain-based ethanol and biodiesel to help wean rich economies from their addiction to carbon-belching fossil fuels, the overwhelming source of man-made global warming.

Heading the rush are the United States, Brazil and Canada, which are eagerly transforming corn, wheat, soy beans and sugar cane into cleaner-burning fuel, and the European Union (EU) is to launch its own ambitious programme.

But as soaring prices for staples bring more of the planet's most vulnerable people face-to-face with starvation, the image of biofuels has suddenly changed from climate saviour to a horribly misguided experiment.

On Friday, the head of the International Monetary Fund (IMF) said biofuels "posed a real moral problem" and called for a moratorium on using food crops to power cars, trucks and buses.

The vital problem of global warming "has to be balanced with the fact that there are people who are going to starve to death," said Dominique Strauss-Kahn.

"Producing biofuels is a crime against humanity," the UN's special rapporteur for the right to food, Jean Ziegler of Switzerland, said earlier.

Biofuels may still be in their infancy but they are growing rapidly, with annual production leaping by double-digit percentages.

In a speech on Wednesday that set down a target for reducing US carbon emissions, George W. Bush pointed to legislation requiring US producers to supply at least 36 billion gallons (136 billion litres) of renewable fuel by 2020.

In 2007, 20 percent of grain -- 81 million tonnes -- produced in the United States was used to make ethanol, according to US think tank the Earth Policy Institute, which predicts that the percentage will jump to nearly a quarter this year.

"We are looking at a five-fold increase in renewable fuel," Bush's top climate change advisor, Jim Connaughton, said in Paris on Thursday at a meeting of the world's major greenhouse-gas polluters.

But more than half of that legislatively-mandated production would come from "second-generation" biofuels made from non-food sources such as switchgrass and wood byproducts, he said.

The EU's and the Brazilian delegates in Paris contested the link between biofuels and the world food crisis.

"This is highly exaggerated," Sergio Serra, Brazil's ambassador for climate change, told AFP.

"There is no real relation of cause and effect between the expansion of the production of biofuels and the raising of food prices. At least it is not happening in Brazil."

EU Environment Commissioner Stavros Dimas said experts would report back by the end of May on how to guarantee that Europe's planned biofuel boost would not impinge on the environment or the poor.

"There are a lot of concerns about social impacts, rising food prices and environment issues, and for all those reasons we want to insist on sustainability criteria in our legislation," he said.

Defenders of biofuels say food shortfalls have multiple causes, including a growing appetite for meat among the burgeoning middle class in China and India.

On average, it takes more than four kilos (eight pounds) of grain to produce one kilo (two pounds) of pork, and two kilos (four pounds) of grain to yield a kilo (two pounds) of beef.

Climate change may well be a contributing factor.

Some scientists fear rising temperatures and shifting rainfall patterns may be worsening water scarcity in key agriculture areas such Australia's wheat belt, and rice-growing deltas may be hit by saline intrusion from rising seas.

In addition, the surging cost of oil has had an indirect impact on many poor people, adding to the pinch caused by rising food prices.

Are biofuels hurting the planet?

Biofuels are getting blamed for a global food crisis and a setback in anti-poverty efforts. Fortune magazine's Allan Sloan examines the wisdom of growing things to make them into ethanol and considers alternatives.

By: Lisa Napoli

Allan Sloan is a senior editor-at-large at Fortune (APM)

Lisa Napoli: Today in Ghana, the U.N. Secretary General talked about the effect biofuels are having on food prices around the world and how they could set back world anti-poverty efforts. Fortune magazine's Allan Sloan says lots of people once thought biofuels were going to save the planet.

Allan Sloan: I think of it as that movie "I Am Legend," where it starts out with a vaccine to cure cancer, then at the end wipes out most of the planet and turns almost everyone who's left into a flesh-eating zombie. Not quite what they bargained for. And the thing with ethanol and biofuel is that was supposed to be a way to cure the United States', what President Bush called our addiction to oil without anyone having to sacrifice anything. You know you're not raising taxes; you're not driving smaller cars; you're not being more efficient. And, of course, it turns out it's taking so much of the world's crops that it's run up the cost of food all over the world and has not succeeded in any visible way, at least in the United States, at holding down the price of oil.

Napoli: So, it's kind like taking a pill for a diet or using a machine that's supposedly going to tone you without your having to work. What would have been a better alternative?

Sloan: Well in hindsight, what my children would call a big honking gas tax where you would have put a fairly substantial tax on gasoline and then, because a lot of people really can't afford that, you flow it back to them in the form of an income tax credit. And that way we'd be paying the tax to ourselves instead of paying what is now the largest transfer of wealth from one society to another. And many of the oil producers are not exactly friends of the United States. So, we're helping fund the worldwide campaign against us, and I think we would have been a lot better off with a gas tax.

Napoli: What do we do now that we've become more dependent on this ethanol? How do we turn back and change directions again? Is it possible even?

Sloan: It's definitely possible. Is it going to happen? It probably wouldn't happen. The idea of ethanol is not a bad idea if you made it out of garbage, something that's already there that you don't have to grow. The idea of growing things to make them into

ethanol, it didn't seem to make any sense when I heard about it, except it made political sense. And again, it's not only President Bush, it's also the Democrats, because you didn't see them lining up and saying, "You know, we'd rather have a gas tax."

That's Fortune magazine's Allan Sloan. And in Los Angeles, I'm Lisa Napoli. Enjoy the day

Associated Press
April 21, 2008

Asian Development Bank: Biofuels making food more expensive

By: Gillian Wong

SINGAPORE (AP) — Developed nations should stop paying agricultural subsidies to encourage biofuel production because the payments are making staple foods more expensive, the Asian Development Bank said Monday.

Biofuels should also be re-examined by governments around the world as it is increasingly unclear how environmentally friendly they are, ADB Managing Director General Rajat Nag said in an interview with The Associated Press. The production of biofuel leads to forests being destroyed and reduced land area for growing crops for food, he said.

"We feel that the developed countries should seriously rethink the whole issue of biofuel, particularly the biofuel subsidies," Nag said. "Giving subsidies for biofuels ... basically acts as an implicit tax on staple foods."

Paying farmers to grow oilseed and other crops to produce biofuels means they grow fewer food crops, resulting in higher prices for such staples as palm oil and corn.

Nag did not give examples, but countries that subsidize biofuel include the U.S., the world's largest producer of ethanol, which is made mostly from corn and other grain crops. The country's farm subsidy programs include payments for ethanol production.

"We believe it is more important to let the developed country farmers decide on what they will plant, based on the relative prices, based on the international prices, but not subsidized prices," he said.

Surging food prices, stoked by rising fuel costs that have increased production and transport costs, have triggered protests around the world in recent weeks. Riots have erupted over food shortages in the Caribbean and Africa and hunger is approaching crisis stage in parts of Asia.

Nag said rising food prices will be top on the agenda of the ADB's annual board of governors meeting in Madrid next week.

He urged governments faced with rising food prices not to impose price caps or export bans, as the measures could prove counterproductive. Price controls are disincentives for farmers amid the rising costs, he said.

"The cost of production is going up, so the obvious, rational reaction (to price caps) of the farmer is to reduce planting, which is exactly the opposite of what we want. We want production to increase, not decrease," he said.

Nag said governments should instead consider targeted cash income transfers to the poor. The Manila-based bank was ready to provide loans to governments to help ease the situation, he said, but added that no country has made any specific requests yet.

"If the governments go for the targeted income support, obviously this will add to the fiscal burden of the governments, so ADB will be very responsive and willing to consider budget support for the government, and providing program loans," he said.

In Asia, Nag said, the supply of rice to the region remained adequate even though stocks have slipped to their lowest in decades.

"We want to get the focus away from being dramatized or an overreaction to the supply situation. It is tight, no doubt about it," he said. "But it is not a situation when rice is not available in the region as a whole."

Nag said, however, that the rapid increase in the price of rice had a "very serious impact" on the region's poor, who spend a large proportion of their income on food.

"The prices have increased very dramatically, almost three times in the last one year and almost twice in the last three months," he said.

Nag said the hardest hit by rising food prices in the Asia Pacific include 600 million people who survive on a dollar a day or less, and about the same number who live on just above a dollar — making up a group of about 1.2 billion who are vulnerable.

