Resources for Global Growth

Agriculture, Energy and Trade in the 21st Century

Center for American Progress

Resources for Global Growth

Agriculture, Energy and Trade in the 21st Century

Center for American Progress
Washington, DC

2005

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just, and free America that ensures opportunity for all. We believe that Americans are bound together by a common commitment to these values and we aspire to ensure that our national policies reflect these values. We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is "of the people, by the people, and for the people."

Contents

Edited by Peter Ogden and Rebecca Schultz

Preface

Later this month, in 2006, and for years to come, American trade delegations will board planes for Hong Kong and other capitals to negotiate trade agreements on behalf of the United States.

Trade negotiators will advocate nuanced positions on everything from blue box payments to bound tariffs, but what they lack is a vision of agriculture as a global commodity that can be developed in ways that will benefit farmers at home *and* abroad. Absent such a vision, American and European negotiators continue to squander opportunities for progress, as they have in the long-stalled Doha Development Round of trade negotiations under the World Trade Organization (WTO). At the same time, they feed into the worst fears of farmers from Kansas to Kenya – that these trade talks are focused not on people, but on politics and profits.

Those fears are well founded. While farmers everywhere hope for nothing more than a fair market price, the structure of international agriculture robs those same farmers of the opportunity to compete on a level playing field. The conventional wisdom is that this is a zero-sum game – either the agricultural sector of the United States must go without a safety net or poor farmers around the world must surrender the hope of competing in the global market. This is a false choice.

Driven by the pressing need to trim the growing federal deficit and its legal obligations under the World Trade Organization, the Bush administration recently put an offer on the table to reduce American agricultural export subsidies. However, by proposing a subsidy cut without a complementary plan for the rural Americans who would be affected by it, the administration fuels the misperception that livelihoods at home must be sacrificed for the benefit of people on the other side of the globe – and that trade hurts Americans. At a time when trade is growing more important to the future of the American economy, this is a perception we cannot afford to fuel.

The Center for American Progress has developed a strategy for breaking the impasse on trade and agriculture by focusing on two core beliefs. First, we believe that agricultural producers at home and abroad desire and deserve the same thing: a fair market price for their products. Second, we believe that any sustainable solution must be rooted in the ability of agricultural producers everywhere to compete in a fair global market. Building on these realities, we can honor our legal obligations, build a functioning global trading system, ensure that the

world's poorest countries have a shot at participating in a fast-moving global economy, and guarantee that American farmers have access to growing and vibrant markets.

Here's how we do it. Instead of simply abandoning those small farmers who depend on the subsidy safety net – as the President seems to have done – we propose that America move quickly to make substantial and comprehensive investments in the domestic production of biofuels and bioproducts.

Significant economic growth in the United States has always come through a combination of innovation and far-sighted investment. By dramatically increasing investment in the research, development, and deployment components of a large-scale agriculture-based energy sector and providing the incentives and risk-management tools that can support the transition to new crops, the U.S. government and private sector can transform the lives of America's small farmers. Simultaneously, we can reduce our costly dependence on foreign oil and pave the way for greater energy security. And, finally, by developing a new competitive edge and creating new domestic markets, we can free up other commodity markets to the developing world and help to ensure that the world's poorest farmers can fairly compete.

The essays in this book lay out the details of how we can and must proceed, and many people have contributed to this effort. I would like to thank Jason Clay of the World Wildlife Fund for an opening chapter on trends in global agriculture that will surprise many but should inform us all. Here at the Center, these essays are the work of a team led by Gayle Smith and including Jake Caldwell, Ana Unruh Cohen, Bracken Hendricks, Denis McDonough, Kara Laney, Rebecca Schultz and Peter Ogden. My thanks to all of them.

John D. Podesta
December 2005

A Global View: Trends in 21st Century Agriculture

Jason Clay, World Wildlife Fund

The Big Picture

There was a time when the world was an open playing field, and the United States and Europe could shape and promote their agricultural sectors with few considerations of global trends. But times have changed. New competitors are redrawing the patterns of global competition. Global food production is on the rise, but so is world hunger.

As Alan Beattie wrote in *The Financial Times*, "Brazil is to agriculture what India is to [outsourcing] and China to manufacturing: a powerhouse whose size and efficiency few competitors can match. Despite facing one of the highest agricultural tariffs in the Western Hemisphere—an average 30% is levied by the nations that import its produce—the country is the world's largest or second largest exporter of [seven commodities] and is rapidly building a strong position in [four more]."

Brazil's agricultural surplus is the largest in the world.

Brazil is positioned to be pivotal in the future of global agriculture and trade. It is registering the largest agricultural trade surplus in the world ($34 billion, or 5 percent of gross national income in 2004), and maintains the largest market share (3.8 percent) in global agriculture.

