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Number 9711

## **Managing Farm Resources in the Era of the 1996 Farm Act**

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**Managing Farm Resources in the Era of the 1996 Farm Act.** Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture. Staff Paper No. AGES 9711.

### **Abstract**

The 1996 Farm Act quickly and dramatically changed the decisionmaking environment for farmland operators, owners, and managers. In response to the uncertainties as to how the Farm Act would affect the management of the Nation's farm resources, eight State and area-specific panels of professional farm managers and farm operators were held during the first part of 1997. Panelists participated in discussions that focused on changes in the management of farm resources, forces driving these changes, the current economic and financial setting for farming, characteristics of farm leases, land values, commodity price expectations, expected crop mixes, management of production and marketing risks, and general prospects for agriculture in their areas. This staff report includes information and perspectives provided by these panel discussions.

Four topics highlighted by the panel discussions have special relevance to prospective management decisions in the U.S. farming sector into the 21st century. Consequently, they have major implications for sector monitoring and analytical activities.

The four topics include:

- The Production Flexibility Contract Payments (PFCPs) and the associated elimination of most planting restrictions,
- Capitalization of PFCPs into land values and land rental rates,
- Direct and indirect effects of PFCPs on farm management decisions, and
- Marketing and managing price risk.

**Keywords:** Farmland, farm policy, farm resources, management, production flexibility, Production Flexibility Contract Payments, risk, 1996 Farm Act.

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For reports on each of the eight State and area-specific panel discussions summarizing panelists' responses regarding:

- changes in the management of farm resources and forces driving the changes,
- current economic and financial setting for farming,
- characteristics of farm leases,
- land values,
- commodity price expectations,
- expected crop mixes,
- management of production and marketing risk, and
- general prospects for agriculture in their areas,

as well as a selection of the panelists' specific comments about:

- farm management decisions in 1996,
- the early 1997 economic and financial setting for farming, and
- perspectives on 1997 and expected 2000-2002 changes in farmland leases and crop mixes,

visit the University of California, Davis, Department of Agricultural and Resources Economics Internet web site at <http://usdafarm.ucdavis.edu>. An electronic copy of this staff report is also available at this site.

## **EXECUTIVE SUMMARY**

### **Managing Farm Resources in the Era of the 1996 Farm Act**

The 1996 Farm Act quickly and dramatically changed the decisionmaking environment for farmland operators, owners, and managers. The emergence of the Farm Act with its production flexibility contract payments (PFCPs) and its almost complete elimination of planting restrictions jolted many engaged in agriculture. It compelled them to rethink the way they manage their resources and related contractual arrangements. It also fostered substantial uncertainties about prospective changes in the management of farm resources.

The recognition of these uncertainties led to the organization of a series of panels held during the first part of 1997. The activity was challenged to give attention to "whole farm" decisions, as distinct from specific commodity decisions, and, where possible, to identify relationships between the 1996 Farm Act and the identified changes in the management of farm resources.

Priority was given to regions of the country with historical importance of past farm programs to local and regional economies. Members of the panels were identified through interactions with leaders of State chapters of the American Society of Farm Managers and Rural Appraisers (ASFMRA) and university and cooperative extension staff with interests in farm management decisions. Six of the eight panels were comprised of professional farm managers and two were comprised of farm operators.

The time of the year when the programs were changed was of great significance to owner-operators, tenants, and landlords. Panelists indicated that the more flexible arrangements provided under the new legislation were not fully incorporated into 1996 farming decisions because of the late development of the farm bill. In many regions of the country, preliminary cropping plans and production financing based on those cropping plans, and even some plantings for the 1996 crop year, were necessarily made before the law was signed by the President on April 4, 1996.

Farm managers and farm operators were very positive about newly gained planting flexibility and PFCPs, both of which are very popular Farm Act provisions. The initial consequence to farm owner-operators, tenants, and landlords was the availability of PFCPs, and for rented lands, the allocation of PFCPs between landlords and tenants.

Producers were very optimistic about prices they would receive for their 1996 production. These upbeat conditions persisted through late summer and contributed to bullish expectations that were reflected into lease negotiations and in land transfers, both influenced by increased competition for land and higher returns to landowners. However, as the 1996 year unfurled, sharp price falls led to changed price expectations. With generally less optimistic outlooks for 1997, decisionmakers increased their concern about commodity price volatility, the level of the safety net provided by loan rates, and the need for appropriate marketing and risk management strategies.

Panelists recognized that changes occur in leasing arrangements because of competitive forces and that Farm Act provisions do influence economic outcomes for owners and for tenants in ways that are sharply different from those of previous, often longstanding, rental arrangements. The "jolt" of significant adjustment of managing farm resources under the 1996 Farm Act involved responses that challenge traditional lease structures. An overall impression is that tensions are being played out



between landlords and tenants. Serious reviews of traditional leasing arrangements are occurring in most production regions.

Panelists reported that agricultural land values increased, often significantly, in several regions. Contributing factors underlying the increases in land values included favorable equity and financial conditions following generally favorable income years, bright prospects for 1996 commodity prices, ample financing, and, not the least, PFCPs transfers to owners of farmland, which appear to have been quickly capitalized into higher land values. Owners of land, including pension funds, insurance companies and foreign investors, thus are beneficiaries of the announced schedule of PFCPs through year 2002. In the heady atmosphere of early- to mid-1996 when commodity prices were strong, the capitalized value may have appeared as a bonus for landowners.

Discussions with the farm management panelists confirmed that owners of farmland like three particular features of the 1996 Farm Act -- the Production Flexibility Contract Payments (PFCPs), the reality that the qualifications for the PFCPs were essentially unambiguous, and, especially, that planting restrictions were nearly all eliminated. The approving attitudes toward nearly eliminating planting restrictions were expressed in each of the eight panels.

Panelists' estimates of how they are adjusting crop mixes illustrate that aggregate data, say for a State, do not reflect the full potential benefits to individual farming operations associated with planting flexibility. There is more change occurring at the farm level than may be revealed in larger aggregate statistics across all farms. Panelists are alert to potential opportunities to grow new crops. They will shift land quickly to optimize their cropping mixes.

The demand to purchase and to rent farmland has expanded in several areas of the country. The land market in many areas was already adjusting to higher commodity prices and the optimism over commodity exports in the future when the 1996 Farm Act became law. The PFCPs became an additional, important component of demand for land.

Changes in underlying economic conditions do not normally warrant dramatic year-to-year changes in farm lease provisions. However, it is likely that the jolt of the 1996 Farm Act on land markets may be substantially affecting how both landowners and renters deal with each other and the extent of the adjustments in leases they are prepared to consider.

In still other cases, panelists indicated that some landowners are discontinuing the renting of their farmland in order to "capture" the PFCPs. Rather than directly operate the land, the landowner hires operators (sometimes the person who had been the tenant) to do custom field work and pays input suppliers to make the appropriate applications of inputs.

The planting flexibility included in the 1996 Farm Act has increased the opportunity to base farm management decisions, including which crops to grow, on profitability without regard for PFCPs. In a few cases, flexibility is constrained by contract limitations on growing vegetables.

Even though the PFCPs may not be directly affecting crop mixes and input applications, they may nonetheless be having an indirect effect. The capitalization of the PFCPs into land values affects input price ratios and may be fostering increased intensity of land use. The capitalization of the PFCPs into land values also means increased wealth for those who own land. These increases may be affecting attitudes toward purchasing additional land and operating land already owned.