The region's poor usually spend about half of their budgets on food, but recent increases have pushed that proportion to about 80 percent in some parts of South Asia, he said.

Battling Ethanol-Propelled Food Prices

Demand for Corn-Derived Fuel is Driving Up Food Prices, but New Technologies Could Help

By: Kevin Bullis

Food prices worldwide have risen dramatically in the past few years, due in part to a similarly dramatic rise in the amount of corn used for ethanol production in the United States. Now, in an effort to make food less expensive, experts are calling for limits on ethanol production, subsidies for corn, and more incentives for biofuels made from nonfood sources.

According to statistics released Wednesday by the U.S. Department of Labor, food prices for the first three months of the year rose at a rate that translates to an annual increase of 5.3 percent (adjusted for seasonal variations). That's slightly higher than last year's increase, and much higher than the increases in previous years. From 2001 to 2006, the price of food increased each year by an average of only 2.5 percent. According to the World Bank, the situation worldwide is more dire: food prices have nearly doubled over the past three years. That's erased a decade of economic gains for the poor in some countries.

Part of this increase is due to corn being diverted from use as animal feed and food to use as a feedstock for ethanol production. Many other factors are also important--such as growing demand for food imports in India and China and a drought in Australia that hurt grain harvests. But the use of corn for biofuels has been singled out because it is one factor over which governments have some control. Some analysts, such as C. Ford Runge, a professor of applied economics and law at the University of Minnesota, say that the use of corn for fuel rather than food could account for about one-third of the rise in prices worldwide. The other two-thirds is split between the effects of weather and increases in demand, he says. (Runge presents his argument in "How Biofuels Could Starve the Poor," in *Foreign Affairs*.) A look at the grain markets gives a good idea of the role that ethanol demand plays in food prices, says Patrick Westhoff, codirector of the Food and Agricultural Policy Research Institute at the University of Missouri. In the past two years, global consumption of grains has risen by about 80 million tons, he says. About half of that increase, or 40 million tons, comes from corn used to make ethanol.

To reverse the effects of corn going to fuel rather than to food, some experts are calling for an end to the biofuel mandates signed into law late last year. The mandates require an increase in biofuel production in the United States, including 15 billion gallons of corn ethanol production by 2015--considerably more than the 6.5 billion gallons produced last year. Repealing the mandates would certainly have some effect on food prices, Westhoff says. According to an analysis done by his organization, the mandates will decrease U.S. corn exports by more than 13 percent from 2011 to 2016. That decrease will tighten corn supplies worldwide, driving up not only corn prices, but also the prices of other staples, such as wheat, that could serve as a replacement for corn. Removing the mandates could improve export numbers, Westhoff says.

(Notably, higher demand for corn for use in ethanol production has actually increased corn exports in the short term. High corn prices have led farmers to plant more corn, and last year, not all of the increased supply went to ethanol. Much of the excess went overseas.)

But the effect of repealing the mandates on food prices depends strongly on the cost of energy. If oil prices stay around \$100 a barrel, ethanol will remain an attractive alternative even without the mandates, Westhoff says. As a result, ethanol production could reach levels as high as those set by the mandates anyway, putting just as much strain on the corn supply. High energy costs increase food prices in other ways, too, says Simla Tokgöz, an economic analyst at the Center for Agricultural and Rural Development at Iowa State University. Growing crops takes energy, and countries that have to import food are now paying a high price for shipping because of fuel costs. Bringing down food prices requires addressing these problems as well.

One thing that could help is reducing or eliminating subsidies that give corn ethanol an economic advantage over ethanol from other sources, such as sugar cane, Runge says. Ethanol can be made from sugar more efficiently than it can from corn, so diversion of sugar to fuel production wouldn't have as much of an effect on food markets.

Scaling up technology for making ethanol from nonfood sources, such as grass and wood chips, could also help. Federal grants are already starting to make that happen, and certain provisions in the U.S. biofuels mandates call for the use of cellulosic ethanol. But so far, technologies for producing cellulosic ethanol have not been commercially deployed. The jump in food prices "increases the urgency to get them developed," says Bruce Babcock, director of the Center for Agricultural and Rural Development at Iowa State University.

Here again, reducing subsidies could help. Runge says that corn ethanol is squeezing out cellulosic ethanol. With corn prices at record highs, farmers have no incentive to plant the best cellulosic crops. Reducing or eliminating corn subsidies could help level the playing field. "You've got to induce farmers to grow the plants you're going to use for [cellulosic] feedstocks, rather than corn," Runge says.

But even if alternative approaches to increasing energy supply catch on, he says, ultimately, people need to use less. "I think the most important thing we could do in the United States would be to develop incentives and regulation encouraging aggressive conservation," Runge says.

Los Angeles Times
April 19, 2008

Pondering fuels' true carbon costs

A conference on the state's evolving carbon standard ponders ways to quantify global warming effects.

By: Elizabeth Douglass

While much of the world argues over whether biofuels made from corn are worsening world hunger, the debate in California is shifting to new state rules that could revolutionize the way fuels are judged.

A gathering this week in Sacramento offered a glimpse of a complex "poly-fuel" future that promised substantial environmental benefits as well as wrenching change for California's transportation systems.

The two-day conference was the first devoted to California's still-evolving Low-Carbon Fuel Standard, which calls for at least a 10% cut in the average carbon footprint of vehicle fuels by 2020, with 2006 as the baseline.

Regulators will attempt to take into account the total carbon cost, in global warming terms, that's embedded in the life cycle of gasoline, from its raw oil origins in a well, through the refining process, to the gas station, into cars and out the tailpipe. Newer and harder-to-quantify considerations, such as a fuel's direct and indirect effects on land use, will also be part of the ratings.

"Biofuels are being transformed into low-carbon fuels, and those are two very different things," said Rahul Iyer, a founder and executive vice president of Primafuel Inc., a Signal Hill-based company that is building a biodiesel plant at the Port of Sacramento.

"These could all possibly be low-carbon fuels," Iyer said as he scanned an exhibit floor dotted with tractors, buses, trucks and cars powered by compressed natural gas, propane, hydrogen fuel cells, diesel, electricity and hybrid-electric motors.

"They all get to compete on the merits of their life-cycle greenhouse gas emissions."

Transportation is responsible for nearly 40% of the state's current greenhouse gas emissions, and that makes the new fuel standard crucial to the state's overall goal of cutting greenhouse gas emissions to 1990 levels by 2020.

Because the land use and other evolving concerns aren't fully understood, calculating the effects has become "a very tough issue," Mary Nichols, chairwoman of the California Air Resources Board, told the 400 attendees at the low-carbon confab. But, she added, "this is the most

ambitious effort to actually do a fair life-cycle analysis that's ever been undertaken. . . . We're very optimistic that it can be a success."

California's Low-Carbon Fuel Standard is at the forefront of a worldwide shift toward evaluating fuels using such life-cycle calculations. Beginning in 2010, fuel will be given a carbon-intensity score that reflects the raw ingredients, how and where it was produced, how it got to market and how it was used.

Significant work remains before that can be done, oil industry executives said.

"I'm not sure this is a doable proposition, although many well-intentioned people believe it is," said John Hofmeister, president of Shell Oil Inc., the U.S. arm of the international oil giant. "I have no doubt that we'll get the science right. . . . but there is absolutely zero understanding of what it takes to go from alpha to beta to commercial-level production of the kind of volumes that are called for."

Even fuels designed to fight pollution and global warming have detractors. Over the last year, some experts have said the demand for corn-based ethanol changed planting patterns and boosted corn prices enough to worsen the worldwide hunger crisis that was triggered initially by poor crops, bad weather and the soaring cost of oil byproducts such as fertilizer.

"The rigor that's being applied to biofuels has never been applied to any other industry," said Iyer, whose company is developing technologies to lessen carbon emissions from current biofuels.

Corn-Based Ethanol Tied to Higher Food Costs

By: Siobhan Hughes

Energy Secretary Samuel Bodman said Friday that the growing emphasis on corn-based ethanol has contributed to higher food prices, and he said the nation should begin "moving away gradually" from ethanol made from food such as corn.