An increase in global consumption, meanwhile, is being fueled by economic growth in Brazil, Russia, India, and China. Sustained 8 percent growth in China not only increases the demand for raw materials that drive the economy, but also generates demand for higher animal protein-based diets. Though the average worker in China does not have enough money to buy land, a house, or a car, he or she can spend marginally more "eating up the food chain" (i.e., eating more expensive animal protein and less starch). When hundreds of millions of people shift their eating habits, markets follow.

Historically, the global commodity trade was dominated by developed countries. Goods were shipped to them, held or transformed, and then reshipped. This is changing. Operating costs in developed countries are higher and consumption levels there are generally stagnant. In the recent past, China bought its soy from the United States; now it buys it directly from Brazil.

This development has prompted China to become one of the world's top investors. The combined investments of international agencies like the World Bank are about $10-12 billion per year. The combined international investments of bilateral donor agencies like the U.S. Agency for International Development are in the order of $55-60 billion per year. By contrast, China has invested $30 billion in Brazil, $20 billion in Argentina and $12 billion in Angola. These investments are aimed predominately at creating or improving market supply to meet China's demand. For example, China's investments in Brazil are for infrastructure that will improve that country's overall agricultural export capacity. This is just the beginning.

But while there is arguably more food per capita being produced in today's world than ever before, hunger and poverty are growing. Over the past 35 years, per capita food production has grown 16 percent faster than population. Even so, the number of hungry people in every country except China increased by an average of 11 percent from 1970-1990. In Africa, agriculture employs about two-thirds of the labor force, accounts for 37 percent of GNP, and is responsible for half of exports. Yet, the sector generates insufficient wealth among the rural poor to adequately address hunger. In South Asia, agriculture generates 27 percent of the GNP but also has little impact on reducing poverty, inequality, and hunger of those most at risk.

An empty cereal box delivered to the grocery store would cost the consumer about the same as a full one.

Meanwhile, the farmer today is earning a diminishing share of retail food price. In 1900, an American farmer received about 70 cents from every dollar spent on food. Today, farmers earn on average three to four cents (less for commodities and more for fresh fruits and vegetables). This means that farmers receive less than 5 percent of the retail price of a loaf of bread or a box of cereal. To put it another way, an empty cereal box delivered to the grocery store would cost the consumer about the same as a full one. Worldwide, farmers fare better, receiving about a third of the total food value. Today's trends, however, suggest that their share will fall to about 10 percent over the next 25 years.

New Trends, New Trade

A number of additional trends combine to make trade in global agriculture more robust, but also more complex. As the United States approaches agricultural trade negotiations under the World Trade Organization, as Congress considers a

new Farm Bill, and as the United States plans its strategy to promote economic development abroad, there are several factors at play.

Food production is growing more efficient. More efficient use of resources like land, agrochemicals, and water reduces the overall impacts of agriculture. For the past 30 years, concerns about food security, total output, production efficiency, and vertical integration have increased overall efficiency within the global food system.

The market chain is being integrated and consolidated. The most important issue that has arisen within the past 10 to 20 years with regard to global food production is integration and consolidation within the market chain. This is occurring at all levels. In 2000, for the first time in human history, the total number of farmers declined. Furthermore, there are only half as many multinational food companies today as there were 20 years ago. Consolidation has occurred both horizontally and vertically. Globally, for any single commodity, there are only 300-500 buyers who make the key purchasing decisions that create markets, not the billions of consumers.

In 2000, for the first time in human history, the total number of farmers declined.

Food prices are lower. Consumer food prices may be rising, but according to *The Economist*, when adjusted for inflation, prices are the lowest on record. Food purchases constitute an all-time low share of total household budgets in developed countries (e.g., about 14 percent in the United States). By contrast, the poor in developing countries can pay as much as 75 percent of their income for food and still be hungry.

Demand for high quality products is on the rise. Consumers are sending clear signals that they want higher quality, healthier, safer, and tastier products. This interest has been fuelled by a succession of food scares, most notably in Europe: mad cow disease, hoof and mouth disease, E. coli and salmonella outbreaks, PCBs, dioxins, and GMOs. However, the concerns are not limited to Europe. Increased organic food consumption and production in the United States is another clear indication of these concerns, while in China the market for green food products has exploded.

The role of government is on the decline. Globally, there has been an overall reduction in the role of government and the resources available to government. This means fewer regulations for agriculture and less funding to monitor laws and standards; less funding for agricultural research and extension; fewer investments in residue and product testing; and the decentralization of government power to local elites who tend not to promote the long-term interests of sustainable agriculture.

The "license to operate" is changing. Food production does not take place in a vacuum – governments, neighbors, society at large, NGOs, and even food manufacturers and retailers all have an interest in the impacts of farming and in managing those impacts. The pressures that these groups can bring on farming collectively have been referred to as the "license to operate." This license to operate is changing.

In the past, producers were required to obey the laws of their country of residence; today, producers are required to obey the law of the consumer country. In the past, the goal was "do no harm." Today, this is shifting to "doing good" and "going beyond compliance."