Adjustments to the 1996 Farm Act go beyond production decisions such as changes in crop mixes. Panelists are seized with the importance of marketing and related price risks to their clients and therefore to their businesses.

Panelists indicated much interest in revenue insurance. However, the amount of income insurance that will be demanded will likely depend substantially on the extent it may be required by lenders and on the amount of subsidy, which affects the producer's cost of insurance.

Because the importance of marketing is so widely recognized, now may be the "teachable opportunity" for topics like speculation, risk transfer, and risk avoidance. It may also be the "commercial opportunity" to develop and promote risk transfer instruments.

Farming interests continue to want protection from low and declining prices but at the same time maintain the opportunity to realize benefits from rising prices. This combination of wanting to socialize the risk of declining and low prices but privatize the gains of rising prices goes a long way in understanding the response to expected increased volatility of commodity prices associated with the 1996 Farm Act.

Those with responsibility for selling commodities should concern themselves with selling at an optimum time. But, in addition, equal, if not more, attention is required to know in what circumstances it is advantageous to transfer price risks to others and how to accomplish the transfers efficiently.

The study reported on in this publication provides important insights about current and prospective effects of the 1996 Farm Act. However, much more information needs to be collected and analyzed if, for example, the economic and distribution effects of the income streams and wealth associated with the PFCPs are to be understood. Similarly, questions such as the effects of attaching program benefits to land or to individuals require careful analysis, extensive discussions among policymakers, and understanding by the public.

# **Managing Farm Resources in the Era of the 1996 Farm Act**

**Lyle P. Schertz  
and  
Warren E. Johnson**

## **I. INTRODUCTION**

The 1996 Farm Act changed the policies that directly affect the management of farm resources used to produce and market several important farm crops. The Act eliminated for 7 years most restrictions of previous programs on the use of land in growing crops, stopped the payment of deficiency payments (applicable to wheat, feed grains, rice, and cotton) which had been geared to the difference between target prices and the higher of market prices or price support loan rates, and suspended the Farmer-Owned Reserve.

The Act also initiated predetermined direct payments (linked to cropland that had produced wheat, feed grains, rice, and upland cotton) for the years 1996-2002; continued the availability of nonrecourse loans (called marketing assistance loans in the 1996 law) at rates no higher than they were for the 1995 production of these commodities; continued the availability of loan deficiency payments; and extended the Conservation Reserve Program (at a maximum of 36.4 million acres) and the Wetland Reserve Program.

In turn, the commodity programs implemented by the USDA were adjusted to reflect the changes in policy. On farms, with exceptions, it was no longer necessary to check if planting more or less of any crop would jeopardize the receipt of a government check. Terms and concepts like base acreages and restraints on the number of acres required to be idled to remain eligible for benefits in commodity programs (acreage reduction programs--ARPs) became, for the most part, no longer relevant to making decisions about what crops to grow.

Nonetheless, other government program terms and concepts like price support loan rates, loan deficiency payments, Conservation Reserve Program acreage and payments, and limitations (somewhat reduced) on the amount of payments that "one person" could receive continue to be relevant to the decisions about how to manage farm resources.

One of the most significant changes in policy included in the Act was the initiation of direct payments that do not vary with market conditions. Two new terms, production flexibility contracts (PFC) and production flexibility contract payments (PFCPs), became important to farmland owners and operators. A key question was, "Will these contracts and their related payments affect the management of farm resources?"

There are always substantial uncertainties about the eventual effects associated with the implementation of major changes in policy, like the 1996 Farm Act. Prior to previous major changes in farm legislation a substantial number of university and USDA studies examined the possible effects that would be associated with the principal provisions that were being considered for inclusion in the new legislation. These studies informed the debate. The situation was somewhat different for the

1996 Farm Act. Although there were undoubtedly several efforts to quickly gauge the potential effect of the proposed approach, the number of broadly focused studies was very limited. Thus, uncertainties about the eventual effects of the 1996 Farm Act commodity program changes were greater than has been typical when new farm acts have been implemented in the past.

The recognition of these uncertainties fostered interest in obtaining early indications of how the new combination of policies (some old and some new) would affect farm resources management decisions. One option would have been to conduct an extensive survey, a relatively high-cost and time-consuming approach. Instead, a more indirect way was chosen to explore changes in the management of the Nation's farm resources: to conduct a series of panel meetings of professional farm manager members of the American Society of Farm Managers and Rural Appraisers during State chapter meetings in early 1997. Although this approach does not yield statistically based estimates, the findings reveal attitudes and judgments of broad groups of farmland owners and operators and provide early indicators of developments which merit close attention in more formal surveys.

Professional farm managers were recognized to be in a unique position to observe decisions about how farm resources are managed and to consider the forces that drive those decisions. They are trained to search out ways to increase returns from farm resources, they are challenged by their clients to seek out these opportunities, and their professional work generates awareness of a substantial number of farm management decisions in differing situations. Furthermore, they are keen observers of the behavior of both farm operators and owners of farmland.

The planned focus of the panel discussions was primarily on changes in:

- The farm management decision environment,
- The mix of crops produced,
- Responses to risks,
- Landowner and operator lease arrangements,
- Use of marketing information, and
- Employment and economic activities in rural communities.

Priority was given to regions of the country with historical importance of past farm programs to local and regional economies. Members of the panels were identified through interactions with leaders of ASFMRA State chapters and university and cooperative extension staff with interests in farm management decisions. Six of the eight panels (ND, KS, IL, OH, GA, and the Delta Region) were comprised of professional farm managers. The remaining two were comprised of farm operators because there are few ASFMRA farm managers in the Texas High Plains and in California.

The following seven panel meetings were convened in January and February 1997:

Great Plains

North Dakota-Fargo	January 13
Kansas-Manhattan	February 25
Texas High Plains-Amarillo	February 24

Corn Belt

Illinois-Bloomington	February 7
Ohio-Columbus	January 29

South

Georgia-Albany  
Delta Region-Vicksburg

January 27  
February 21

An additional panel meeting, focused on the Western Sacramento Valley, was later supported by the University of California Agricultural Issues Center:

California-Colusa

May 24

Prior to each panel meeting, information was solicited from the eight or so farm managers or operators planning to participate in the meeting. The participants' responses focused on their 1996 management decisions including selection of crop mixes, use of risk strategies, and adjustment of lease provisions, as well as changes in land values. These responses provided "base" information which was used to prepare notebooks for use during the panel meetings. The notebooks summarized the information received earlier and provided a framework for the panel discussions among panel members. Each panelist completed additional notebook tables and responded to specific questions included in the notebooks.

The discussions, and, in turn, this report, focus on major agricultural developments, changes in lease arrangements, price expectations, and risk strategies, and changes in crop mixes.

This report is based on the combination of the base information provided by panelists before to the panel meetings, the notebooks completed by the panelists at the panel meetings, and the discussion among the panelists at the panel meetings.

## II. RESPONDING TO THE 1996 FARM ACT IN 1996 AND 1997

The eight panel sessions conducted as part of this project demonstrated that the 1996 Farm Act quickly and dramatically changed the decisionmaking environment for farm managers and their clients. The new farm commodity program ushered in a new era for farm managers and farm operators.

The quickness with which the programs were changed is of great significance, for owner-operators, tenants, and landlords make a variety of current crop year and longer term decisions about the use of farm resources in a continuous, ongoing manner. The decision framework often precedes the crop year and, in the case of marketing decisions, may extend months beyond the time the crop is actually harvested. Consequently, the emergence of the Farm Act with its production flexibility contract payments (PFCPs) and its almost complete elimination of planting restrictions was in a sense a jolt to many engaged in agriculture for it differed greatly from previous legislation. It compelled them to rethink the way they manage their resources and the related contractual arrangements (leases, for example).