"As we pursue diversity in our overall energy mix, we must also pursue diversity in our biofuels," Mr. Bodman said at a conference in Alexandria, Va. "This means moving away gradually from ethanol produced from foodstocks like corn."

Mr. Bodman's remarks come as efforts to make motor-vehicle fuels from grains such as corn are coming under fire amid soaring world food prices and food riots in several countries. A U.N. report Tuesday called biofuels a "crime against humanity."

In December, President Bush signed an energy bill mandating that 36 billion gallons of so-called renewable fuel be blended into the fuel supply by 2022. Of that amount, 21 billion gallons would have to come from sources other than corn, such as wood chips. Ethanol from such alternative sources is known as cellulosic ethanol.

"The reason that cellulosic fuels like ethanol are not on the market in large volumes is not because we don't know how to make it in commercial quantities," Mr. Bodman said. "The production process at present is too complex and too costly, but I am confident that we can find the way forward."

Separately, Mr. Bodman said the government would "not plan to" hold off on adding oil to the Strategy Petroleum Reserve, even though gasoline prices averaged \$3.38 a gallon last week, a record high.

Mr. Bodman also disagreed with a proposal by Republican presidential candidate Sen. John McCain (R., Ariz.) to suspend the 18.4-cent federal gas tax this summer.

Beyond biofuel: Food gap runs deep

By: David Adams

When deadly food riots erupted in Haiti this month, experts were quick to blame the United States' policy of harvesting grains to make biofuels.

Using food crops to satisfy the needs of wealthy, gas-guzzling consumers ahead of the starving poor was "a crime against humanity," according to one United Nations official.

Anger and fear over food prices that have climbed an average of 40 percent since last summer are visible worldwide. In Haiti, where rice prices have doubled since last year (50 percent since January alone) at least five people were killed and 25 injured in food riots and clashes with U.N. peacekeepers. The protests led to the ouster of the prime minister this month.

"The last few months have been outrageous," said Gabriel Verret, the president's top economic adviser. "It's the same thing as is happening all over the globe."

But in Haiti biofuels are not the chief villain. Haiti does not use its farmland to produce ethanol or biodiesel, the two main alternative "green" fuels.

"The role biofuels plays in all this is marginal compared to the host of other issues," said Matt Hartwig, spokesman for the Renewable Fuels Association, which represents the ethanol industry. "We don't use rice to make ethanol, nor do we grow corn in rice paddies."

The real culprits — at least in the hemisphere's poorest country — are trade policies that have decimated Haitian agriculture and a catastrophic drought half a world away that has made rice so valuable that paddies in Thailand are under armed guard.

Before 1950, Haiti produced more than 80 percent of its own food.

But in the 1980s the International Monetary Fund persuaded the Haitian government to reduce its import tariffs. Tons of low-priced U.S. goods, rice in particular, began to flood the docks of Haitian ports. This put many of Haiti's rice farmers out of business. Now, of the 400,000 tons of rice consumed in Haiti each year, three-quarters is imported from the United States.

"Removal of tariff barriers has allowed a handful of northern countries to capture Third World markets by dumping heavily subsidized commodities while undermining local food production," according to Anuradha Mittal, executive director of the Oakland Institute. "This has resulted in developing countries turning from net exporters to large importers of food."

Though most of Haiti's rice comes from the United States, the price has been affected by poor harvests in other parts of the world. For the last six years Australia has been hit by a catastrophic drought, which has seen rice production fall by a stunning 98 percent.

"It may never recover," says Sophia Murphy, who lives in Australia and is a senior adviser at the Minneapolis-based Institute for Agriculture and Trade Policy.

In times of scarcity, big importers tend to rush to hoard stocks on fears they will not be able to meet domestic demand. Major producers also begin restricting exports to keep domestic prices down. Much of the recent rice crisis came after major exporting nations, including Egypt, Vietnam, India and Indonesia, imposed restrictions on exports. This has drastically reduced available global stocks and caused prices to reach as much as \$1,000 per ton.

While most of the focus in Haiti is on rice, prices of other basic food items, such as vegetable oil, have also risen. In the case of other grains, especially corn and soy, it's hard to ignore the biofuels factor.

One quarter of the U.S. corn crop is used to make ethanol. Although record amounts of corn are being planted — 2007 was the largest crop since 1944 — farmers planted less soy and wheat, pushing prices up on those crops.

But pegging ethanol's impact on food prices is difficult because of the large number of variables involved. Studies have produced estimates as low as 15 percent and as high as 50 percent.

"There's no mathematical formula," said Keith Collins, who recently retired as chief economist at the Department of Agriculture.

The trend of tightening demand in the global grains market began to appear eight years ago, well before the biofuels boom took off, Collins said.

This was due to episodes of bad weather and unprecedented economic growth in countries like China and India that permitted people to buy more and better food.

But biofuels may have tipped the scale.

"Without biofuels you would have had supply meet demand," he said.

Collins predicts the demand for corn will only get worse due to a slew of ethanol plants about to go into production. "It looks to me that we have taken federal policy on biofuels too far and overreached," he said.

Lifting a 54-cent-per-gallon tariff on ethanol imports from Brazil, (which makes its fuel from sugar, not corn), as well as ending a system of tax credits for ethanol blenders in the United States (51 cents per gallon), could help ease the situation.

"Why keep pouring gasoline on the fire?" Collins said. "Let's roll back the incentives and let the market play its role."

The ethanol industry says it's not to blame, pointing the finger instead at the rising price of oil, which hit \$115 a barrel last week.

"What people are failing to appreciate is how much oil impacts production of food at every step of the way, from tractors farming the land, to fertilizers, and transporting produce to market," said Hartwig of the renewable fuels group.

"When oil hits \$115 a barrel, it's inevitably going to wreak havoc on the world economy."

All this demand for corn — as food for humans and livestock, as well as fuel — has caused another major problem for poor countries like Haiti.

Growing more corn has meant using more fertilizer. This has helped drive up fertilizer costs 168 percent since 2000, and they are now the highest on record, according to the U.S. Department of Agriculture.

Farmers in Haiti say they can't afford to plant new rice crops due to the high cost of fertilizer.

Facing rock-throwing protesters outside the palace gates, Haiti's president, Rene Preval, announced subsidies to cut the cost of rice more than 15 percent. But critics say that may be too little too late.

Preval, an agronomist by training, is asking for urgent international help. The United Nations has offered emergency food supplies targeting children, pregnant women and nursing mothers. The World Bank chipped in \$10-million.

To ensure this year's rice harvest Preval said he will ask Venezuela to help provide fertilizer for farmers.

"When you put the rice and the fertilizer situation together — that is what's hurting us," said Verret. "It's a perfect storm."

Defeating OPEC, one ear of sustainable corn at a time

Building cars that use alternative fuel would break monopoly that the oil cartel currently holds

By: Robert Zubrin

The most oppressive force in the world today is the OPEC oil cartel.

Distributed elsewhere, the \$1.3-trillion per year taxed out of the world economy by OPEC countries could lift the entire Third World out of poverty.

Based on current oil prices and export levels, Saudi Arabia will make more on oil this week than the 60 poorest countries on Earth will make all year.

Breaking the cartel would thus be a great act of social justice and of critical value to the world's poor. But there's only one way to do it – by creating fuel choice.

OPEC cannot be defeated by conservation alone. A global boycott of oil is, frankly, impossible. And even in a fantastical scenario in which all the consuming nations got together and agreed on quotas for cutting their oil consumption, and then actually complied, OPEC could counter simply by cutting supply. So long as it is the only game in town, it wins.

What is needed is for the United States Congress to pass a law requiring that all new cars sold (not just made, but sold) in the United States be flex-fuelled – that is, be able to run on any combination of gasoline or alcohol fuels, including E85, which is a mix of 85 per cent ethanol and 15 per cent gasoline.

Such cars already exist.

Two dozen models of flex-fuelled vehicles (FFVs) are being produced by Detroit's Big Three this year – including plants in Ontario – and they only cost about \$100 more than identical models that can run on gasoline only.

Right now there is little incentive for consumers to own a flex-fuel vehicle (alcohol fuel pumps are nearly as rare as unicorns) and there is little incentive for gas-station owners to dedicate a pump to alcohol fuels (FFVs comprise only about 3 per cent of the new-car market).