In developing countries, cheap food for cities drives the license to operate. Even though cheap imports can displace local farmers, many decisionmakers opt to avoid the street riots and political opposition that often arise in response to high food prices in urban areas. There has also been a shift in emphasis from scale *or* equity to one of scale *and* equity. It used to be thought that achieving both was nearly impossible. Now, however, it is increasingly required that producers achieve equity (e.g., benefit society) as well as produce at a scale that is competitive on global markets.

More than half of all habitable land on the planet is used for agriculture or livestock.

Environmental sustainability remains elusive. Agricultural production must become more environmentally sustainable if it is to continue to increase its yield. More than half of all habitable land on the planet is used for agriculture or livestock. Some 90 percent of all land is farmed unsustainably (e.g., there is a net loss of organic matter each year). To compensate, new land needs to be brought into production. Meanwhile, many of today's production packages have reached technological ceilings. For example, per hectare production of rice is thought to be as high as it can go given today's technology. Using fertilizers to increase production may work in the short term, but yield long-term environmental losses.

The effects of climate change are looming. Predicting the impacts of climate change is as difficult as predicting the weather. That said, the long-term effects on agriculture will most likely register on production itself. It will take such forms as an increase in demand for water, pest proliferation, and a deepening reliance on agrochemicals.

The Trend towards Comparative Advantage

Most countries pursue an advantage by producing crops that derive from their natural resources and climate. The United States, for example, is extremely well suited to produce corn, soy, wheat, meat, fruits and vegetables. Many developing countries, meanwhile, have an advantage in producing tropical crops such as coffee, cocoa, rubber, cashews, palm oil, or even wood pulp from plantations. Similarly, countries in the tropics that have sufficient water can produce crops all year.

Most agricultural producers focus their attention on a small number of crops grown in rotation. Very few producers of any scale or commercial market integration grow more than two or three commodity crops at one time. Even most small farmers rely on one or two commodity crops (grown in association with other subsistence foods) to generate most of their income. In general, the global trend is to produce a greater volume of fewer crops to remain competitive. While this trend has been spurred by trade for centuries, globalization further accelerates the process.

However, it is important to look at the world in terms of evolving trends, not just past performance. As technology allows for the genetic manipulation of crops like soybeans, the United States will lose its comparative advantage to countries such as Brazil, where the longer growing season allows for more production than in the temperate northern hemisphere. Similarly, wild harvested timber for pulp wood in Canada and the United States will be less competitive than single species plantations in the tropics where trees grow all year round. The tropics will be the center of future pulp production.

As technology allows for the genetic manipulation of crops like soybeans, the United States will lose its comparative advantage to countries such as Brazil.

Similarly, fish protein (from capture fisheries and from aquaculture) is shifting from developed to developing countries. In spite of very high fishing subsidies in developed countries, developing countries accounted for about half of the export value (more than $56 billion) of all fisheries products in 2002. That same year, the $28 billion in developing country exports of fish protein generated $18 billion in net revenues – twice the net revenues of the exports of coffee, bananas, rubber, tea, rice, and all other meats combined.

Not only are developing countries relying more heavily on the production of animal and vegetable protein, they are increasing consumption as well. For instance, fish consumption in developed countries is predicted to remain static until 2020, while in China it will increase more than 36 percent (and in all other developing countries by

about 61 percent). In short, production, consumption, and exports will increasingly take place within and among developing countries.

Comparative advantage will not be enough to allow producers to survive if policies do not align incentives and reinforce those advantages. The right balance is key. Producers in the United States, Europe, and Japan are adversely affected by high land values, labor costs, regulations, and other factors that are far less significant in developing countries. Consequently, even though there is a strong consumer base and the quality of the land may be high, these countries will lose their advantage to less industrialized countries. In this context, efficient producers and countries with growing rates of consumption will assume a greater role in global agricultural production and trade. It is also anticipated that efficient food manufacturing will shift to developing countries that are nearer either to the raw material producers or to the consumers.

Energy: A Growing Agricultural Commodity

For many, energy is an increasingly appealing alternative. The rapid increase in the price of oil has triggered new speculation about the potential for renewables and biofuels such as biodiesel and ethanol. Biofuels have caught the attention of policymakers and agribusiness companies alike around the world. Growing interest is driven by environmental considerations, continued instability in the world's oil producing regions, and costs. For the agricultural sector, the immediate concern is the impact higher oil prices will have on producer costs, including direct costs such as machinery and transportation, and inputs such as fertilizers and pesticides, which have high embedded energy costs. Some preliminary findings suggest that producer costs may increase by 50 to 100 percent.

Producing energy from agriculture is a viable way forward for many. In today's world, Brazil is taking the lead. Brazil is likely to double the area devoted to sugarcane by 2010 and increase ethanol production considerably from the current 1 billion liters per year to 6-10 billion per year. Brazil's average cost of producing sugarcane is $158 per ton, while the cost for the rest of the world is about $250. In addition, some 94 percent of sugar mills in Brazil already produce ethanol and are among the most efficient in the world. Brazil's goal is to increase the area under sugarcane cultivation from 5 to 35 million hectares and total production from 1 to 150 billion liters, an amount equal to about 10 percent of current global petroleum consumption.