The new farm program permits farm decisionmakers to base their decisions more fully on economic evaluations of comparative advantage, commodity prices, and costs of production rather than on conditions of previous, less flexible programs with historical base acreages and acreage set-aside restraints. Farm operators acknowledge that the new framework for decisions is preferable for both agronomic and economic reasons. Production flexibility contract payments are paid to farmers of land with acreage bases, generally without regard to the crops actually planted.

Panelists indicated that while the new farm act emerged in early 1996, the impact of the more flexible arrangements provided under the new legislation was not fully incorporated into 1996 farming decisions because of the late development of the legislation. In many regions of the country, preliminary cropping plans and production financing based on those cropping plans, and even some plantings for the 1996 crop year, were necessarily made before the law was signed by the President on April 4, 1996. The sign-up period for production flexibility contracts extended from May 20 to August 1, 1996.

### The Setting

The farm sector was generally in good financial health going into the 1996 crop year. It is important to note, as panelists did, that in early 1996 the farm sector was more than a decade removed from the agricultural crisis of the early- and mid-1980s. Debt-equity levels had subsided from critical levels observed in the period of financial crisis. The sector had just experienced several recent favorable crop years in major production areas (with a few exceptions, of course) and was additionally conditioned by decade-high commodity price expectations. These contributed to a very positive outlook for agriculture during the period in which the farm bill was drafted and approved.

Both legislators and farm decisionmakers were influenced by buoyant price expectations in early 1996. World farm commodity inventories were low, demand was strong, and prices were at decade high levels for wheat, corn and other feed grains, and soybeans. The removal of acreage limitations permitted additional acreages to be planted to those crops in the 1996 crop year. Producers did, in fact,

respond to the new flexibility provisions in the limited decisions that they were called on to make subsequent to the announcement of the legislation's provisions.

Production flexibility facilitated crop shifts in several production areas where adverse weather affected planting opportunities and crop outcomes. For example, corn plantings were affected by wet conditions in the eastern Corn Belt, and some land was ultimately planted to additional soybeans. Prolonged drought in the Southern Great Plains led to failed acreage of wheat and abandonment of some cotton acres, portions of which were then seeded to grain sorghum later in the season.

The 1997 crop year is the first production year in which farm decisions will be made in an environment that includes full consideration of the provisions of the new farm act, including production flexibility. The bullish crop price expectations of early 1996 for cereals collapsed after harvest and have given way to lower prices in early 1997. Increased global supplies of wheat and feed grains are in stark contrast to the inventory situation and outlook of the previous year. Prices received by farmers for wheat and corn have fallen to levels that are closer to the slightly upward trend observed for the 1990s. Cotton prices continue to decline from their high in early 1995.

The exception to generally lower commodity prices is the price outlook for soybeans. Soybean prices rebounded from a late-1996 post-harvest decline like that experienced by cereals to early-1997 levels higher even than those experienced during the 1996 crop year. The strength of soybean prices relative to low cereal prices likely shifted crop mixes more heavily toward soybeans in areas where soybeans can be cultivated than was elicited from discussions and responses that occurred at the early 1997 panel sessions.

The structural change in provisions of the farm act have yet to be fully assimilated and the rate of assimilation may vary among the classes of decisionmakers. The initial consequence to farm owner-operators, tenants, and landlords was the availability of PFCs and, for rented lands, the allocation of PFCs between landlords and tenants. Most production decisions had been made by the time the farm act was enacted and producers faced very optimistic price forecasts for their 1996 production. These upbeat conditions persisted through the late summer of 1996 and contributed to bullish expectations that were incorporated into lease negotiations and land transfers, generally characterized by increased competition for land and higher returns to landowners.

However, as 1996 progressed, sharp price declines revised decisionmakers' expectations and more near-term bearishness emerged to particularly influence lease negotiations with heightened attention to risk sharing between owners and tenants. With generally less optimistic outlooks for 1997, decisionmakers also increased their concern about commodity price volatility, the lack of the safety net, and the need for appropriate marketing and risk management strategies.

Farm managers very much recognized that the decisionmaking setting for landowners and farm operators was changed significantly by the new farm act. Change will continue as farm decisionmakers are confronted with weather events, resource availabilities, and marketplace realities. However, the speed at which individuals respond depends on many factors including types of farming, whole farm and enterprise alternatives, financial resources, and risk-aversion -- risk-sharing considerations. The 1997 crop year will see the first revelation of the types of changes that may persist with the new legislation, again with differences among the decisions made by individuals.

Two major changes observed in 1996 and in plans affecting the 1997 crop year discussed extensively by panelists involve changes in land rents (and tenant-owner arrangements) and land values. Professional farm managers were keenly aware of the key features of the new legislation as it emerged in spring of 1996. Operators, whether they were owner-operators or tenants, were also keenly aware of the importance of new farm legislation as it might affect their decisionmaking environment, giving them perhaps earlier recognition of major opportunities for economic gain than that of many nonfarm and absentee owners of farmland (retired farmers, heirs, investors, etc.).

### **Farmland Leases and Rents**

Panelists on seven of the eight panels reported specific information about the nature of farm leases that were in place for the 1996 crop year. All panels discussed changes in types of leases and rental arrangements that had been incorporated in leases as they moved from the 1996 to the 1997 crop year.

Panelists recognized that changes occur in leasing arrangements because of competitive forces and that the farm act provisions do influence economic outcomes for owners and for tenants in ways that are sharply different from those of previous, often longstanding, rental arrangements. The "jolt" of significant adjustment of managing farm resources under a new farm act structure includes responses that challenge traditional lease structures.

An overall impression is that there are tensions being played out between landlords and tenants that are leading to serious reviews of traditional leasing arrangements in most production regions. In some cases, landowners seem to benefit almost entirely from the new rental conditions, which include higher cash rents and less landlord sharing of production expenses, while in others, farm operators seek some protection from commodity price volatility with higher levels of landlord risk-sharing arrangements. In some areas, longer-term leases seem more in vogue; in others, lease terms are being shortened. Additionally, panelists acknowledged that the conditions of leases negotiated for the 1997 crop year were influenced by when they were drawn up in 1996 (early- and mid-year leases were higher or more generous to landlords than end-of-year leases because of the decline over the year in the expectations for cereal prices in 1997).

Farm manager and farm operator panelists identified the type of leases in place on lands that they managed for the 1996 crop year. The typical lease for the 1996 crop year, based on responses from seven panels, was a single-year, share-rent crop lease. All panels, with the exception of the North Dakota panel, reported that the share-rent lease was the dominant type of lease (table II-1). The proportion of share-rent leases ranged from 68 to 89 percent of all leases managed by panelists on six of the seven panels, but only 25 percent of North Dakota leases were share-rent leases. The remaining leases were cash-rent leases, except for the explicit identification by Illinois panelists of the exclusive use of custom operations by some landowners. Most panels acknowledged the growing importance of custom operations over all types of farming operations. Most leases were, and are, single year rather than multiple-year leases, but both the North Dakota and Texas panels reported higher than average use of multiple-year crop leases.

