Mr. Chairman and members of the Committee, thank you for the invitation today to discuss the implications for U.S. agriculture of higher energy prices and the disruption of the transportation system due to hurricanes. Prior to the hurricanes, many farmers were already facing rising energy and lower crop prices for the 2005/06 year due to strong global energy demand and large expected crop production in the United States. Hurricanes Katrina and Rita reduced domestic crude oil, natural gas and refinery production temporarily and destroyed some port infrastructure, adding significantly to energy prices and disrupting trade. These impacts have had effects across the Nation's agricultural producers. Energy and transportation costs remain elevated, and labor to operate export facilities remains tight. The higher energy prices and disruption of the transportation system are increasing farm production expenses, lowering prices to producers and raising farm program costs.

Despite these challenges, Gulf Coast areas have made important and remarkable steps toward recovery. USDA has implemented a number of assistance programs to help. In recent weeks, barge traffic has increased sharply; grain inspections for export through the Mississippi Gulf have approached last year's levels; barge and rail forward rates have moved well below spot rates; and cumulative corn and soybean exports for this marketing year are now only moderately below year earlier levels. Importance of Gulf Ports for Agricultural Trade Four of the top 10 U.S. ports used to export agricultural products are located in the Mississippi and Texas Gulf region. They are South Louisiana, 36 percent of total agricultural exports by weight; New Orleans, 8 percent; Westwego, 5 percent; and Houston, 5 percent. Fifty-four percent of agricultural exports moved through these four ports in 2004. Key commodities include bulk grains and grain products such as cereal and flour, soybeans, vegetables, animal feed, rice, and tallow. Two of the top 10 ports used to import agricultural products are also located in the Mississippi and Texas Gulf region. They are Houston, 5 percent by weight, and New Orleans, 3 percent. In 2004, 8 percent of total agricultural imports moved through these Gulf ports. Key commodities include oils (coconut, soybean, palm kernel, nut), coffee, fruit (bananas and pineapple), molasses, and beverages.

The Mississippi River system is a major transportation artery in the U.S. agricultural marketing system, providing a low-cost way for Midwest grain and oilseed producers to ship to international markets. This system is an important factor in keeping U.S. products competitive in world markets. In a typical year, 50 to 65 percent of U.S. grain exports move down the Mississippi and through the Gulf to their final destinations around the globe.

Gulf Area Transportation Situation for Agriculture

Initial Situation. Immediately after Hurricane Katrina hit New Orleans on August 29, debris, and loss of aids to navigation, loss of power, evacuation of the city and infrastructure damage closed the Mississippi River to navigation. In addition to the bulk grain facilities and ports along the Mississippi River, the ports of Gulfport and Pascagoula, Mississippi, sustained damage to warehouses and storage for refrigerated and frozen commodities. Hurricane Rita, tracking farther west than Katrina, added to the disruption. The pace of vessel loading at Gulf ports fell sharply the week following Hurricane Katrina. Prior to the storm, the weekly loading pace was 36 vessels, and the week after the hurricane, vessels loaded fell to 10.

Port Recovery. USDA's Office of Transportation and Marketing in the Agricultural Marketing Service has had the USDA lead for assembling information on the status of the marketing system in the Gulf and tracking the recovery effort. They report that Gulf Ports have made substantial progress, although much work remains. There are 10 export elevators and three floating rigs between Baton Rouge and Myrtle Grove, LA that have a total storage capacity of about 53 million bushels of grain and a capability of loading 970,000 bushels per hour when fully operational. All facilities are now fully operational. Grain elevators on the Texas Gulf generally escaped damage from Rita. Getting power restored was their most significant delay. Initially, dredgers were not able to get to ports like Gulfport and Pascagoula because they were busy dredging in the Mississippi River. Dredging is now occurring in these ports as well.

At New Orleans, the number of dock workers, truckers and crane operators as reported are still below normal. Some workers are still living on temporary MARAD ships provided by the Department of Transportation; these vessels are scheduled to leave in mid-November. Demand for truck drivers at the port remains high, with truck capacity reportedly running at 50 percent of pre-storm levels.