But within three years of the enactment of an FFV mandate, there would be 50 million cars on North American roads capable of running on high-alcohol fuels. E85 pumps would be everywhere. And for the first time, OPEC nations would come face-to-face with something utterly foreign to them: Competition.

By mandating that all new cars sold in the U. S. have flex-fuel capacity, Congress would also induce all foreign auto makers who want access to the American market to produce FFVs as well, effectively making flex fuel the international standard.

In addition to the 50 million FFVs we'd see in the U.S. in three years, there would be hundreds of millions more worldwide that could be powered by any number of alternative fuels, forcing gasoline to compete against methanol and ethanol, fuels that can be made in any number of ways.

Methanol, for example, can be made from any kind of biomass without exception, as well as from coal, natural gas and recycled urban trash.

Ethanol can currently be made from a wide variety of starchy or sugar-rich crops, but new means of making it are on the way, which will radically expand its resource base to include many kinds of crop residues and weeds that have no food value.

By making our cars compatible with such fuels, we will enormously expand and diversify the options for growth in the Third World. This would effectively break the monopoly that the oil cartel currently holds on the world's fuel supply.

It would also foster sustainable Third World development. We could take a trillion dollars a year – which is currently flowing to the oil cartel – and direct it towards the world's agricultural sector instead.

With about 30 per cent of American farmland currently being used, and only 15 per cent of the arable land in the developing world, the amount of untapped biomass potential on existing agricultural land is exceedingly high, and with no negative effect on food supply or rain forests.

Certain opponents allege that ethanol's production from corn takes away from the food supply, and that large irrigation requirements draw power that exceeds that provided by the ethanol.

Such analyses, however, have been discredited. When ethanol is made from corn, all of the protein in the corn is preserved for use as animal feeds, and virtually no ethanol corn crop grown in the United States requires irrigation. In fact, for the expenditure of a given amount of petroleum, nearly 10 times as much ethanol can be produced as gasoline.

A variety of people have been quick to blame biofuels for the recent rise in world food prices. Despite its corn ethanol program, U.S. corn exports have continued to increase in recent years, and overall agricultural exports this year are up over 23 per cent.

So it is not corn ethanol that is driving up global food prices, including those for fish, rice, fruit, and other agricultural crops. Rather it is high fuel costs, which have been rising at an average rate of 30 per cent per year for the past nine years due to vicious OPEC price rigging.

The time has come to take the world off the petroleum standard and onto the alcohol standard. Only in this way can we release the planet from OPEC's stranglehold. Only in this way can we

redirect funds to deal seriously with the crushing problem of global poverty. Only in this way can we transfer control of the future from those who take their wealth, pre-made, from the ground, to those who make their wealth through hard work, skill and creativity – and a concern for the future good of humanity.

Robert Zubrin is president of Pioneer Astronautics and author of Energy Victory: Winning the War on Terror by Breaking Free of Oil. energyvictory.net

Food shortages, prices pose big danger

Add climate change and world could be in for famine, wars

By: Scott Canon

Blame Australian drought. Blame the shrinking dollar. Blame ethanol. Blame \$100-a-barrel oil and \$3-plus gasoline. Blame China for finding prosperity. Blame India, too. Blame humankind for liking the taste of meat.

Whatever's to blame, it's the world's poor who go hungry.

The number of hungry poor on the planet had stabilized in recent years. But soaring costs for food, and for shipping it to the starving, form the basis of a burgeoning global food shortage.

In Haiti last week, anger over runaway food prices sparked deadly protests and looting that led to the dismissal of the prime minister and a cut in rice prices. People clashed violently with police in Egypt over ballooning food costs. Cameroon and Burkina Faso saw food riots late last month. Earlier in the year, it was protests in Pakistan over rice and wheat shortages.

Some analysts say food wars could be next.

"This is not something that's going to go away overnight. It's not just cyclical," said Ellen Levinson of the Alliance for Food Aid, a coalition of humanitarian groups. "We are definitely into this for a couple of years."

A food aid conference in Kansas City, Mo., this week was dominated by what anyone who checks out at the supermarket or picks up a restaurant tab knows too well -- food prices are up.

For American households, spending typically less than 20 percent of their income on food, it's a painful adjustment.

For the world's truly poor, who may use 70 percent to 80 percent of their money to stay ahead of starvation, it's a disaster.

"As the price goes up, they can't buy the same amount or the same quality," said Gawain Kripke, a policy director for the Oxfam America aid group. "It's almost a certainty that there will be more hunger as food prices go up."

To be sure, it's hardly new that hundreds of millions of people regularly go hungry. And humanitarian groups have been sounding alarms for decades.

Yet the dramatic explosion of food and fuel costs in recent months probably means hundreds of millions more could soon find themselves unable to feed their families.

The world's stockpiles of grains are about 150 million tons, or roughly 20 percent, below what they were at the start of the decade. Shortages of wheat, rice and corn drove world food prices up 45 percent in the past nine months. Last year, cooking oils jumped 50 percent, and dairy prices rocketed up 80 percent.

"And our best guess is these high prices will continue to stay high," said John Hoddinott, a researcher for the International Food Policy Research Institute.

What has been good news for Midwestern farmers -- demand finally catching up to American agriculture's unmatched ability to grow food -- could mean disaster to the world's poorest people.

Just last week the U.N. Food and Agriculture Organization called for a June summit of international leaders to manage what the agency is calling a worldwide food shortage emergency.

The World Bank's president, Robert Zoellick, has also called for a global response to address the escalating prices and prevent mass starvation.

At the annual gathering this week in Kansas City, Josette Sheeran, executive director of the World Food Programme, said the time has come for governments around the world to invest in their farmers.

Half of hungry African farmers can't even afford to feed their own families, she said. In Laos, farmers are planting one-third fewer crops because they have no access to credit to buy seed and fertilizer. At the same time, they have a fundamental mistrust in commodity markets. In many countries, remote farmers cannot access markets because of poor roads, she said.

Several factors have combined to make for a looming crisis:

Protein: First, and paradoxically, many people are eating better. Economic awakenings in India and China have lifted millions out of abject poverty and put them higher on the food chain.

But by eating more meat, they effectively consume more grain needed to raise livestock. The resulting demand for more grain has cranked up commodity prices.

Biofuels: More food is being converted to energy. The shift to renewable fuels such as ethanol in the United States, Brazil, Thailand and elsewhere has left less acreage available to stock the dinner table -- another pressure point on prices.

Weather: Back-to-back drought years devastated Australian crops. Europe had a poor harvest last year. Those agricultural busts meant better prices for Kansas wheat farmers, but crippling food cost hikes for the Third World. Food aid specialists worry that climate change could mean that such crop disasters will become more routine.

Exchange rates: Because the United States is the biggest provider of food aid, the dollar's tumbling value means the same amount of assistance buys less overseas.

Energy: It jabs at food costs at every stage, from the cost of fertilizer, to running farm machinery, to processing, to shipping.

Consider, for instance, the cost of shipping a ton of grain from New Orleans to Japan. A year ago it ran about \$63. Today it's \$100. And that's assuming increasingly frequent traffic jams don't back up ships at the Panama Canal.

Sometimes far shorter trips are impossible. India has put some food export bans in place -- keeping larger supplies available for its still sizable poor population, but shutting off hungry millions in Bangladesh. Ethiopia has prohibited the export of all cereals. Pakistan has tried to seal its borders against the smuggling of flour to Afghanistan.

In the United States, calls for a halt to wheat exports as a way to corral flour prices have met stiff opposition from farmers.

All these factors prompted the U.N. World Food Program to put out the first "extraordinary" appeal in its 45-year history for an added \$500 million shortfall.

The agency estimates that its cost of procuring food leaped 55 percent between June and April.

Some aid groups think the gap can be narrowed through reform. Indeed, CARE is moving away from a longstanding practice known as monetization, in which American grain is given to an aid group, shipped overseas and sold on the open market, with the proceeds going to pay for supplies better tailored to a crisis.

CARE, for one, is dumping the practice as inefficient in many cases. Some of the foodstuffs might as well be a freighter full of sweaters to be sold. The aid group is getting out of the grain-selling business, relying more on grants.

That change could cost the food aid community the political backing of agribusinesses and the shipping industry, which profit from the demand that the old system creates. Groups like World Vision note that when Europeans backed away from the practice, the aid wasn't replaced fully with cash grants.