Crop leases reported for the 1996 crop year were, in the main, negotiated before the enactment of the farm act, although panelists did report that some leases were written (and perhaps renegotiated) afterwards to meet formal reporting requirements for payment of PFCs. Panelists identified the



number of leases that were renegotiated in 1996 with substantial change in lease terms; the percentage involving substantial change are reported in the last line of table II-1. However, it is unclear to us whether the numbers reported relate to leases for the 1996 crop year or to all leases renegotiated during the 1996 calendar year, in which case, the number would reflect changes made in leasing arrangements for the 1997 crop. We suspect that there is a bit of both in individual panelist responses to the question.

Changes in lease types and provisions for the 1997 crop year were discussed extensively in each of the eight panel sessions. Clearly, the bullish commodity conditions, in addition to the new farm legislation, were affecting lease negotiations. Generally, competitive conditions underlying the demand for leased land are such that much, if not all, of the PFCPs are ultimately transferred to owners of land, essentially capitalized into higher rents. Admittedly, the benefits of previous farm legislation were also capitalized. However, the immediate availability of PFCPs, given aggressive responses to near-term price expectations, gave an additional bump to land prices beyond levels that would have occurred without the PFCP provisions.

For share rents, owners reduced shared expenses, effectively increasing their (landlord) returns, while for cash rents, rents were increased by amounts upwards to the equivalent of the PFCPs received by operating tenants. Thus, intense competition for land appeared to have dissipated increases that tenants might have gained under the new farm act. Where competition for additional land by operators was not as vigorous, tenants retained or captured larger proportions of the income derived from PFCPs.

There are significant variations in lease types and lease provisions for the 1997 crop year among the regions, as indicated by the following regional summaries.

**North Dakota.** Three-quarters of the leases managed by panelists were cash-rent leases and only 19 percent were 1-year leases. Both owners and operators shortened the length of cash leases, believing shorter term leases to be more prudent, given market uncertainties. Intense competition for farmland has led both to higher cash rents and to earlier payments of cash rents. Production uncertainty (risk) has changed cash rents from a gross to a tillable or planted acreage basis in areas that have recently experienced unplanted acreage due to wet conditions. Several panelists identified the increased use of crop share rents to more equitably share expenses and risks, particularly when new activities, CRP, and marginal lands are involved. In general, owners appear to have considerable strength in lease negotiations, but some changes have appeared that recognize increased risks for operators.

**Kansas.** The typical lease is a share-rent, single-year lease and is traditionally renewed annually by landlords. There were few or no changes in crop share leases for 1997. Cash rents were raised by only the estimated amount received under a typical 1/3 crop share lease, rather than by a larger proportion of PFCPs. These observations reflect a farmland rental market that appears to be more nearly in equilibrium between lessors and lessees.

**Texas High Plains.** Texas farm operator panelists reported very intense competition for the limited number of properties available at any given time in some areas, but this appeared to result largely from a tradition of landlords annually renewing leases rather than exposing their land to price competition among bidding tenants. Panelists opined that cash rents may have fallen for the 1997 crop year without the availability of PFCPs. Landlord shares were reduced in some cases and/or landlords were

required to share expenses to offset rising input costs experienced by growers, particularly on cotton and new, specialty crops. Operators appeared to dominate the rental market following the mixed crop outcomes (failed wheat, abandoned cotton, profitable corn and milo) experienced in the 1996 crop year.

**Illinois.** Rents have increased for the current crop year and landowners appear to hold considerable strength in lease negotiations. Share-rent leases have been adjusted to shift more income to landowners by one or more means, such as increased shares, separate rents for improvements, a reduction of landlord sharing of expenses, and a "privilege" bonus or cash payment component even for share-rent leases. Part of the pressure for the changing basis of traditional share rents is the increase in landlord incomes otherwise achievable by increases in cash rent leases or by custom operations based on contract operations, both of which transfer all or substantial portions of PFCPs to landowners. For example, panelists indicated that custom operations had increased and that the PFCP provisions were a factor contributing to the increase.

**Ohio.** Two-thirds of farm leases managed by panelists were share-rent leases, but cash-rent leases increased in number because of aggressive operator responses to intense competitive pressures for available farmland. Cash leases were higher and often advanced a portion of the rent early in the period of the lease. Operators favor longer term leases to control land, while landowners were content with short duration leases under current competitive conditions for farmland. Owners adjusted crop and expense shares in ways similar to those in Illinois to increase rental incomes in their favor, while operator margins are generally narrowing. Here, as in Illinois, owners appear to be able to control terms for leasing available farmlands.

**Georgia.** Cash rents dominate the rental of farmland in southwestern Georgia, and rents were higher for the 1997 crop year due to PFCPs and the competition from cotton gins which rent and then sublease land, thereby reducing the availability of land directly leasable from owners. Demand is very strong for irrigated cropland. Dry land is in less in favor due to production risks. Operators seek longer term leases extending as long as the duration of the farm act in cases where owners are perceived not to be fully aware of the capitalized value of PFCPs. In general, owners are not responding to attempts to negotiate longer term leases. Share-rent leases are typically in place for out-of-state owners who must share production risk in order to maintain peanut quota on their land.

**Delta Region.** Renegotiated leases increased payments to owners and were more precise in stipulations about crop mix and development projects. Rents were increased even on marginal lands that have government payments. While several cases of long-term cash leases were reported where owners were not fully informed about the capitalized value of PFCPs, short-term leases were more prevalent, and farm managers have been successful in protecting the economic interests of owners. The consensus of panelists was that owners are gaining more control of renegotiated leases, that more marketing risks were transferred to operators, and, as a result, owners are receiving more of PFCPs for the 1997 crop year.

**California: Sacramento Valley.** Lease conditions for 1997 appeared mixed in the opinion of panelists. Cash rents were increased for some land with contracted, specialized crop production, but rents were reduced on single-purpose rice lands. Price uncertainty was manifested for rice by lower cash rents and conversion of some cash-rent leases to share leases. Returns to owners of rice land are

expected to decrease while returns are expected to be higher on more adaptable land with contracted production of oilseed and specialty cereal and vegetable seed crops.

### **Changes in Land Values**

Panelists reported that land values increased, often significantly, for agricultural lands in several regions. Contributing factors underlying the increases in land values included favorable equity and financial conditions following generally favorable income years, bright prospects for 1996 commodity prices, ample financing, and, not the least, PFCPs transfers to owners of farmland, which appear to have been quickly capitalized into higher land values. A very important factor is that the PFCPs appear to have been quickly capitalized into higher land values, but in addition, producers and landowners evidently anticipated that they would be much higher throughout the life span of the 1996 Farm Act than deficiency payments would have been. It is the increase in expected program payments along with other factors, that have contributed to the increase in farmland values. Owners of land and investors, including pension funds, insurance companies, and foreign investors, thus are beneficiaries of the announced schedule of PFCPs through year 2002 whether or not they are the operators of the land.

Although deficiency payments under the previous legislation could be counted on to provide relatively stable minimums of the combined market prices plus deficiency payments, the specific amount of the deficiency payments were dependent on market developments. In sharp contrast, PFCPs are known through 2002 and thus have a capitalized value for land in addition to unknown crop receipts. In the heady atmosphere of early- to mid-1996 when commodity prices were strong, the capitalized value of PFCPs may have appeared as a bonus for land holders.

Land values were reported as having increased by panelists in the last year. All panels reported modest to strong increases in market values of land. A quarter of the panelists (13 of the 51 who expressed an opinion about relative land values) estimated that values increased by 11 to 20 percent (table II-2). Members of Corn Belt panels (Illinois and Ohio) were among those reporting the largest increases. Another 25 panelists (about 50%) said that land values had increased from 1 to 10 percent. These more modest increases occurred primarily in North Dakota, Kansas, and the Delta Region. Opinions of "no change" were mostly contained in Texas and California panel responses. Only 1 panelist (North Dakota) reported a drop in land values. While members of the Georgia panel did not offer numerical estimates of relative land values, the discussion indicated that irrigated cropland had increased in value, whereas dry land probably had not.