But ensuring that the potential gains that agriculture can afford are both equitable and sustainable requires careful consideration of three critical factors. First, even modest levels of renewable energy production in the world's poorest countries

will require external investments. For these countries, new technology will have to be created or adapted to local conditions to produce renewable energy, and for poor countries with limited capital, the cost will still constitute considerable risk.

Second, any effort to expand dramatically agriculture-based energy production in the United States will require government supports – including, potentially, incentives, risk management tools, subsidies, and tariffs. Given the agricultural trade issues that divide the developed and developing worlds today, it is critical that these be designed to comply with international trade agreements, and that subsidies are crafted as incentives for innovation. In short, if public money is used to support the transition to renewables, society should be able to verify that we get what we pay for. For example, if subsidies shift to green box payments, then they should measurably build soil, reduce water take, or increase water quality, biodiversity or habitat.

Third, a move towards increased production must prevent potentially adverse environmental impacts. Any plan to increase the production of biofuels must take into account the fact that, globally, 90 percent of agricultural production loses more carbon each year through soil erosion than it replaces – and that is when only the targeted part of the plant is harvested. For this reason, it is critical that the proper species be targeted and production be utilized to produce biofuels from agriculture.

Finally, for the expanded production of renewables and biofuels to proceed without reducing the amount of top quality agricultural land that is required for food production, more marginal lands may have to come under cultivation. The most viable option would be to utilize perennials, though even cultivation of these will require caution so as to avoid more erosion and a loss of soil carbon on vulnerable marginal land.

The Copernicus Institute will soon release a multi-year study based on data from the Food and Agriculture Organization of the United Nations (FAO) that focuses on a wide range of countries. Several interesting conclusions can be drawn from its findings. First, the production of renewable energy from agriculture can be undertaken without jeopardizing food production, even for a global population of nine billion. Second, given current technology, tree crops will always be the most efficient source of renewable energy. Third, all things being equal, tropical areas will always be more efficient producers of renewable energy than temperate ones because of their ability to produce 12 months of the year.

The production of renewable energy from agriculture can be undertaken without jeopardizing food production, even for a global population of nine billion.

The Core Principles for Change

Globally, agriculture is experiencing something of a renaissance. New management practices, improved genetics and plant technologies, better equipment, and the exchange of information made possible by the Internet have significantly increased production yields around the world. Innovation is rampant, and most of it comes from farmers themselves who are trying to solve their own problems. The mantra of the day is "more with less," and the farmers who survive and prosper without government assistance live by this creed.

However, there is a critical need for the government and private sector to step in to encourage and spread innovation. Here are a few of the significant lessons learned.

- ***Only strategic alliances and partnerships can produce results.*** If the goal is to use the market to make commodity production more sustainable, then the different actors along the market chain need to be involved. No single stakeholder group or set of government or private sector policies can make significant improvements in agricultural production single-handedly.

- ***Change takes time, but can be accelerated by information.*** Today's agricultural production systems took a long time to create. Changing them for the better will also take time. In fact, it is easier to build better systems from scratch than it is to retrofit them. Yet, even the fastest growing commodity production systems will take 20 years or more before the output of new systems equals that from traditional ones. This raises important issues and has implications for determining who the key partners will need to be to change commodity production and markets significantly.

- ***Most entitlement programs actually make the beneficiaries worse off.*** Assuming prevailing trends continue, there will be fewer farmers working the land each year. The poorest people in rural and urban areas do not own land. There is a need to shift our emphasis from trying to protect small farmers to creating opportunity, viable scales, and equity for producers. New ways to address equity issues need to be identified and better understood. These could include ESOPs (employee stock option plans or worker-owned shares within a business), joint ventures with producers and buyers, and value-added manufacturing and processing. Brazil has dozens of such experiments going on at this time. We should learn from them, and this information should help farmers and those who work with them learn rather than reinvent solutions.

- ***Producing agricultural goods is about managing change and how to think, not what to think.*** Today's price norm is tomorrow's premium. Prices will continue to decline through globalization and increased efficiency. Given overall reductions in subsidy regimes, one tendency will be for producers to cut corners to remain competitive. The corners cut will be those that are least regulated (e.g., environmental). By contrast, producers who learn faster will survive. Overall efficiency, Best Management Practices (BMPs), and the introduction of new crops all take time to develop and disseminate. Even under the best conditions, it can take eight years or more to disseminate better practices unless they are patented information and a company is selling the technology to make money.