"It's important," said Robert Zachritz, a World Vision lobbyist, "to keep all of these tools in the toolbox."

Meanwhile, exploding food costs mean that hunger is less limited to rural villages, and a growing problem in areas where food may be available -- but unaffordable. Already, hunger is shifting from Asia to sub-Saharan Africa and from remote villages to fast-growing cities.

"The new face of hunger," said World Food Program spokeswoman Jennifer Parmelee, "is urban."

Questions and Answers

Josette Sheeran took over as executive director of the U.N. World Food Programme a year ago and has been struck, she says, by "how many people are reliant on compassion and the good will of the world to help them meet the most basic human right, which is the right to food."

Q: Isn't the world always in caught in a hunger crisis?

A: I think there's a growing awareness that right now we're in a perfect storm -- soaring food prices, lower stocks and natural disasters. They've combined to push prices up to their highest levels in many decades.

We are seeing a quiet tsunami of need. This is unique in all of our history, because at a time of increasing need, supplies are down.

Q: Given the explosion of crop prices, are biofuels such as ethanol -- which put food and energy in competition for crops -- a mistake?

A: This could be a real boon for small farmers. The increased demand for food could be great for them. But right now, it's creating very tight supplies.

We're in a new dynamic when food and energy become intertwined with each other. When corn or palm oil or wheat or cassava or any other kind of product goes to biofuels, it very much affects the food supply.

Q: Doesn't this all boil down to the cost of energy?

A: I wake up every morning and the first thing I turn to is oil. If that price stays high, many poor farmers will not be able to afford fertilizer and diesel, and it will ensure that throughout the world, food will be bought as an input for energy use.

Q: Do you expect climate change to affect world hunger?

A: If you look at all the projections, they all model that climate change will have a significant impact on agriculture. Some areas will be net beneficiaries. But developing countries can expect to see a decline in yields that will be quite dramatic.

Q: Some people say we're on the verge of food wars. Where?

A: In a way, we've been experiencing food wars throughout recent history. ...

Part of the story in Darfur has been a battle between farmers and pastoralists who can't be supported on land that could support them both a decade ago. ...

Look at Haiti and the upheaval there. People have been reduced to eating mud cakes -- mud mixed with salt and oil and left to dry in the sun. For the world's poorest people, there's no room for error. There's no backup.

Does overplanting of ethanol crops cause higher food prices?

By: David A. Ridenour and Bob Stallman

YES

By David A. Ridenour

Move over “Bridge to Nowhere,” there’s a new poster child of congressional waste and avarice — ethanol, the “Fuel to Nowhere.” Ethanol leads only to higher food prices and greater greenhouse gas emissions.

Anytime Congress can find an excuse for shoveling out billions of dollars in pork, it’s a safe bet there’ll be a stampede of Democrats and Republicans to vote “aye.” Such has been the case with ethanol ever since Congress latched onto the idea that it could be sold as a means of cutting greenhouse gas emissions.

Congress has already authorized billions in taxpayer-funded subsidies for farmers who grow corn and the producers who turn it into the fuel that’s pumped into your car.

Never mind that ethanol is helping spike food prices. Corn prices have already increased by 70 percent since 2005, and the U.S. Department of Agriculture projects they will rise another 10 percent to 20 percent this year.

That’s not the half of it. Corn-dependent livestock are also increasing in price. The USDA estimates that corn feed price increases added nearly 9 percent to the price of beef last year. This doesn’t include the indirect costs. U.S. beef cattle herds declined by 338,000 in 2007, increasing beef prices further. This was due, in part, to higher prices for feed, according to the American Farm Bureau Federation.

Ethanol advocates claim that rising corn costs have contributed only modestly to the overall increase in food prices. They’re not being honest, as they’re only counting the direct costs of ethanol. They don’t count, for example, increases in soybean prices resulting from farmers switching to the more lucrative corn crop. Soybean crops dropped by 11 million acres last year. Much of that acreage is now used to produce corn.

The corn growers and Big Ag, flush with newfound cash, have generously increased their campaign contributions, making everyone happy — everyone but consumers and taxpayers. Taxpayers are shelling out billions of dollars while getting nothing in return, making ethanol truly a fuel to nowhere.

Worse, the ethanol program is not reducing greenhouse gas emissions as promised, but increasing them. That's according to two new independent scientific studies published in the journal *Science*. One, by the University of Minnesota and the Nature Conservancy, concluded that further converting the rainforests, grasslands and savannahs of Southeast Asia and South America to crops for biofuels will increase greenhouse gas emissions, perhaps for centuries, while destroying important habitat.

A second study, by researchers at Princeton University, came to a similar conclusion, finding that corn-based ethanol would produce twice the greenhouse gas emissions as conventional gasoline over the next 30 years.

The recently passed energy bill is expected to create even greater demand for ethanol, since it requires the U.S. to ramp up biofuel production to 36 billion gallons by 2022 from 7.5 billion gallons today. Don't count on Congress amending the energy bill to correct its glaring ethanol mistake anytime soon, though.

Rep. Edward J. Markey, chairperson of the House Global Warming Committee, dismissed the studies, saying they show "where we are, not where we're going to be." Markey says technological advances will be driven by federal mandates, noting, "Once you set the standard, then it's going to drive where the investment is made, where the breakthroughs are."

Since ethanol currently is 30 percent less efficient than gasoline, those breakthroughs will have to be truly heroic.

Mandating technological innovation has been tried before and failed, as it did in the 1970s with the synthetic fuel program. That hasn't stopped environmental lobbyists from continuing to argue that a federal cattle prod is the best way to force greedy capitalists to accomplish the impossible.

As Viking King Canute showed his courtiers when he commanded the tide to cease to no effect, the heavens, earth and the seas obey only one king.

Markey isn't the one.

David A. Ridenour is vice president of the National Center for Public Policy Research (www.ncppr.org), a conservative, nonpartisan think tank on Capitol Hill. Readers may write him at NCPPR, 501 Capitol Court NE, Washington, D.C. 20002.

NO

By Bob Stallman

The popular misconception that increased usage of corn for ethanol production is the only factor driving higher food prices is just that — a misconception. Ethanol production has, and will continue, to add to corn demand, but other factors also are playing major roles in higher food prices.

Global demand for U.S. agricultural products has increased significantly over the last several years. China and India are but two examples where growing affluence is leading to changes in diet and overall food demand. Helping add to export demand is the devaluation of the dollar. This makes corn, soybeans, wheat and other commodities produced in the U.S. particularly attractive to overseas buyers.

Even though corn prices for the current marketing year are up \$1 per bushel from last, corn exports are projected to increase by 200 million bushels. Rising exports in the face of rising prices is an indicator of very strong demand. This is not limited to corn. It can be seen in dairy and other commodities. Domestic demand, beyond ethanol, is also strong, with corn used for livestock feed running at the same pace as last year.

Above the farmer in the food chain are processors, distribution systems and grocery stores. We are all familiar with how energy prices are affecting the retail costs of goods. Food products are no different. And because of the refrigerated nature of much of the food system, those delivery costs can be even higher. Labor costs are also a factor, as is the fact that, as consumers, we are constantly demanding more convenience in our food products. Finally, food suppliers are raising food prices simply because they can.

And yes, there is ethanol.

Agriculture has been asked to help provide some of the nation's energy supply, but to supply it in a way that conforms to existing infrastructure. From the pumps to the engines, from the tanks in the ground to the carburetors in old vehicles, the energy supply agriculture has been asked to provide comes with a lot of constraints.

Ethanol helps provide the answer. It will not replace gasoline, nor will it, by itself, make the U.S. energy independent. It will take a great deal of effort and research to make large-scale cellulosic ethanol production feasible in a way that allows us to substantially reduce our oil import needs.

Yet corn-based ethanol already is providing half-a-million gallons of motor fuel a day and will approach a million barrels a day when the renewable fuels standard for corn-based ethanol is fully implemented. Francisco Blanch of Merrill Lynch has been reported by The Wall Street Journal as saying biofuels are lowering the price of oil and gasoline by 15 percent.

Contrary to some press reports, numerous studies demonstrate that corn-derived ethanol has a positive energy balance — that we get more energy out of the product than we put into the entire process, going all the way back to the energy used to build the tractors and combines.