Discussants did express some concern about what in some regions appeared to be intense competition among financial institutions. Land values in several regions have approached values of the early 1980s and some panelists were concerned that errors of judgment of the same sort that preceded the "farm crisis" were being made by lenders and by some borrowers. Bank consolidation, supplier financing, and other new sources of credit were among factors affecting the increased supply of credit. Several farm managers reported being offered bonus payments for referring potential borrowers to lenders. Others were critical of FMHA loans to marginal producers competing with commercial producers who are dependent on other higher-cost credit sources.

**Table II-1--Characteristics of managed leases, 1996 crop year**

Number or percent of leases	Total	ND	KS	TX	IL	OH	GA*	DLT	CA
	Number								
Number of leases managed in 1996	3,264	584	530	27	1540	156	n/a	426	77
Percent of leases -	Percent								
Share-rent leases	72	25	89	78	80	68	n/a	74	82
Cash-rent leases	24	75	11	22	12	32	n/a	26	18
Direct/custom operations	4				8				
1-year leases	81	19	95	56	97	93	n/a	87	82
Multiple-year leases	19	81	5	44	3	7	n/a	13	18
Substantial 1996 change in lease terms	11	24	4	0	6	18	n/a	22	3

Source: Table IV - 5

\* Specific estimates were not collected from Georgia panelists.

**Table II-2--Percentage change in land values, last year to current year**

Percent change	Total	ND	KS	TX	IL	OH	GA*	DLT	CA
Increases									
16 to 20%	3					2		1	
11 to 15%	10	1		1	3	4		1	
6 to 10 %	16	2	3	1	5	2		3	2
0 to 5%	9	3	3	1				2	1
No change									
0 %	6			5				1	3
Decreases									
0 to -5%	0								
-6 to -10%	1	1							
<b>Totals</b>	<b>51</b>	<b>7</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>n/a</b>	<b>8</b>	<b>6</b>

Source: Table IV - 6

\* Specific estimates were not collected from Georgia panelists.

### **III. PERSPECTIVES ON MANAGEMENT DECISIONS INTO THE 21ST CENTURY**

Four topics highlighted by the panel discussions have special relevance to prospective management decisions in the U.S. farming sector into the 21st century. Consequently, they have major implications for sector monitoring and analytical activities.

The four topics include:

- The Production Flexibility Contract Payments (PFCPs) and the associated elimination of most planting restrictions are liked,
- PFCPs are being capitalized into land values and reflected in land rental rates,
- Direct effects of PFCPs on farm management decisions are limited, but there may be indirect effects on decisions, and
- Interest in marketing and managing price risk is very high.

#### **PFCPs and Planting Flexibility--They Are Liked**

As expected, discussions with the farm management panelists confirmed that their clients--owners of farmland--like three particular features of the 1996 Farm Act. These are the Production Flexibility Contract Payments (PFCPs), the reality that the qualifications for the PFCPs were essentially unambiguous, and especially that planting restrictions were nearly all eliminated.

**PFCPs.** The discussions among panelists affirmed the attachment of landowners and many farming and ranching operators to the continuation of financial support from the Federal government and their strong preference for it to be provided with minimal regulation of farmed acreages or farming activities. The strong preference for minimal regulation together with the general expectation of the receipt of production flexibility contract payments through 2002 account in large measure for the general positive attitude among the panelists toward the 1996 Farm Act. However, the panelists' preference for the PFCPs instead of deficiency payments under previous programs is not independent from the strong commodity markets for wheat, corn, and soybeans in 1996. It is clear that producers are better off because of not only higher commodity prices, but also because of the higher program payments under the PFCPs relative to the deficiency payments that would have been paid at these prices under previous programs. These two points go a long way to explain why producers prefer the PFCPs to deficiency payments. The preference could be reversed under weak market conditions.

We interpret the positive attitude of the panelists to be consistent with the viewpoints of their clients who include retired farm operators, urban residents who inherited farmland, individual investors in farmland, and institutions, for example, insurance companies and pension funds.

However, the positive attitudes noted above are probably somewhat representative of tenant operators as well, since the 1996 Farm Act emphasizes full utilization of productive resources without the interference of Federal planting restrictions. The scope of the project limited the opportunities to gather information about tenant attitudes toward the 1996 Farm Act. Tenants in many cases, are sharing somewhat in the PFCPs. Approaches to leases by some landowners, the existence of community attitudes which resist change, as well as USDA procedures are resulting in a distribution of a portion of the PFCPs to some tenants. In other cases landowners are capturing most of the PFCPs.

Also, in a limited number of instances, the panels included farm operators who owned and rented land. Their attitudes toward the 1996 Farm Act as a whole were interpreted as being positive. It is important to remember that many people who rent land from others for farming also own land that they operate. Consequently, they have landowner motivations, as well as interests as tenants.

In terms of longrun perspectives, it is also conceivable that the 1996 Farm Act will lead to an era of complete planting flexibility and no transfers that are attached to farmland. For example, while the 1996 Farm Act was being debated in the Congress, it was promoted by some as a phase-out of government farm commodity programs. But the law does not call for this to happen. Even so, the farm and popular press continues to use the term "transition payments" rather than PFCs. A movement to this kind of policy environment could, of course, shift landowner-tenant relations markedly. Rents for farmland would no longer be affected directly or indirectly by government transfers. And neither would farmland prices or rental rates.

**Crop mix.** Approving attitudes toward nearly eliminating planting restrictions were expressed in each of the eight panels. Here are some of the things said that illustrate the pervasive attitude on this topic:

- "Freedom to farm puts management to work."
- "We can grow the most profitable crop mix."
- "Freedom to plant crops best suited for one's farming operation and strong commodity prices in 1996 allowed many operators to pay debt, expand their operations, upgrade equipment, and perform improvement work on their farms."
- "Crop mix is now determined by resources, not USDA."
- "Flexibility in cropping plans are directly or indirectly market related."

Panelists' anticipation of the extent to which they would adjust crop mixes varied (table III-1). However, the central point is that the law now permits farm operators and farm managers to respond to opportunities without jeopardizing their PFCs.

Panelists differ as to how to partition the effects of "changes in commodity programs," "market price expectations," and "other" on the changes that were planned in the crop mix from 1996 to 1997. For example, the Illinois panel (on average) attributed only 3 percent to changes in commodity programs (table III-2). The Texas High Plains panel attributed 54 percent to commodity program provisions which included cropping flexibility, and is the only panel that thought "changes in commodity programs" more important than the "market price expectation." Prices clearly are the dominant force driving changes in crop mixes.

The average of the panelists' responses about expected crop mixes into the future provide another perspective on possible adjustments in crop mixes. For example, 39 percent of the land managed by the North Dakota panelists was devoted to wheat in 1996 (table III-3). The panelists, on average, anticipated in January 1997 that the wheat percent of the land managed would be 40 percent in 1997 and 45 percent in 2000-2002. However there is more change occurring at the farm level than may be revealed in larger sets of aggregate statistics.