In Gulfport, the storm clean-up continues, including demolition of several damaged warehouses including some used for frozen product. Pascagoula is providing only direct loading services, with cargo moved directly from truck, rail, or barge to and from the vessel. The port's warehouses are being reconstructed. The port expects to have the warehouses open and operational within a matter of weeks. At the Texas Gulf, public facilities at Port Arthur, which took almost a direct hit from Hurricane Rite, are fully operational. Some private facilities/ terminals have not completely restored operations.

All Mississippi River channels used for grain export are open and operating at normal depths. The shipping channel leading to Port Arthur and Beaumont, Texas, is open to 40 feet with no restrictions. The Coast Guard also cleared the Port of Lake Charles, Calcasieu Channel, to 40 feet with no restrictions.

Barge Situation. On the Mississippi Gulf, 90 percent of grain is delivered by barge, the rest by rail. Prior to Hurricane Katrina, lower water levels in the Upper Mississippi River system resulting from drought had already led to rising barge rates in July and August and higher overall costs of moving grain down river. The low water levels were also causing concerns about the ability to move grain down the river during the upcoming harvest season. As a result of Katrina, only about 25 barges are estimated to have been lost due to severe damage or sinking. Out of a fleet of 11,900 covered barges, the industry reports that as many as 2,000-plus covered barges are currently on the lower Mississippi River between Baton Rouge and Myrtle Grove, Louisiana - twice the normal number. The bottleneck of barges in the south is partly due to a lack of adequate labor to unload barges. A shortage of housing for barge crews contributes to this problem. In addition, an unknown number of barges are reported to be holding poor quality grain, some of which are said to have been on the Mississippi Gulf prior to Hurricane Katrina. In addition, covered barges are being used to move non-grain cargo back up the Mississippi River which adds to the turnaround time of a barge.

Barge grain shipments on the Mississippi Gulf were running below the 4-year average before Hurricane Katrina. After the storm, shipments declined further as barges began to back up waiting for ports, elevators, and navigation channels to reopen. Despite the below-normal turn-around time, by late October, barge grain shipments were recovering toward their pre-storm levels, although they still lagged compared to the 4-year average.

Rail Situation. Grain deliveries by rail to the Mississippi Gulf decreased sharply after Hurricane Katrina, recovered by September 21, lagged in mid October, but rose 45 percent from a year ago in the week ending October 26. Deliveries to the Texas Gulf have been erratic, but have been running well above year ago levels since the beginning of October. Interchange service in New Orleans among five of the six major railroads has been restored. CSX is the only major railroad unable to interchange freight in New Orleans, and it expects to restore service by the end of February.

Bids for guaranteed grain cars have been at record highs since August due to large harvests and grain stocks. Secondary market rail bids for delivery during the months of January and February finally began to decline during mid October from sharp increases that occurred in response to Hurricanes Katrina and Rita. Still, they remain much higher than previous years, signaling tightness in the transportation market overall. Bids normally ease for rail cars to be delivered in December as harvest ends; however, ongoing pressure on freight rates is anticipated this year.

Export Situation. Vessel loadings of bulk grain in the Mississippi and Texas Gulf declined significantly after Hurricanes Katrina and Rita. Within two weeks after Hurricane Katrina, vessel loadings were just about back to normal, reaching the 4-year average. However, with the approach of Hurricane Rita, the loading pace dropped again. By mid October, vessel loadings again reached the 4-year average but slipped some the week ending October 27.

Another indicator of export performance is grain inspections for export through the Mississippi Gulf, which in the week after Katrina hit fell to 21 percent of the same week in 2004. Compared with a year earlier, grain inspections were generally at, or well below, the year earlier levels until the week of October 13, when they were up 30 percent over last year. The volume of grain inspected again declined during the weeks of October 20 and 27.

In the Texas Gulf, inspections have returned to normal and have helped offset some of the decline in the Mississippi Gulf. The Beaumont facility remains an exception as the export grain elevator there has had limited power and continues to clean up, but it expects to resume loading of vessels prior to November 6. Grain inspections in the Texas Gulf have been very strong the past two weeks, running 142 and 130 percent above a year earlier for the weeks ending October 20 and 27, far better than the 16 percent experienced during the week immediately following Hurricane Rita.