For good or ill, agricultural policy impacts prices, food quality, consumer health, air quality, water quality, and biodiversity. Like driving a car by looking in the rearview mirror, policies that are built on a vision of agriculture in the last century will not pave the way for the future. For the United States to remain competitive in agriculture and make agriculture more competitive in the rest of the world, the first step is to understand that though today's markets present more challenges, they also offer more opportunities.

References

Clay, J. *World Agriculture and the Environment.* Washington D.C.: Island Press. 2004.

Gillson, I., D. Green, and S. Wiggins. Rethinking Commodities. Working Paper for the Renewable Natural Resources and Agriculture Team, DFID Policy Division. June, 2004.

Thurow, R and J. Soloman. As Hunger Rises in Line with Food Production, India Shifts Its Strategy. *The Asian Wall Street Journal*, June 25-27, 2004.

Valdimarsson, G. A Future for Socially Responsible Aquaculture: A View from the FAO. Talk given to AquaVision 2004. Stavanger, Norway, 2004.

Resources for Global Growth

Agriculture, Energy and Trade in the 21st Century

Breaking the Doha Deadlock: A Time for Leadership

Countercyclical payments, export assistance, subsidy caps, tariffs, green boxes, blue boxes. Accusatory fingers pointed at the French, at the United States, at the entrenched interest groups. If you have been following the heated debate surrounding the Doha Development Round of the World Trade Organization (WTO) talks, you might believe that the source of all frustration in the agricultural trade arena extends from esoteric legal technicalities.

But in fact these issues are only symptoms of a deeper and more profound problem – a problem that has stalled the Doha talks for four years and threatens to make global trade the instrument of division rather than a force for integration. This problem is the lack of a clear vision of how to make the lives of working people vital, competitive, and productive in the 21st century.

In the absence of such a vision, ongoing global trade negotiations are at risk of devolving into an increasingly costly and ultimately futile attempt to preserve the status quo – a status quo in which, among other things, farmers in the developing world struggle in vain to compete against heavily subsidized competitors, and in which farmers in the United States are not given adequate opportunity to innovate because of a lack of smart government investment.

In such a world, the WTO becomes less of a forum for effective and creative engagement and more of a boxing ring in which one's "success" is hinged to the constraints imposed on other countries. The United States must move beyond this. In an increasingly globalized marketplace, it is essential that the rules governing agricultural trade grant every farmer the right to compete fairly.

In such a world, the WTO becomes less of a forum for effective and creative engagement and more of a boxing ring in which one's "success" is hinged to the constraints imposed on other countries.

Sadly, the Bush administration has failed to break the deadlock on trade between Americans who believe it is the source of economic insecurity and those who argue that it is a panacea; between those who believe that our trading partners are out to get us and those who believe that they deserve better; and between those for whom trade is offering a brighter and more profitable future and those for whom trade is the cause of economic hardship. As globalization charges swiftly ahead, and new economic powers rise and weak powers decline even further, the administration has failed to zero in on the dire

need for a coherent, equitable, and functional global trading system that can guide a rapidly changing economic order.

The latest in a string of trade negotiations, the Doha Round of trade talks was launched with a commitment by the world's richest nations to make development a centerpiece of trade and reform the trading system to enable poorer countries to make real gains, particularly in areas of relative competitive strength, like agriculture, which sustains 70 percent of the rural poor in developing countries.[1]

The challenge is to act on those stated commitments and pursue a vision of trade that allows farmers everywhere to produce, innovate, and compete in a world of shifting production patterns and global markets. This will require real leadership on the part of the United States, and more than an endless continuation of the rhetorical "blame game" in the opinion pages of the world's leading newspapers.

Beyond the Status Quo

The status quo in trade and agriculture is under increasing pressure. As the United States prepares to reauthorize agricultural support programs and draft the 2007 Farm Bill, what happens at the WTO will have a profound impact on America's farm policy.

Increased energy demand and growing concerns about the impacts of climate change have given fresh momentum to proposals for enlisting agriculture to help diversify our energy sources.

At the same time, increased energy demand and growing concerns about the impacts of climate change have given fresh momentum to proposals for enlisting agriculture in efforts to diversify our energy sources.[2] Technological advances in cost-competitive renewable energy resources, including biobased fuels and products, provide a significant opportunity to increase the value of traditional crops – and break the impasse on agricultural trade.

The future of U.S. farm policy is dependent on our capacity to innovate and enhance our competitiveness in local and global markets. And what we do – or do not do – will have a direct impact on the lives of other agricultural economies, particularly in the developing world.

By pursuing a domestic agricultural growth strategy that focuses on making markets work for all of the world's farmers, increasing the production and marketing of value-added competitive products, and recognizing that our long-

term economic and national security interests are well served by a healthy and stable global economy, we can seize this opportunity to redefine the compact between our farmers and our government that strengthens the rural economy and demonstrates American leadership in the pursuit of global economic growth and development.

Agriculture: Driving Development and the Doha Round

The WTO Doha Round of negotiations is guided by a commitment to reduce trade-distorting agriculture practices, industrial tariffs on manufactured goods, and barriers to services, while achieving further liberalization in other areas. Agriculture dominates the agenda and is central to the negotiations for two primary reasons.