So while U.S. agriculture is going through an adjustment phase, as would any sector of the economy trying to handle the number of hurdles that have been tossed its way, I encourage you to look at all of the contributors playing a role in rising food costs.

Making ethanol the scapegoat oversimplifies the issue and derails a product that is good for our economy, our environment and helps to lessen our demand for foreign oil.

Bob Stallman, a rice and cattle producer from Columbus, Texas, is president of the American Farm Bureau Federation (www.fb.org), an independent, non-governmental, voluntary organization governed by and representing farm and ranch families. Readers may write him at AFBF, 600 Maryland Ave. SW, Suite 1000W, Washington D.C. 20024.

Fuelish thinking

Is ethanol affecting the price of bread?

THE CASE for alternative fuel is so compelling that our own president, hardly a progressive environmentalist, has embraced biofuel and ethanol production as a way to wean ourselves off foreign oil. Alternative-fuel skeptics--there are some out there--warn that the produce required to meet federally mandated alternative-fuel requirements will wreak havoc on the world's food supplies. Our grand vegetable-fuel experiment has hardly gotten under way, and the skeptics seem to have evidence on their side.

A recent U.N. report took the bold step of calling biofuels a "crime against humanity." Protests and riots in developing countries have been an impassioned reaction to a pinch that even U.S. citizens are feeling: Food prices--particularly the cost of basic staples such as rice, wheat, and corn--are rising.

As yet, there is no clear link between increasing biofuel and ethanol production and rising food prices. Major alternative-fuel-producing countries such as Brazil and the United States deny a link outright. There are other factors at work here--the rising cost of oil and transportation, most notably.

Economists and scientists will spend the coming months and years trying to determine how fuel and food production are related, and how the government can continue to support alternative fuels with subsidies and tax breaks without affecting the price of a slice of pizza. On present evidence, they can't disengage the two. Upsetting the delicate balance in our food supply seems surprisingly easy to do.

Alternative fuels are not the solution to our dependence on fossil fuels. If things continue the way they are, those new options may not even be a Band-Aid. Worst of all, the time spent trying to change our fuel source is distracting us from real solutions to our energy problems. Biofuel and ethanol are red herrings.

Sometimes the most obvious solution is the best one, and in this case, it's the only one with any real potential: conservation. Unfortunately, conservation isn't a big business with dollars and lobbyists--it's merely common sense. Whether vegetable oil or dinosaur bones fuel our future, we need to start doing more with less. The wave of the future isn't solar panels and cold fusion--it's efficiency.

Higher-mileage vehicles, more efficient lighting and electronics, and smart power management are necessary if we are to cut our reliance on fossil fuels. They are also necessary if we wish to adopt new fuel sources without adversely affecting other markets.

Any competent government should try to do more with less. When it comes to our nation's energy policy, it's imperative our government back measures that do the same.

Crash could follow farm boom

Ethanol cash boosts crop prices

By: Associated Press

DES MOINES, Iowa - At a time of record agricultural profits, concerns are mounting that American farmers could be edging toward a financial crisis not seen since the 1980s farm-economy collapse.

Soaring land values, increasing debt and a reliance on government subsidies for ethanol production have prompted economists to warn that what some describe as a golden age of agriculture could come to a sudden end. At risk are the livelihoods of thousands of farmers, the health of hundreds of banks and the vitality of an agricultural industry that has lately been one of the nation's few economic bright spots.

"We're in a very risky time, and yet we don't seem concerned about that risk nearly as much as we should be," said Barry L. Flinchbaugh, an agricultural economist at Kansas State University.

The potential problem, economists said, is that strong demand for corn and other grains has caused prices to reach historic highs. That has led to record farmland values and steadily increasing debt as farmers borrow money to buy more land, finance the higher costs of fertilizer and seed and upgrade their equipment.

As long as the demand remains, good times for farmers should continue. But if demand falls, they could find themselves in a situation reminiscent of the early 1980s when the farm economy largely crumbled.

Among factors that could affect demand would be a change in the federal policy on ethanol subsidies, now estimated at about \$6 billion a year, revisions in the farm bill that would lower support payments or an increase in the dollar's value, which would hurt exports.

Farm economists question whether the federal backing for ethanol will continue in the face of complaints that soaring corn prices are increasing food costs. Corn is used in most animal feed and is a key ingredient in myriad other products.

"U.S. energy policy has been friendly to ethanol in the last couple of decades. The question is, will it continue to be. It's running up food prices and that's causing pressure on Congress to limit mandates for ethanol usage," said Neil Harl, an emeritus professor of economics at Iowa State University.

The farm bill appears mired in Congress as lawmakers bicker with the Bush administration, which has threatened a veto if any increases in spending are not offset by reductions elsewhere.

Congress on Thursday passed a short-term extension to the 2002 farm bill that keeps programs funded through this Friday.

Flinchbaugh said the agricultural economy bears a striking resemblance to that seen in the mid-1970s, when a seemingly insatiable demand for U.S. crops drove up land values and farmers took advantage of their soaring equity to increase debt. When federal policy changed and demand suddenly dropped, land values and farm income plunged, forcing thousands of farmers to sell out and leading to the failure of nearly 300 agricultural banks.

Grain farmer Harlan Meier, 76, of Davenport lived through the last two major farm economy downturns - the Depression in the 1930s and the 1980s farm crisis.

Even at a time of such strong prices, Meier noted that farmers are paying much higher prices for seed and nitrogen fertilizer, a product needed in abundance for fields repeatedly planted in corn. The increased costs and memories of the 1980s have made him hesitant to take on debt.

Economists worry that farmers could be tempted to add debt due to the belief that high commodity prices would continue. Those prices have been driven up by a strong demand for corn and soybeans from countries such as China and India, coupled with the needs of more than 50 corn-reliant ethanol plants built in the last few years.

Pro-Con: Is the overplanting of ethanol crops responsible for soaring food prices? NO

Ethanol production has and will continue to add to corn demand, but other factors also are playing major roles in higher food prices.

Global demand for U.S. agricultural products has increased significantly over the last several years. China and India are but two examples where growing affluence is leading to changes in diet and overall food demand. Helping add to export demand is the devaluation of the dollar. This makes corn, soybeans, wheat and other commodities produced in the United States particularly attractive to overseas buyers.

Even though corn prices for the current marketing year are up \$1 per bushel from last, corn exports are projected to increase 200 million bushels. Rising exports in the face of rising prices is an indicator of very strong demand. Making ethanol the scapegoat oversimplifies the issue.

Detroit News
April 20, 2008

GM leader refutes biofuels critics

By: John McCormick

BEIJING -- Politicians' claims that biofuels are driving up food prices are "shockingly misinformed," said General Motors CEO Rick Wagoner.

Speaking at the Beijing auto show, Wagoner said the food price issue has become "a cause celebre without reason. Higher fuels costs are a far bigger driver of food prices."

Wagoner noted that a dramatic escalation of ethanol use derived from corn could drive up food prices, but that situation is not even close to reality. "There are ways to produce ethanol using the cellulosic process and with winter crops that would not affect the food supply," he said.

GM is a leading advocate of ethanol or E85 use, producing millions of vehicles in the US capable of running on gasoline or E85.

Wagoner bemoaned the lack of effort to introduce more ethanol stations in the US. "Just because automakers create new technologies doesn't mean the infrastructure will be there to support them," he said. "We can't be in the energy provider business."

Less corn in the ground could translate to higher grocery bills

The Associated Press

WASHINGTON — Farmers are expected to plant less corn this year, which could mean continuing higher costs for consumers at the grocery store.

Corn prices have skyrocketed in recent years, helped by the burgeoning ethanol industry, which turns the crop into fuel, and rising worldwide demand for food. The higher prices have hurt poultry, beef and pork companies, which use corn to feed their animals.

Farmers are expected to plant 86 million acres of corn this year, the Department of Agriculture predicted, down 8 percent from 2007, when the amount of corn planted was the highest since World War II.

The decreased supply could drive corn prices even higher — a cost for food producers that could be passed on to consumers.

Wisconsin farmers said they plan to plant 3.65 million acres of corn, down 10 percent from last year but the same amount planted in 2006.