USDA Efforts to Help Improve the Marketing Infrastructure. USDA has implemented a series of emergency provisions to help improve the transportation and marketing situation for producers.

? Barge movement. USDA is providing temporary incentives to assist immediate movement of barges of damaged corn from New Orleans to up-river locations. When empty, the barges will be available to move newly harvested crops. USDA has accepted proposals to move about 145 barges of damaged corn out of New Orleans to up-river locations. On November 2, USDA announced that it would continue with a second round of the program, providing an additional $7.6 million in funding.

? Alternative storage. To help producers deal with insufficient barge transportation, USDA will pay incentives for alternative storage of grain. USDA has accepted proposals on 41.4 million bushels from 19 companies.

? Alternative transportation modes. To reduce stress on the transportation system, USDA is providing a transportation differential to cover the costs of moving grain to other river transportation modes and locations. Freight differentials have been provided to move 294,770 tons of corn, wheat, and soybeans through the Great Lakes and Pacific Northwest ports. The shift from Gulf barge transportation to Great Lakes and Pacific Northwest rail transportation will help mitigate the temporary congestion at Mississippi Gulf ports.

? Marketing Assistance Loans. Producers with 2004-crop corn, soybean and rice marketing assistance loans maturing at the end of September and October and who wish to forfeit the loan collateral securing these loans are being provided the opportunity to keep the commodities on their farm for 60 days, rather than move it immediately to commercial warehouses as normally required. During this 60-day period, the producer may purchase these forfeited commodities at the rate allowed for repaying marketing assistance loans.

? Emergency Loans. More than $150 million in emergency loans has been made available to eligible producers who have suffered at least a 30-percent reduction in crop production or have sustained physical losses to buildings, chattel or livestock from Hurricane Katrina. Farmers and ranchers have eight months from the date of a Presidential or Secretarial disaster declaration to apply for low-interest agency loans.

? Temporary and Emergency Storage. For the 2005-crop year, producers may obtain marketing assistance loans for on-farm grain storage on the ground in addition to storage in grain bins and other normally approved structures. States along the river in the upper Midwest have requests for approval of temporary and emergency storage in excess of 250 million bushels. Areas tributary to the Illinois River have requests for approval in excess of 37 million bushels. Facilities along the Missouri River have requested temporary and emergency storage in excess of 138 million bushels. We have requests along the Ohio River of approximately 45 million bushels. In total throughout the U.S., USDA has approved 242 million bushels of temporary storage and 302 million bushels of emergency storage.

? On-farm storage capacity. In addition, the Farm Storage Facility Loan Program (FSFL) is available to provide low-interest financing for producers to build or upgrade on-farm grain or silage storage facilities.

Energy Situation for Agriculture

In addition to the disruption of port facilities, agricultural export infrastructure and rising transportation rates, the hurricanes have exacerbated an already tight energy market. Fuel and fertilizer prices have risen, reflecting higher prices for crude oil and natural gas. USDA

estimates farmers paid 43 percent more for diesel fuel in October 2005 than in October 2004. Crude oil delivered from the Gulf accounts for 30 percent of domestic production. Ninety-percent of Gulf oil output was disrupted by the hurricanes and caused a 30-to-40-cent-per-gallon jump in gasoline and diesel prices as farmers were gearing up for harvest.

Producers use energy directly for operating machinery and equipment on the farm, transporting products to market and indirectly in fertilizer produced off the farm. Farm expenditures on energy-related production inputs--electricity, fuels and oils, and fertilizers--rose from about 5 percent of total farm cash expenses in 1910 to over 17 percent by the early 1980s. From the early 1980s to 1999, improvements in efficiency and generally stable energy prices caused energy-related expenses as a share of total farm cash expenses to fall to about 11 percent. The share of energy-related expenses started rising again after the energy price spikes of 2000-2001. Rising energy costs affect farm commodities in different ways, depending on their reliance on energy. USDA estimates the cost of production for corn, soybeans, wheat, cotton, grain sorghum, rice, peanuts, oats, barley, sugar beets, tobacco, milk, hogs, and cow-calf operations based on surveys conducted every 3-8 years. These estimates indicate that commodities with the highest energy-related expenses per acre include tobacco, rice, sugar beets, and peanuts.