First, over the last 30 years, the liberalization of agricultural trade has moved at a glacial pace. Trade-distorting policies (such as tariffs and subsidies that are linked to production) persist at much higher levels in agriculture than they do in other sectors. Almost all countries have higher tariffs for agricultural trade than the trade in manufactured goods.[3]

Second, agriculture has historically played a significant role in poverty alleviation.[4] Opening agricultural markets and reforming subsidies are high priorities for developing countries, as it is these policies that create the greatest distortions in trade and exacerbate competitive disadvantages in the precise sector of the global economy that offers the world's poorest countries the potential to be competitive.

As a result, developing country agricultural exporters and importers have united behind a common agenda. Led by Brazil and including India, China, and South Africa, they have formed the "Group of 20" (G-20) to advocate on behalf of the agricultural interests of developing countries. Collectively, the G-20 represents almost 60 percent of the world's population, 70 percent of the world's rural population, and 26 percent of the world's agricultural exports.[5]

Collectively, the G-20 represents almost 60 percent of the world's population, 70 percent of the world's rural population, and 26 percent of the world's agricultural exports.

The G-20 has already proven to be effective in lobbying for the elimination of subsidies in rich countries, improved market access for their agricultural products, and a slower timetable for reducing tariffs in their own agricultural, manufacturing, and services sectors. But to date, overall progress has been slow.

Deciphering Trade Negotiations: What Are They Talking About?

The broad objectives of the agriculture negotiations in the Doha Development Round are to reduce trade barriers in order to increase access to markets by exporters and to reduce trade-distorting subsidies that are linked to farm production. The Doha Declaration commits WTO members to seek substantial reductions in three areas of global agricultural trade:

- **Export Subsidies:** Reducing or eliminating subsidies and programs used to confer unfair competitive advantages on certain products through the promotion of exports.

- **Domestic Support:** Reducing trade-distorting subsidies and support to ensure that government policies are not used to encourage the production of agricultural products. Government support should be "decoupled" from farm production.

- **Market Access:** Lowering trade barriers, such as tariffs, that restrict or regulate imports.

In addition, the declaration makes provisions for Special and Differential treatment of developing nations. An emphasis is placed on achieving an outcome that allows developing countries to meet their needs, particularly in the areas of food security and rural development.

Together with Special and Differential treatment, the "three pillars" (export subsidies, domestic support, and market access) are at the core of the agricultural trade negotiations currently underway. Progress on agriculture in the Doha Round will be measured by progress in these areas.

In order to allow for different timetables for different kinds of government support, the WTO has defined a color-coded set of boxes – amber, blue, and green (as well as a *de minimis* box for relatively minor subsidies) – that group subsidies according to their variable impacts on trade and production. The classifications are important to U.S. farm policy because they, in part, determine which farm policies (such as incentives for renewable energy) will be permissible under WTO rules. The boxes work like this:

- **Amber Box:** This box contains the domestic support that is the most trade distorting and subsidies that encourage agricultural production. Countries must keep subsidies below their agreed levels or "caps."[6]

- **Blue Box:** The blue box contains trade-distorting domestic support and subsidies that also include limits on production. "Countercyclical payments" – which are the payments made to farmers when a commodity's market price drops below its established target price – are likely to qualify for the blue box.

- **Green Box:** The green box is for trade-distorting domestic support and subsidies that are not in any way related to production. Programs that fall into the green box category can include unlimited subsidies and are considered exempt from mandatory reductions.

Determining which domestic supports and subsidies qualify for which box will be a key issue for the 2007 Farm Bill, ongoing WTO agriculture negotiations, and future WTO disputes. By designing programs to fit into the green box, the United States can ensure that they are minimally trade-distorting and are therefore able to receive domestic support. For example, if the United States includes significant incentives for renewable energy programs in the 2007 Farm Bill, this support should be designed to meet green box criteria. That way, they can be eligible to receive relatively unlimited subsidies and be exempt from mandatory reductions in those payments.

The Substance of Subsidies

A World Bank study recently noted that the sheer size of agricultural subsidies relative to the size of the market has the effect of rewarding non-competitive producers, and wreaking havoc on small economies that are heavily dependent on the export of only a few crops. For example, the combined value of U.S. and EU cotton subsidies is $4.4 billion – in a global cotton market valued at $20 billion.[7]

Among other policy goals, subsidies in the United States are in part intended to provide farmers with greater income stability, guard against volatile commodity prices, and strengthen the international competitiveness of U.S. agricultural products. In recent years, as gains in agricultural productivity have run up against declining or unstable commodity prices, the scope and structure of subsidy payments have come under increased scrutiny.

With annual budget deficits projected to reach $400 billion over the next several years, advocates for foreign policy reform have drawn public attention to the high cost of U.S. subsidies.