Area ethanol plant builders remain optimistic

By: Stephen Elliott

Despite concerns over soaring corn prices, two local ethanol plants are expected to be in operation by next spring.

And, from indications at a recent job fair sponsored by Patriot Renewable Fuels, LLC, many area residents are eager to be part of the industry.

Patriot is building a \$160 million plant 1 1/2 miles east of Annawan on U.S. 6, scheduled to open in August. It expects to be one of the largest locally owned and operated ethanol plants in Illinois, operating 24 hours a day seven days a week.

The company hopes to employ 45 to 50 people.

"It was a tremendous turnout" at the job fair, with more than 300 people, project coordinator Judd Hulting said. "There were a lot of enthusiastic individuals."

Patriot broke ground in October of 2006. The 100-million-gallon-a-year plant will require 37 million bushels of corn annually, about 100,000 bushels a day.

Mr. Hulting said the corn is expected to come from area producers, and Patriot met with area farmers throughout the winter.

Big River Resources LLC began construction on a 100 million-gallon ethanol plant near Galva last fall.

"Everything is on schedule, maybe a little bit ahead," said Big River CEO and president Ray Defenbaugh. "The weather has entered into it some, or we would be further ahead."

"Within a couple of weeks, we'll have an overpass completed over our rail so emergency vehicles can get in. It is an internal overpass that goes over the rail."

Mr. Defenbaugh also operates an ethanol plant in West Burlington, Iowa. He said there are concerns in the industry about the high price of corn, but prices are going up on every crop.

Earlier this month, corn prices jumped to a record \$6 a bushel. That's expected to hurt the ethanol industry.

"It cuts into the profits," Mr. Defenbaugh said. "Ethanol prices are going up a little too, so it is taking care of that."

Mr. Defenbaugh said some problems encountered in the industry are similar to those across the U.S., especially with the housing industry. "There was a propensity to overbuild. The (ethanol) industry is still optimistic."

As corn prices have climbed over the past year, construction of several plants has been halted or delayed, with no ground broken on new plants in the last couple of quarters, according to Broadpoint Capital analyst Ron Oster.

Mr. Defenbaugh said it's more difficult to start up a plant today because the capital requirements are more stringent.

According to the National Agricultural Statistics Service, corn growers plan to plant 86 million acres in 2008. That's down 93.6 million acres from 2007 when corn-planted acreage was its highest since 1944.

Mr. Hulting said Henry County produced 48 million bushels of corn in 2007, compared to 37 million in 2006. He attributes the increase to ethanol. "And this year, we're (U.S.) looking at world record exports."

He said the USDA projects 2.5 billion bushels of corn out of a roughly 13 billion-bushel crop to be shipped out of the country. He said that would be an all-time record.

The nation's 147 ethanol plants now have the capacity to produce 8.5 billion gallons of fuel a year, according to the Renewable Fuels Association. There still are plans to build or expand another 61 plants.

The Associated Press contributed to this story

Ethanol: Environmental savior or snake oil?

By: Peter Reuell

To supporters, ethanol is the fuel of the future, a gasoline substitute derived from renewable sources which produces fewer greenhouse gases and may be the key to breaking the nation's addiction to foreign oil.

Opponents, however, say the plant-based fuel amounts to high-tech snake oil, and could actually be even more harmful to the planet than oil.

The truth, experts on both sides of the ethanol debate say, is it could be both.

But as the push to develop alternative fuels gathers steam, the question state officials are trying to answer is whether Massachusetts will play a role in making ethanol one or the other.

At least part of that answer could come by the end of this month, when the state's Advanced Biofuels Task Force publishes its report on the impact of biofuels in the state.

The report will include a handful of recommendations to state leaders, but it's unclear how much, if any, support the group will offer to biofuels, officials said.

"It'll be a comprehensive look at the whole issue," said Department of Environmental Resources spokeswoman Lisa Capone.

There are, however, hints about the direction the Task Force is headed.

In a series of draft recommendations, the group cites the potential economic impact of biofuels, stating the industry could bring more than 13,000 jobs and \$3 billion in new construction to Massachusetts over the next 15 years.

Also included in the draft are recommendations to exempt some biofuels from the state's gasoline tax, and the creation of tax incentives and grant programs to support biofuel research in the state.

That kind of support will be necessary, said Andrew Schuyler, director of the Northeast Biofuels Collaborative, if the state wants to take advantage of ethanol's multi-billion dollar potential.

Most of the ethanol produced in the U.S., he said, is derived from corn, using a relatively inefficient process.

The answer, Schuyler believes, is cellulosic ethanol, derived from the cellulose found products like farm waste, wood chips and switchgrass.

Supporting research into cellulosic ethanol, he said, will position the state to get in on the ground floor of what could be the most critical technology of the next half-century.

"We have, in Massachusetts, a unique cluster of advanced biofuels companies really on the cutting edge," he said.

"Someone's going to get it right, and it would be really neat if it were in Massachusetts," agreed Eric Strauss, director of Environmental Studies at Boston College.

When the technology to efficiently produce cheap cellulosic ethanol finally is perfected, Strauss said, the region could see a technological explosion on par with California's Silicon Valley in the 1990s.

"In the global market of ideas, there's no particular reason Silicon Valley has to be where it is. That's just where the buzz started," he said. "Here's the next frontier, (and) boy, do we have a great brain trust."

While he believes supporting ethanol research could pay off for the Bay State, Strauss was more wary when it came to the millions of dollars corn growers and ethanol producers receive in federal subsidies.

"I think it's sort of a mistake, at the national scale, to be so committed to ethanol," he said. "Right now, as the technology is...ethanol typically comes out with a higher carbon footprint than traditional fuels."

Several recent studies, Strauss pointed out, have suggested corn-based ethanol, when studied over its entire life cycle - from growing the corn to producing the ethanol and delivering the product to filling stations - produces as much if not more greenhouse gases than gasoline.

And as more and more corn crops are diverted away from food production and into more lucrative ethanol, the effects may prove disastrous.

In the U.S., ethanol production has already led to spikes in the price of corn and other crops, and higher food prices worldwide could spark food shortages or even famine.

Despite those concerns, most experts agree ethanol will play at least a part in alternative energy policies of the future.

"I think ethanol will definitely be part of the future," said Henrik Selin, a professor of International Relations at Boston University. "I think there's every reason to continue doing research into ethanol and improve ethanol production, but what kind of ethanol we're talking about is critical.

"In the short-term, I do not think corn-based ethanol is the way forward. (It will) have impacts on rising food prices...because we're talking about a global commodity."

While that may not mean much to U.S. consumers, even modest price increases can be disastrous in the rest of the world.

"If my grocery bill goes up \$25 a month, I will survive," Selin said. "I will grumble, but I will survive. If you're a rural farmer in Mexico, another \$25 a month could be the straw that breaks the camel's back."

A Worsening Food Crisis

The U.S. and its allies need to act.

Editorial

THE WORLD'S most dangerous conflicts stem from religion and ideology -- tragic proof that man does not live by bread alone. But when bread is hard to get, that, too, causes unrest. And lately, it has been very expensive indeed: The World Bank estimates that global food prices have risen 83 percent in the last three years. Hence, food riots in Haiti, Egypt and Ethiopia and the use of troops in Pakistan and Thailand to protect crops and storage centers. Many countries are banning or limiting food exports. World Bank President Robert B. Zoellick says that 33 countries are at risk of food-related upheaval. Famine may revisit North Korea, parts of Africa or, disastrously for U.S. foreign policy, Afghanistan.

To many, the villain is biofuels. U.S. and European ethanol programs, intended as an antidote to climate change and an alternative to OPEC oil, stand accused of snatching food from the world's hungry. According to India's finance minister, ethanol is "a crime against humanity." And it is part of the problem. The more corn becomes ethanol, the less will be available as food for people and livestock. In the U.S. farm belt, heavy ethanol subsidies, such as a tax break of 51 cents a gallon, encourage the shift. These subsidies were already questionable, in economic terms, before the commodity crunch. That they might contribute to hardship for the world's poor is another argument for reducing them.