? For example, in 2003, the average energy-related expenses for tobacco were about $400 per acre, with about $100 per acre for fuels, lubricants, and electricity and about $300 per acre for fertilizer and soil conditioners.
? In comparison, the average energy-related expenses for rice, sugar beets, and peanuts were about $128, $108, and $97 per acre, respectively.
? Energy-related costs for corn, sorghum, and wheat averaged $66, $51, and $34 per acre, respectively.
? On the lower end, energy-related costs for soybeans were only $16 per acre because of significantly lower fertilizer use.
? Expressed as a percent of per acre total farm expenses, which includes land and depreciation, energy-related costs are the highest for sorghum, 23 percent; rice, 21 percent; corn, 19 percent; and wheat, 18 percent.
? Energy-related expenses as a share of total farm production expenses were highest in the Midwest, where energy-related expenses accounted for about 11 percent of total farm production expenses and lowest in the Atlantic and West regions at about 7 percent.

? If the 2003 cost of production data for energy-based inputs are indexed to reflect higher energy costs for 2005, energy-based production expenses for the 2005 crops are about 20 cents per bushel higher than 2003 costs for corn and soybeans, 31 cents higher for wheat, and 45 cents higher for sorghum.

Natural gas is the primary input in the production of nitrogen fertilizer, representing 70 to 90 percent of the cost of anhydrous ammonia nitrogen fertilizer. When U.S. natural gas prices started to increase significantly in 2000, the cost of domestically produced ammonia also rose significantly. These rising production costs have been reflected in the prices paid by farmers for fertilizers, although prices have not fully reflected increases in natural gas prices. From 1999 to 2004, the Prices Paid Index for fertilizer rose by 34 percent. The Energy Information

Administration (EIA) reports that the U.S. average natural gas price for industrial users doubled over the same period. More recently, the Prices Paid Index for fertilizer for September 2005 was 11 percent above September 2004, and the October Index was 13 percent above October 2004. Long-term increases in natural gas prices will lead to an increase in the cost of U.S. nitrogen fertilizer production and higher expenses for fertilizers. Increasing imports of fertilizer will limit the impact of higher domestic natural gas prices on farmers to the extent that natural gas prices in other countries do not increase as rapidly as prices in the United States. USDA's farm income forecast, issued on November 3, 2005, reflecting post-hurricane conditions, placed expenses for fuels and oils, fertilizer and electricity at 14 percent of total farm cash expenses for 2005. The estimate indicated expenses for energy-related production inputs would be up $5.2 billion over last year, with fuels and oils accounting for $3.4 billion of the increase and fertilizers $1.7 billion Implications of Transportation and Energy Situation for the Farm Economy Barge rates, rail rates, energy prices and farm prices. The price to charter a barge on the Mississippi River from the Illinois River to New Orleans generally ranged between $10 and $20 per ton during most of 2004/2005.

Rates increased sharply since early September, peaking at $39 per ton the week of October 12. By the week of October 26, rates fell to $27 per ton and forward rates three months in the future were down to $19 per ton. Rail will continue to struggle in a few areas until backlogs created by Hurricane Rita are corrected. Demand for rail cars has increased due to large grain supplies and to other, non-agricultural factors. This means that railroads are pressed to capacity and continued pressure on rail rates is likely. The competition for the available barges and railcars, as well as high energy prices, continues to pressure barge and rail rates. Higher energy prices are also raising rail, truck, storage and processing costs. Much of these increased marketing costs get passed back to producers in the form of reduced farm prices. In addition, farm production costs are rising as prices for off-road diesel, propane, and fertilizer are up. In addition to lower market prices and higher production costs, grain storage capacity has become a serious problem with carryover stocks of nearly 2.5 billion bushels of corn and soybeans from the 2004 record crops as well as the second largest harvests ever expected for 2005.