With annual budget deficits projected to reach $400 billion over the next several years, advocates for foreign policy reform have drawn public attention to the high cost of U.S. subsidies. Furthermore, domestic support programs have also been criticized for inflating land values to the particular detriment of small farm operators. Most of all, farm policy is coming under scrutiny for its inequity: between 1995 and 2004, 72 percent of $140 billion worth of farm subsidies went to 10 percent of farms, and the bulk of U.S. subsidies and payments are limited to five major commodity crops: cotton, corn, wheat, soybeans, and rice.[8]

WTO Negotiations and the 2007 Farm Bill: Convergence or Conflict?

The evolution of the 2007 Farm Bill and efforts to conclude the WTO Doha Round of negotiations in 2006 will have a significant impact on each other. In the United States, "fast track" or Trade Promotion Authority (TPA) – which allows Congress to review implementing legislation for trade agreements on an expedited basis and without amendments – is due to expire in mid-2007. Any agreement achieved at the WTO must be concluded by the end of 2006 in order to receive Congressional approval on a fast track basis. Similarly, the 2007 Farm Bill will be debated by Congress throughout 2006. As a result, the United States Farm Bill and the Doha negotiations both must be concluded no later than mid-2007.

Regardless of whether or not a Doha agreement can be successfully concluded, it is likely that pressure will continue to mount on the United States, European Union, Japan, and others to reduce their highest subsidies in production-distorting agriculture programs. An informal alliance of developing countries and non-agricultural industrial interests, among others, will insist on advances in the agriculture negotiations in order to maintain overall momentum for the WTO's broader Doha trade liberalization agenda. As a result, the programs most at risk for reductions in overall support through negotiations and dispute settlement challenges in the United States are the commodity programs (grains, oilseeds, cotton and rice). Key areas of agreement, trends and their likely impact on United States farm policy include:

- The elimination of export subsidies and short-term export credits, by as early as 2010. This would require the United States to eliminate nearly $600 million worth of export subsidies. The EU would be required to eliminate export subsidies valued at $9 billion.[9]

- Further disciplines and the eventual elimination of trade-distorting practices in food aid programs. This would mean that when debating the 2007 Farm Bill, U.S. legislators will face increasing pressure to restructure the food aid program to provide less in-kind food aid from surplus crop production and more cash donations.

- Reductions in total trade-distorting support (amber box, blue box, and *de minimis* boxes combined), with the highest levels of support being reduced the most. This would require U.S. policymakers to look for savings in current commodity programs with high levels of support, including rice, cotton, dairy, sugar, and peanuts. In particular, U.S. commodity marketing loan and loan deficiency payment programs may be at risk for substantial reductions.[10]

- Adherence to blue box caps. The blue box designation will most likely allow U.S. countercyclical payments, but a cap equal to 5 percent of the value of a WTO member's total agriculture production has been proposed. Under this cap, the United States will not be allowed to exceed $9.2 billion in support.[11]

- Provisions for greater market access. Under market access provisions, the highest tariffs are to take the largest cuts. Although industrialized countries are granted flexibility to shield "sensitive products" from further market access concessions, in U.S. farm policy, the commodity programs with high levels of support and protection may require the greatest reductions.[12]

- Allowance of flexibility for the developing world. Developing countries may be granted greater flexibility and time to continue employing export subsidies and domestic support. Subsistence farmers in developing countries may be able to have their crops declared "special products," and therefore exempt from further reductions in tariffs.

Finally, there has been and will continue to be debate about whether a cut in subsidies is, in fact, a cut. In terms of the net effect of reductions in domestic support, the real outcome depends on whether a country's stated reductions will be taken from baseline ceilings already committed to or from the actual levels of trade-distorting support paid out. For most countries, including the United States and EU members, actual subsidy payments are well below baseline ceilings – but in negotiations, reduction offers are based on the inevitably higher baseline

ceilings. As a result, significant percentage cuts to domestic support may not translate into real world subsidy reductions. For example, a recent World Bank study projected that a claimed reduction of 75 percent in amber box support levels would require, in real terms, the United States to cut actual subsidies by only 28 percent, and the EU by only 18 percent.[13]

Taking Subsidies to Court

The 2007 Farm Bill and American farm policy will also be influenced by several current and future challenges to U.S. agricultural programs in WTO dispute settlement proceedings, such as the U.S.-Brazil cotton dispute.