The Illinois data in table III-3 combined with the data included in table III-1 illustrate that average panelist data, although perhaps indicative of supply response on an aggregate basis such as a State or perhaps for the Nation, does not reflect the full potential benefits to individual farming operations associated with planting flexibility. For example, the mean of the Illinois panelists' percent expectations of the land that they manage that will be devoted to corn is 45 and to soybeans 43 for both 1997 and 2000-2002, the same

as the 1996 percentages (table III-3). But the data in table III-1 show that 7 of the 8 Illinois panelists expected that the 1997 percent of land they manage that was devoted to corn would be different than in 1996. Three anticipated decreases and four increases, despite the fact that the average for all Illinois panelists was unchanged. The point is even more evident when it is recognized that each panelist was reflecting an average over the many individual farms associated with their clients.

Comments by panelists also indicated that they are alert to potential opportunities to grow crops that have not in the past been grown on large acreages. Whether the profitability of such crops will attract acreages away from the major crops like corn, wheat, soybeans, cotton, and rice remains an open question. However, the discussions among panelists indicate that with the removal of restrictions on plantings, they will shift land quickly to optimize their cropping mixes, previously restricted by historical acreage bases. Further, there is a willingness to consider niche or quality-identified crops of wheat, corn, and soybeans, like waxy and high-protein corn and tofu soybeans. But the profitability of such crops will be watched closely. Certainly, the demand for these products for the foreseeable future can be satisfied without large effects on the total acreages of the major crops. However, for individual operations they can be very important. They are recognized as being higher value and have less risk because they are likely to be grown under contractual arrangements, which provide a premium over going market prices and sometimes some price protection.

**Information Analytical Needs.** The importance of PFCs to the distribution of incomes and wealth in the farm sector and the potential economic efficiency gains associated with changes in crop mixes suggest that there may be significant payoffs from activities that:

- (1) Monitor attitudes of significant groups of people involved in farming and ranching toward the major provisions of the 1996 Farm Act including tenant operators, nonfarming landowners, and individuals who operate land that they own.
- (2) Ascertain the extent to which landowners and tenants:
  - Are aware of the direct and indirect effects of the PFCs on them,
  - Recognize the scheduled adjustments in PFCs--an increase from 1997FY (\$5.6 billion) to 1998FY (\$5.8 billion) with subsequent annual declines to a level in 2002FY (\$4.0) that is about one third less than the peak year, 1998FY,
  - Are aware that the PFCs are not now scheduled to adjust upward if commodity prices drop to low levels, and
  - Are aware that the 1996 Farm Act does not provide for supply-constraining programs in response to declines in commodity prices toward the maximum loan rates (support price levels) of \$2.58 per bushel for wheat, \$1.89 per bushel for corn, \$5.26 per bushel for soybeans, \$6.50 per cwt. for rice, and 79.65 cents per pound for upland cotton.
- (3) Examine the distribution of the PFCs between landowners and tenants over the term of the 1996 Farm Act and compare it to the distribution of the deficiency payments under the 1990 Farm Act.
- (4) Closely observe changes in crop mixes and measure the effects these changes are having on farm returns and the economic efficiency of the sector.

### **PFCs Affect Value of Farmland**

Two considerations about the capitalization of the value of PFCs into land prices and their reflection in rental rates are particularly important:

- The value of the payments are being reflected in rental rates and farmland prices.

- Potential uncertainties about what may happen with respect to the PFCPs after 2002 will, as 2002 becomes nearer, affect land rental rates and land prices.

**PFCPs and Land Prices.** The farmland market is not nearly as transparent as, say, the U.S. corn market. There are several reasons. Only a small percentage of cropland is sold and purchased in any one year and markets are more local. Although cash rent is increasingly the basis for the renting of land by an owner to an operator, still in the United States less land is cash-rented than is crop share-rented. And, crop-share rental arrangements reflect strong institutional and cultural conditions, as well as economic and financial considerations. The latter are of increased importance in lease negotiations in contrast to the more traditional leasing arrangements that are now challenged more frequently.

As pointed out in other chapters of this report, the demand to purchase and to rent farmland has expanded in several areas of the country. Increases in land prices and cash rents were particularly evident in the panel discussions in North Dakota, Illinois, Ohio, Georgia, and the Delta. It was noted, however, that increases in farmland prices and rents vary among States and among regions within States. For example, in some States irrigated land is experiencing significantly greater increases in demand and therefore larger price increases, than is the case for land that depends on rainfall.

PFCPs quickly affected the price of land and land rental rates. The land market in many areas was already adjusting to higher commodity prices and the optimism over commodity exports in the future when the 1996 Farm Act became law. Many factors, including the discontinuation of target prices and the associated system of deficiency payments, discontinuation of Acreage Reduction Program requirements, caps on price support loan rates, changes in commodity price expectations, perceived export prospects, and current and prospective technologies have contributed (some with positive and some with negative effects) to these changes in land rents and land prices. At the same time, PFCPs became an important component of demand for land. Further, in areas where demands for land have evidently not increased substantially, like Texas High Plains dry lands, and Sacramento Valley of California rice land, the PFCPs are being reflected in land prices that are holding their value even in the face of lower crop returns.

**Valuation of PFCPs.** In other words, with one caveat, if the 1996 Farm Act had not included provisions for PFCPs or some similar payment, or if the PFCPs had been set at significantly lower levels, say one-half, land prices and farmland rents today would be lower than they are today in all areas of the country. The caveat is that if the rights to the PFCPs had been granted outright to people, including legal entities such as corporations (regardless of the criteria used to make the grants) and not attached to the land, there would be no link between the PFCPs and farmland values and farmland rental rates. Therefore, the PFCPs would not then be having an effect on land prices or rental rates.

Such an insulation between PFCPs and land prices and rents would be the case even if the individuals holding the rights to the PFCPs were allowed to transfer these rights to others. Then, the value of the stream of the PFCPs income would be reflected in transfer prices of the "right to the PFCPs" much like the case with government bonds and notes. The reason the stream of income associated with the PFCPs (which range from \$5.6 billion for 1996FY to \$4.0 billion for 2002 FY) directly affects the value of farmland is because the PFCPs are attached to the land.

Further, the high degree of certainty attached to PFCPs makes their valuation fundamentally different from the valuation of price deficiency payments, which were a prominent feature of the 1990 Farm Act. The anticipated value of deficiency payments was conditioned by commodity price expectations and the



realization that the deficiency payments were to vary inversely with commodity prices--higher prices would lead to lower (or no) deficiency payments and vice versa.

In summary, we conclude that the value landowners and cash renters of land generally attached in 1996 and into 1997 to the "benefits" of the 1996 Farm Act was greater than the value they had attached to the "benefits" of the 1990 Farm Act. Since the benefits are attached to land and the entitlements to the benefits are sold if the land is sold, the perceived higher value of the benefits was reflected in the land prices and cash rents.

### **PFCs and Crop Share Leases**

The capitalization of the PFCs into farmland rents is much more problematical when crop-share leases are involved. There are at least two reasons for this to be the case. First, USDA has opportunities to influence some of the terms of crop-share leases since the leases are reviewed under USDA guidelines when considering the production flexibility contracts. Panelists indicated that they perceive that the USDA general policy is that the PFCs are to be divided between landowner and tenant in proportions related to the sharing of the crop. Thus, for landowners to extract the full economic rent from the PFCs attached to the land rented, they need to negotiate adjustments in other clauses of the lease in an equivalent amount. There are opportunities, of course, to do just that. The simplest is to change the share. Another is to change the sharing of input costs such as the cost of fertilizer. But these kinds of changes take time and can raise questions in the review of leases at the county level. Thus, there would seem to be a natural tendency by landowners using crop-share leases to avoid "full scale changes" and to "wait and see" what happens around the "county." Note how much more complicated such an approach is than a cash rent situation where the land rental may be to the highest bidder with an explicit expectation as to not only the size of the PFCs, but also that the operator will receive the USDA check for the period of the lease, even though at the same time the PFCs are attached to the land and are transferable with the land if sold.