As of October 31, U.S. farmers had harvested 92 percent of their soybeans and 80 percent of their corn. Farmers without sufficient storage capacity face the prospect of on-ground storage, paying for commercial storage if it can be found, or selling at lower cash market prices. As the hurricanes disrupted the marketing system, the national average corn basis-the local cash price minus the futures price-widened substantially. The long-term national average corn basis, as measured using data from Data Transmission Network (DTN), is 19 cents per bushel. However, the basis usually widens in the fall as harvest selling begins. This year, there are several reasons to suggest a wider-than-normal fall basis: corn carryover from last year's record crop is exceptionally large; the second-largest corn crop ever is estimated for this year; and energy prices were already high, adding to transportation costs. The national average corn basis was 38 cents per bushel on November 4, 2005, compared with 26 cents a year earlier. Basis changes differ by region and do not strictly reflect transportation costs to the Gulf. For example, the North Central Iowa corn basis was 54 cents per bushel on November 4, over double the 24 cents of a year earlier. The weaker prices in Iowa probably reflect that State's larger than average corn supplies relative to storage capacity. Iowa is expected to face a storage deficit of 470 million bushels, requiring on-ground storage. Meanwhile, in Central Illinois,

where drought reduced production from trend, the corn basis on November 4 was 24 cents, only slightly wider than 20 cents a year earlier.

The combination of current low prices and upward revisions in the size expected for this year's grain and oilseed production has led USDA to lower farm price expectations for 2005/06. USDA forecasts an average U.S. farm price for corn of $1.85 per bushel for the marketing year that began September 1, 21 cents below the 2004/05 marketing year average. Soybean prices are expected to average $5.40 per bushel, 34 cents below last year's average. The lower farm prices and higher prices for energy-related products such as diesel, propane and fertilizer are cutting into farmers' bottom lines. Food Prices. Data on consumer food spending indicate that the farm value represents about 19 percent of the retail cost of food, with the remaining 81 percent attributable to food processing, transportation, wholesaling, and retailing. The energy component of the marketing bill for food was last estimated to account for 3.5 percent of retail food expenditures in 2000, with eating places incurring nearly 40 percent of the fuel and electricity costs of food marketing. The rail and transportation costs accounted for another 4 percent of food marketing costs, but only a portion of those expenses are energy-related costs. The spike in energy costs in recent years has raised questions about the effect of higher energy costs on retail food prices. Because energy and energy-related costs represent a relatively small share of the retail cost of food, we expect that higher energy prices to have only a small effect on food prices. The Consumer Price Index for food rose 2.6 percent during the first half of 2005, and in September was 2.4 percent above September 2004 on a seasonally unadjusted basis. This year's rate of increase is likely to be at the lower end of a range of 2.5-3.5 percent, well below the 3.4 percent rise in 2004. Farm program costs. A sharp increase in loan deficiency payments and countercyclical payments triggered by low market prices will help offset some of producers' lost income.

Through loan deficiency payments alone, corn producers could capture about 45-cents per bushel. This will, of course, add considerably to farm program spending, which was already up. Commodity Credit Corporation outlays, which dropped to $10.6 billion in fiscal 2004, were expected to be $19.5 billion in 2005 and nearly $22 billion in 2006, even prior to Hurricanes Katrina and Rita. On November 3, 2005, USDA estimated government payments to farmers would be $22.7 billion for calendar year 2005, the second highest ever. The November estimates reflect an increase in marketing loan benefits of $1.3 billion compared with payments expected to be made prior to the hurricanes. Competitiveness of U.S. Exports. The Mississippi Gulf region is a crucial export region for movement of U.S. grains and oilseeds to overseas markets. Data recently released by the U.S. Bureau of the Census indicates that the value of U.S. agricultural exports through the Port of New Orleans fell by $366 million (52 percent) in September compared with a year earlier. Grain inspections for export through Mississippi Gulf ports in September were down 100 million bushels, or over 50 percent compared with September 2004.