In March 2005, the WTO Appellate Body affirmed an earlier WTO dispute panel decision. It determined that the United States' approximately $3.2 billion in annual cotton subsidies were in violation of its earlier trade commitments to reduce subsidies. Brazil alleged that the U.S. subsidies to American cotton growers, millers and exporters encourage overproduction and increase exports which, in turn, contribute to reducing the world price of cotton and the earnings of Brazilian, West African, and other developing country cotton producers. As a result of this ruling, the United States has agreed to alter certain existing farm programs and to eliminate export credit guarantees and the "Step 2" payment program for cotton millers and exporters.[14]

The WTO's cotton ruling also determined that certain domestic support payments under the 2002 Farm Bill had exceeded allowable limits and were not entitled to safe harbor in the green box as non-trade-distorting payments. For technical reasons, the United States will not have to comply directly with this aspect of the cotton decision, but it does establish a precedent and open a potential avenue for further challenges to U.S. programs with similar payments. If the U.S. is unable to have these subsidies declared allowable under the green box from this point forward, they will fall into the amber box and be targeted for steady reduction.[15]

Brazil has also successfully brought a WTO challenge against the EU sugar program. Uruguay recently announced a WTO challenge to the U.S. rice program, and Canadian trade authorities have launched a formal inquiry into current U.S. domestic support for corn. The trend appears to signal an increase in potential challenges to U.S. domestic support programs, rather than a decrease. If a Doha agreement is not reached, it is widely anticipated that countries will resort to the WTO dispute settlement process with increased frequency as a means to achieve reform gains not realized in negotiations.[16]

Adverse panel decisions, meanwhile, raise the specter of cross-retaliation and trade wars. An aggrieved trading partner may attempt to ensure compliance by imposing retaliatory sanctions against seemingly unrelated products. For example, in the course of the Brazil-U.S. cotton case, Brazil has threatened to impose retaliatory measures valued at $3 billion on U.S. goods and services. In order to increase the pressure on the United States (and enlist the support of non-agriculture interests in the United States), Brazil has targeted the suspension of U.S. intellectual property protection in Brazil as one means to ensure compliance with the cotton decision and adequate reform of the U.S. cotton program. Finally, reliance on litigation, unlike negotiation, carries the risk of requiring unilateral adjustments in existing U.S. policy without the benefit of securing favorable adjustments in a trading partner's policies.

Reliance on litigation, unlike negotiation, carries the risk of requiring unilateral adjustments in existing U.S. policy without the benefit of securing favorable adjustments in a trading partner's policies.

Energy: Empowering Changes in Trade

As the United States confronts an ever more complex and contentious agricultural trade environment, the nation's energy policy is under increasing scrutiny from all quarters. American dependence on oil carries tremendous costs to our economic well-being, productive capacity, national security, environment, and climate. Rising oil and gas prices, meanwhile, hit farmers and rural communities particularly hard as the costs of energy inputs at every stage of production and distribution increase even as prices for goods remain flat or decline.

The United States has an increasingly important opportunity to diversify its energy supply and foster innovation in the agriculture and transportation sectors by investing in renewable energy resources. Agriculture has the potential to make a significant contribution to energy production while reducing our dependence on petroleum and promoting the diversification of the U.S. energy supply. Investing in the capacity of agriculture to produce alternative energy, meanwhile, could help us twice on trade. First, it would allow for a reversal of a looming agricultural trade deficit. Second, by expanding the production of energy crops, the United States can reduce trade-distorting supports for certain commodities while offering America's farmers a viable alternative.

Alternatively, America can be proactive, and use upcoming farm bills as vehicles for aligning American farm policy with new trends in the global economy.

The shape of the 2007 and future farm bills will be determined by whether America's political leaders choose to be reactive or proactive. If we only react – to the growing pressures imposed by a raging federal deficit and a likely string of successful challenges in the WTO – cuts will be made on an ad hoc basis and both the farm safety net and the potential for innovation will be squandered. Alternatively, America can be proactive, and use upcoming farm bills as vehicles for aligning American farm policy with new trends in the global economy.

By making investments in the capacity of domestic agriculture to produce biofuels and other bioproducts, America can strengthen rural communities by providing well-paying jobs at locally built and maintained biorefineries. A new market in biofuels for traditional commodity crops can raise commodity prices and farm incomes, thereby enabling more farmers to stay on the land in a competitive enterprise. With this shift, the United States can emerge as a viable competitor in agriculture, and render the global agricultural economy more rational and more equitable.

A Path Forward

The United States can fulfill the promise of Doha by eliminating trade-distorting subsidies and granting greater market access by reducing tariffs on agricultural products from poor countries. The European Union, Japan, and others must follow suit and make specific and concrete reductions in their agricultural support programs.

The proposed cuts to subsidies and tariffs must translate into real reductions with firm deadlines. Legitimate cuts from *actual* payment and tariff levels – not targeted levels – will alter current policy. True reductions will give us a fighting chance to curb overproduction and the dumping of products on the market for less than their cost of production. Furthermore, it will provide a boost to prices and incomes of farmers in the United States and around the world.

But offering meaningful changes to the rest of the world without providing a plan for our own farmers is not a viable option. At home, U.S. farm policy should focus on the need to maintain a sensible safety net for farmers, while placing limits on subsidies that encourage trade distortions and overproduction.

Center for American Progress
1333 H Street, NW 10th floor
Washington, DC 20005
202.682.1611 • 202.682.1867
www.americanprogress.org