Second, there are cultural factors and imperfect information situations that give rise to situations whereby the value of the PFCs is probably not yet being fully reflected in the rental rates, particularly with crop-share arrangements. These conditions include unawareness by landowners of the conditions associated with the PFCs, landowner affinity for particular tenants for various reasons, and lack of competition for land in local rental markets.

Information about rental market transactions is more scarce than information on land transfers. In addition, changes in underlying economic conditions do not normally warrant dramatic year-to-year changes in the lease terms. However, it is likely that the jolt of the 1996 Farm Act on land markets may be affecting how landowners and renters deal with each other and the extent of the adjustments in leases they are prepared to consider. For example, comments by different panelists suggest that there is an incentive for farmland owners to negotiate changes in the terms of their crop-share leases to take into account the value of the PFCs and that they are doing so. In some cases, they are even changing from crop-share leases to cash leases.

In still other cases, panelists indicated that some landowners are discontinuing the renting of their farmland in order to "capture" the PFCs. Then, rather than directly operate the land, the landowner hires operators (sometimes the person who had been the tenant) to do custom field work and pays input suppliers to make the appropriate applications of inputs. USDA rules evidently permit this type of change, and questions as to who receives the PFCs are avoided completely. Although custom farming is not a new farming concept, it appears that its usage is being increased by landowners. This custom-operation approach to

farming seems to be most likely in areas of intensive crop production with a high proportion of land being cropped with standard cultivating and harvesting practices. While the Illinois panel explicitly identified a portion of their negotiated leases as "custom" farming arrangements, members of several panels recognized the growing attraction to landowners of custom arrangements.

These observations suggest there may be a basic incompatibility between the Farm Act's implicit attachment of the PFCPs to the land and the Act's Subtitle B, Sec 111 ( c ) which states, "In carrying out this subtitle, {Subtitle B--Production Flexibility Contracts} the Secretary shall provide adequate safeguards to protect the interests of tenants and sharecroppers." One's appraisal of this incompatibility depends on the definitions attached to several words including the words adequate, safeguards, protect, and interests.

**Information and Analytical Needs.** These circumstances suggest that a full understanding of the effects of the 1996 Farm Act will require careful collection and analysis of lease information, particularly for crop-share leases. Crop-share percentages will be useful in such an effort. However, information about several other lease provisions will be essential if the objective is to understand the economic value of the PFCPs and the distribution of the income flows associated with them. The panel discussions indicated substantial differences among the States in which panel sessions were held with respect to the proportion of rental arrangements that are for cash. Thus, any collection of lease information will need to give careful attention to this diversity in lease arrangements across the country.

### **Effect of PFCPs Farm Management Decisions Limited**

From the mid-1960s, changes in U.S. commodity policy have intermittently adjusted farm programs so that the transfers to the sector did not provide a direct incentive to produce more. For example, with the 1990 Farm Act, the acreage base was tied to the moving 5-year average of planted acreage. Similarly, the Secretary had the discretion to fix the program yields used in calculating deficiency payments at 1990 levels or to base them on moving averages.

**Separation of Benefits From Production Incentives.** The initiation of PFCPs continued the separation of direct benefits from incentives to produce more. Land eligible for contract acreage is fixed and equals an acreage calculated pursuant to the provisions of the 1990 Farm Act. PFCPs, in turned, are calculated by multiplying 85 percent of the contract acreage times a "farm program yield," which is fixed. This logic suggests that the PFCPs are not directly affecting farm management decisions.

Further, the panel discussions did not reveal any ways that actions by landowners or operators subsequent to the enactment of the 1996 Farm Act could enlarge their rights to PFCPs or increase the amount of the PFCPs associated with any one parcel of farmland. In addition, discussions among panelists did not suggest that the PFCPs were affecting directly the mix of crops grown or the use of inputs to increase crop yields, although it was quite clear that landowners and tenants vied vigorously with each other for the PFCPs.

At the same time, the planting flexibility included in the 1996 Farm Act has increased the opportunity to base farm management decisions, including which crops to grow, on profitability without regard for PFCPs. In a few cases, flexibility is constrained by limitations related to the growing of fruits and vegetables. A small number of panelists indicated that they would include more fruits and vegetables on the farms that they managed if the 1996 Farm Act did not include limitations related to the growing of vegetables as a condition for receiving PFCPs. In those cases the promised flexibility was constrained by

the limitation. There was no indication however, that the potential payoff from the precluded fruit and vegetable production was sufficient to forgo the PFCPs associated with the land.

**Possible Indirect Effects.** Even though the PFCPs may not be directly affecting crop mixes (with the fruit and vegetable exception) and input applications, they may nonetheless be having an indirect effect. Two considerations are important.

First, as reasoned above, the substitution of PFCPs for deficiency payments appears to be contributing to the bullishness of land prices, and their expected economic value is being capitalized into land transfer prices and affecting rent rates. Owner operators may regard these as paper gains or costs not affecting their management decisions, but for tenants who own no land, factor price ratios have been altered. Ratios of land costs to management, labor, and capital inputs have increased. Economic reasoning suggests that these increases in price ratios will foster increased intensity of land use with increased employment of greater amounts of non-land factors, including technology, than would be the case without the PFCPs attached to land. However, some panelists indicated that other input prices are increasing as well. Thus, input price ratios may not be greatly different than they were previous to the 1996 Farm Act, although different from what they would be if the PFCPs were not attached to the land.

Second, the creation of the PFCPs has had a positive effect on the wealth position of those who owned the land to which they are attached. The panel discussions did not reveal any substantial insights as to the effect of this wealth increase. Queries to panelists about how the PFCPs proceeds are being used evoked responses which consistently indicated that the proceeds are being used for widely divergent purposes not unlike the response that might be given to an inquiry as to how annuities are utilized--they are used for everything. There were no indications that recipients' use of the PFCPs is being guided with a belief that transfers will go to zero in 2003 or a belief that the PFCPs should be "banked" for use in years of depressed commodity prices.

However, some of the panelists indicated that they encourage their landowning clients to make investments, such as installing irrigation and drainage systems. Various panelists also indicated that some recipients of PFCPs are using the proceeds to purchase additional land or aggressively bid for cash leasing of additional acreage.

Even though PFCPs may not be significantly affecting crop mixes directly, they are likely to have indirect, longer-term supply effects on supply response and thus affect crop mixes in the long run. One possibility is that investments in farm machinery could, in turn, allow producers to respond to market signals more readily when commodity prices are rising. Also, the PFCPs, which are higher than projected deficiency payments, would increase producers' wealth position and could make some producers more willing to carry risk, a situation that can also affect supply response and crop mixes.

The more likely effects of PFCPs on decisions will be reflected through changes in landownership and tenure arrangements. But these are very uncertain. Higher returns to land may discourage some people from selling their farmland, especially if commodity prices strengthen over the long term, and thereby diminish opportunities to buy land by those who do not now own land. The higher returns would seem also to contribute to the increasing separation of ownership and operation of land as families find that it is more advantageous to keep the land from one generation to the other than it was without the PFCPs. For others, the higher land values may encourage them to sell their land and perhaps discontinue farming.