This loss in exports and the adverse effects on farm prices have raised questions about the competitiveness of agricultural exports for 2005/06. The adverse effects on trade depend on (1)

the length of time port operations are affected, (2) the extent that foreign buyers can delay purchases from us, and (3) the extent to which grain might be diverted to other ports or to alternative uses, including short term storage. Fortunately, all of these factors are working to mitigate export losses. The quick actions taken by the U.S. Army Corp of Engineers to replace navigation aids on the Mississippi River and to re-open the ports helped minimize the disruption by hurricanes Katrina and Rita. While grain inspections for export fell sharply after the hurricanes, combined inspections from the Mississippi Gulf, Texas Gulf and the Pacific Northwest from the week ending August 25 through the week ending October 27 were 94 percent of the 4-year average for that period. Total U.S. Gulf vessel loadings returned to the previous 4-year average by the week ending October 13, although the pace has slipped some since. USDA has helped this recovery with a range of programs to move and store grain. We also do not know of cases where major foreign buyers have indicated they were going to switch to a foreign source because of the disruption to Mississippi Gulf ports. Finally, USDA's U.S. Export Sales report for the week of October 27, 2005 indicates that accumulated U.S. corn exports this marketing year are at last year's pace, although soybeans were running about 76 percent of last year's pace.

Based on the above considerations, USDA has not reduced its official forecasts of the volume of corn exports for the 2005/06 crop year. As of October, 12, USDA's estimate of this year's corn exports is 2.0 billion bushels, the same as the early September estimate and up slightly from the early August estimate. While actual exports were below expected levels in September, USDA believes the shortfall will be made up as the year progresses. The season-average corn price forecast has been reduced for the 2005/06 crop year, from $2.00 per bushel in early August to $1.85 in early October, which does reduce the value of exports. (Note that price forecast is for the full year and includes forward contracted prices.) But, much of the reduction in the price forecast is due to an increasing corn production forecast, which is now placed at 10.9 billion bushels, the second largest crop ever.

What can farmers do? USDA believes that the Mississippi River system will be able to handle this year's grain movements, although it will take longer to move grain down the river and it will cost more to do so. USDA is working to help producers deal with the slowdown in barge traffic and storage problems. In the short run, farmers are limited in what they can do to mitigate the effects of lower farm and higher energy prices. Higher loan deficiency and countercyclical payments will help offset lower farm prices for eligible producers.

Over the longer term, research indicates energy savings are possible in a number of areas. For example, under conservation tillage, it has been estimated farmers can save 3.9 gallons of fuel per acre by going from conventional tillage to no-till. Energy savings can also come from better irrigation water management, including low-energy precision application; improved pesticide management; improved nutrient management; shifting to grazing systems instead of baled feed; adding windbreaks; adopting precision agriculture; purchasing energy efficient equipment; and generating energy on the farm using anaerobic digesters. Some producers may also be able to switch to less energy-intensive crops. In addition, U.S. farms and ranches have increasing opportunities to produce biomass for biofuel and electricity production.

Another way many producers have reduced input costs is though input purchase strategies. USDA's Agricultural Resource Management Survey for 2004 indicates 24 percent of commercial farms report locking in fuel prices before delivery, 21 percent report negotiating fuel price discounts, 31 percent report negotiating fertilizer price discounts, 8 percent report entering into fuel and fertilizer contracts, and over 20 percent buy fuel and fertilizer through cooperatives.

Conclusion

This year's devastating weather has damaged crops, livestock and livestock products and the agricultural production and marketing infrastructure in the Gulf Coast area. These disruptions combined with higher energy costs have slowed farm marketings, lowered prices of some farm commodities, and raised farm production and marketing costs. While these impacts will reduce many producers' farm incomes, farm product demand remains strong, and farm programs are cushioning the income drop for many producers. USDA continues to estimate 2005 U.S. net cash farm income to be second only to 2004. Agriculture's overall financial strength is indicated by this year's debt-to-asset ratio, which is expected to be the lowest since 1961.

While energy costs in particular will be a financial problem for producers this and next year, as long as gross farm income remains strong the farm economy should be able to absorb these costs. Substantial work remains to restore the marketing system. USDA will continue its assistance efforts with other Federal, State and local agencies and will monitor the energy situation closely. While farmers and ranchers face many challenges for 2006, we are confident that the underlying financial strength of U.S. agriculture will enable them to deal with the uncertainties ahead.

That completes my statement, and I will be happy to respond to any questions.