But ethanol's impact should not be overstated. The International Food Policy Research Institute, which is critical of ethanol, pins about 25 to 33 percent of the recent price rise on biofuels; the U.N. Food and Agriculture Organization guesses about 10 to 15 percent. Most of the crisis is rooted in three other factors: drought in grain-exporting Australia; the surging price of crude oil, which raises food prices through the costs of shipping and petrochemical fertilizer; and booming demand for food in China, India and other newly prosperous areas of the developing world. These areas consume not only more staples such as rice and wheat but also more meat from animals fed on grain. This trend is here to stay -- and, unlike Australian drought or oil inflation, no one should want it to go away. Lifting hundreds of millions of Asians out of poverty is a historic achievement.

To cope with the current situation, the United States must contribute its share to help the U.N. World Food Program fill a \$500 million gap in its budget. Congress should change U.S. law to let U.S. aid buy food in developing countries themselves, which could boost local producers. Looking further ahead, the U.S. and multilateral institutions must also support greater investment in farming in the developing world, including funding for research into improved crop yields, which has been in steady decline over the last 25 years.

Today's crisis could be tomorrow's opportunity. If the era of cheap food is over, higher prices might stimulate local agricultural production in Africa and other places that now depend on imports. This will be likelier if the United States and Europe finally dismantle the wasteful crop subsidies and trade barriers that fatten their farmers' bank accounts -- but distort international markets at the expense of the poor.

Editorial: Need to rethink ethanol

In the well-meaning rush to produce alternative fuels as a way to reduce oil imports, Congress went overboard subsidizing ethanol made from corn.

Ethanol, certainly when it involves corn, has many hidden costs.

Studies show producing corn-based ethanol consumes as much energy as the final product provides.

As U.S. farmers put more land into cultivation for corn that goes for ethanol, other crops that receive smaller or no subsidies go unplanted.

Corn-based ethanol is responsible in part for fast-rising food prices here and abroad.

When including the total emissions required to produce corn-based ethanol, the final product generates more carbon dioxide per gallon than gasoline, according to Science magazine.

Compared to other crops, corn is a heavy consumer of water.

Congress has promoted ethanol production with a hefty 51-cents-a-gallon subsidy. As if that weren't enough, it also imposed a 54-cents-a-gallon tariff on much cheaper imported ethanol made mostly in South America from sugar cane.

Most ethanol now is sold as a 10 percent mixture with gasoline. There is talk in Congress of ordering U.S. refiners to increase the ethanol mixture to 15 or 20 percent despite new studies that show a range of problems with corn-based ethanol.

Other sources for ethanol production should be encouraged instead of corn.

In his 2006 State of the Union address, President Bush urged a change in the way Americans power their automobiles. He called for funding for research to produce ethanol from wood chips and switchgrass.

Switchgrass and other biomass sources, as it turns out, offer considerably more hope for alternative fuel production than corn, with no hidden costs.

Congress should admit it made a mistake by reducing or eliminating the large subsidies given to produce corn-based ethanol.

Food or biofuel? Dumb question

Inter Lake editorial

The world is learning that there are consequences to an American determination to develop “alternative” energy.

But Americans feel good about ethanol, right? So good that ethanol production has been subsidized to the point where corn for energy has become more profitable than corn for food. Of course, that means less corn being sold for human consumption. And fields that have long produced other crops, such as wheat, are being converted to producing corn for biofuel use, further restricting food supplies.

The predictable result has been soaring worldwide food prices. The United Nations World Food Program is reporting a 40 percent increase in global food prices since the middle of last year.

There are, of course, other factors at play in the equation, such as a weakened U.S. dollar and higher energy costs that also translate to higher food production costs. But ethanol subsidies are at the center of the economic storm that has caused food riots in Egypt, Cameroon and Haiti.

As Time Magazine describes it, “biofuels have become the vanguard of the green-tech revolution, the trendy way for politicians and corporations to show they’re serious about finding alternative sources of energy and in the process slowing global warming.”

And the trend is likely to continue, considering it’s an election year, and presidential candidates have been stumping in corn-fed states like Iowa and Ohio.

What’s stunning is the loud, automatic and litigious opposition to petroleum energy development. “Dirty coal” has been demonized but somehow ethanol is blessedly subsidized.

Leftist environmental groups need to be held accountable for the economic consequences of their agendas, or at least they should be compelled to acknowledge those consequences.

Just as there was a movement that led to subsidies for biofuels (never mind that farmers are converting the carbon absorbing Amazonian rain forest into farmland), now there’s a growing clamor for the United States to “do something” about global warming.

Guess what. There will be consequences. Carbon taxes, or cap and trade solutions, are essentially increases in the cost of doing business. And those taxes or cost increases, whether leveled on energy production or manufacturing, have a way of trickling down through all economic sectors, including food production.

In the end, the planet's poorest people will be hurt the worst. Whether they are trying to travel, to feed themselves or simply heat their homes, they are in for some stiff cost increases as the green agenda advances.

Planet needs a greater effort to break from fossil fuels

By: Tom Lyon and Gary Was

Most Americans recognize that this is the century in which humanity must make the transition from fossil fuels to sustainable, renewable fuel sources. America, it seems, has awakened to the sustainability challenge.

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With positive momentum appearing, including the promises of the presidential candidates to tackle the issue, it's easy to think we're well on our way to solving the carbon problem. But Americans and people in other nations are only beginning to confront the tough, serious energy choices that climate change imposes.

Good practices such as switching to fluorescent light bulbs and hybrid vehicles are just the beginning of the beginning.

Consider the European Union, which in 2007 agreed to cut carbon emissions 20% below 1990 levels by the year 2020. Just one year later, at a March 2008 summit, many were backpedaling.

California, arguably the nation's most aggressive promoter of renewable energy, faces a similar situation. It requires 20% of Californian electricity to come from renewables by 2010. However, the California Energy Commission now admits utilities are not expected to meet the 2010 goal.

There are many reasons for missed goals, but they all come back to the same quandary: Our economy is based on fossil fuels, and so far, the more we try to wriggle free, the more we recognize how much we depend on them.

Take the plug-in hybrid vehicle as an example. This is, without question, a wonderful leap forward. But where does the electricity to charge your car come from? About 70% comes from fossil-fueled power plants that pour carbon into the air.

Many other current "solutions," such as corn ethanol, also add some emissions even as they reduce others.

We are deeply tangled in the web of fossil fuels. They have provided humanity with unprecedented power, health and wealth; they're stitched into the very fabric of our society and standard of living.

So if we're really going to contend with climate change, here's where we need to start:

- We need to make hard choices. The world cannot keep up with current energy demands, and renewables are not yet ready to carry the whole load. Will we use coal? Nuclear power? Will we invest in liquefied natural gas, or build wind farms off Cape Cod and Sleeping Bear Dunes?

- If we want silver bullets, we'll have to make them -- a lot of them -- ourselves. In the short run, we need to push for better energy efficiency. Long term, we need renewable sources to replace fossil fuels. To get there, we'll need massive investment and government at all levels is going to have to help.

Venture capitalists spent \$2.2 billion on renewables last year. That's great, but the figure is dwarfed by the \$5.3 billion they plowed into software, and the more than \$9 billion that went to life sciences. Technology can help solve the climate crisis, but we can create silver bullets only with investments of money, sweat and brains.

- We need to navigate between easy optimism and despair. Many former climate-change skeptics have conceded that humans are causing climate change. Now, ironically, some say it's too late and too difficult to do anything about it.

This pessimism is unwarranted and un-American. Yes, we will have failures and false starts, and we'll hear about how we're not meeting our goals. We must regard these as reminders of the magnitude of the problem.

We can meet the climate challenge, despite the heavy burden it places on our generation, because the alternative is even harder to accept.

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Ethanol contributing to global food crisis

By: Randy Scholfield

After decades of relatively low-cost food, the world is facing a global food crisis, with soaring prices for staples such as wheat and corn and rice hitting poor people especially hard and causing food riots in Haiti, Egypt and other countries.

The situation alarms food experts, who warn that looming famine and starvation could not only cause untold suffering but also foster political instability.

Several factors are behind the spike, according to experts, including the diversion of millions of acres of crops to biofuels such as corn-based ethanol. Other factors include climate change, soaring gasoline prices, and greater consumption of meat and dairy products in the developing world.

The United States and other wealthy nations must address this crisis on several fronts to avert a humanitarian disaster.