**Information and Analytical Needs.** In a sense, the specific questions related to PFCPs are part of a larger issue important to the economics of agriculture, but seldom investigated--what are the effects of changes and levels of wealth on supply response and other farm management decisions? An important information and analytical challenge is to understand the economic and distribution effects of the income streams and wealth increases associated with the PFCPs. In addition, in terms of future policy decisions, widespread understanding of the property right dimensions of farm program transfers is important. Questions such as the effects of attaching rights to program benefits to land or to individuals require careful analysis, extensive discussions among policymakers, and understanding by the public.

### **Recognition that Marketing and Managing Price Risk Is Important**

Adjustments to the 1996 Farm Act go beyond production decisions, such as crop mixes. Panelists are seized with the importance of marketing and related price risks to their clients and therefore to their business. The importance of marketing is reflected, for example in the following statements made by panelists:

"The two major changes are the open planting of acreages and changes in the market prices of commodities."

"Greater adjustment of acreage and increased price volatility leads to need for more attention to marketing."

"Farmers must concentrate on marketing for a huge part of their business if they plan to stay in business."

"With loan rates frozen at current levels we expect increased price volatility."

"Producers and landowners need to be focused on marketing. Marketing is much more critical to success in farming than ever before."

This concern for risks is reflected in the fact that "increasing risks" was identified by 41 panelists as one of the "major changes that have occurred in the economic and financial setting for farming." Discussion indicated widespread anticipation that the 1996 Farm Act will lead to greater commodity price volatility than has occurred in recent years.

Panelists indicated that they will need to give more attention to marketing and risk transfer instruments in the future. For many, the change will involve new experiences and approaches. These include participating in training experiences, accessing market information electronically, centralizing marketing decisions with individuals with market and price risk experience, contracting for commodity selling, and when possible contracting production and pricing of niche products with buyers and processors. Panelists indicated much interest in revenue insurance/assurance. However, the amount of income insurance/assurance that would be demanded will likely depend substantially on the amount required by creditors and the degree to which it is subsidized. For example, when asked if they would recommend buying crop insurance if it were not subsidized, many panelists indicated that they would not.

There are four dimensions of discussions related to marketing and risk that merit particular consideration.

First, interest in marketing is extremely high. For example, among all of the possible ways that panelists thought the management of farm resources would change over the next 5 years, "more attention to marketing" received the highest score. However, within individual panels it did not always receive the highest score.

Because the importance of marketing is so widely recognized, now may be the "teachable opportunity" for topics like speculation, risk transfer, and risk avoidance. It may also be the "commercial opportunity" to develop and promote unsubsidized risk transfer instruments. But that would be true only so long as the government, in spite of pressure from farm and nonfarm interest groups, avoids providing subsidies that undercut these promotions and that generate below market expectations for "premiums" and "costs" associated with the risk transfer instruments.

Second, farming interests continue to want protection from low and declining prices but at the same time opportunities to realize benefits from rising prices. Essentially they want a "put option," but at no or very little cost. This combination of wanting to socialize the risk of declining and low prices but privatize the gains of rising prices goes a long way in understanding the response to the increased prospective volatility of commodity prices. There is hope that (1) commodity selling programs can be designed to capture the higher prices and (2) it will continue to be possible to sharp shoot government-sponsored crop insurance programs by picking those situations where the combination of management decisions, crop prospects, and premium structures provide a high probability of payout.

Third, the target expressed by different panelists of selling commodities for prices in the top, say, one-third of the range of prices for any one harvest may not be achievable. Many farm managers may in fact be able to sell at the higher prices. Of course, because of competitive market conditions, all sellers will not be able to even if they had the skill to do so. The difficulty of the "sell in the top one-third" approach is illustrated by the recognition that if individuals are able to structure consistently a selling program that captures prices in the top third, they are probably also able to structure a buying program that captures prices in the bottom third. And, if so, they could earn much more by trading commodities than by farming or managing farms!

In addition, those with responsibility for selling commodities should concern themselves with selling at an optimum time. But, equal, if not more, attention is required to know in what circumstances it is advantageous to transfer price risks to others and how to accomplish the transfers efficiently.

A limited number of farm operators participated in the panels. They were medium to relatively larger size operators. The discussion indicated that many are well acquainted with ways to transfer price risks and use them frequently, while others are aware of risk transfer instruments but not as fully involved in using them.

Fourth, the interest of some people in marketing takes the form of contracting delivery of products modified in ways that add value and, in turn, increase returns and transfers or avoids risks. These "niche products" present important opportunities deserving of special attention, especially for those products that have high employment opportunities. One of the most difficult tasks, but potentially one of the most useful, would be objective estimates of the potential expansion of this type of production/marketing activity.

**Table III-1--Panelists' crop mix expectations for 1997 and 2000-02 crop mix percentages relative to 1996 crop percentages**

Crop panel	ND	KS	TX	IL	OH	GA	DLT	CA
<i>Number of responses</i>								
<b>CROP: Wheat - 5 panels</b>								
<b>Expected 1997 crop mix percentage:</b>								
Below 1996 percentage	2	1	3	7	4			0
Equal to 1996 percentage	2	4	4	0	4			2
Above 1996 percentage	3	2	1	1	0			1
<b>Expected 2000-2002 crop mix percentage:</b>								
Below 1996 percentage	1	6	5	5	5			1
Equal to 1996 percentage	0	0	3	1	2			1
Above 1996 percentage	5	1	0	2	1			1
<b>CROP: Corn - 4 panels</b>								
<b>Expected 1997 crop mix percentage:</b>								
Below 1996 percentage		0	1	3	1			2
Equal to 1996 percentage		5	1	1	1			0
Above 1996 percentage		1	4	4	6			4
<b>Expected 2000-2002 crop mix percentage</b>								
Below 1996 percentage		2	2	2	1			2
Equal to 1996 percentage		1	0	3	1			0
Above 1996 percentage		3	4	3	6			4
<b>CROP: Soybeans - 4 panels</b>								
<b>Expected 1997 crop mix percentage:</b>								
Below 1996 percentage	1			0	5	3		
Equal to 1996 percentage	3			4	1	2		
Above 1996 percentage	0			4	2	3		
<b>Expected 2000-2002 crop mix percentage</b>								
Below 1996 percentage	1			0	5	5		
Equal to 1996 percentage	2			3	1	1		
Above 1996 percentage	1			5	2	2		
<b>CROP: Barley &amp; cotton</b>								
	<b>Barley - 1 panel</b>			<b>Cotton - 2 panels</b>				
	ND			GA*		DLT		
<b>Expected 1997 crop mix percentage:</b>								
Below 1996 percentage	3						2	
Equal to 1996 percentage	2						3	
Above 1996 percentage	1						1	
<b>Expected 2000-02 crop mix percentage:</b>								
Below 1996 percentage	4						1	
Equal to 1996 percentage	1						0	
Above 1996 percentage	1						5	
<b>CROP: Grain sorghum &amp; rice</b>								
	<b>Grain sorghum - 2 panels</b>			<b>Rice - 2 panels</b>				
	KS	TX		DLT		CA		
<b>Expected 1997 crop mix percentage:</b>								
Below 1996 percentage	1	4		0		2		
Equal to 1996 percentage	5	1		1		3		
Above 1996 percentage	0	2		6		3		
<b>Expected 2000-2002 crop mix percentage:</b>								
Below 1996 percentage	0	3		0		6		
Equal to 1996 percentage	1	0		0		0		
Above 1996 percentage	5	4		7		2		

Source: Table IV-8

\* Specific estimates were not collected from Georgia panelists.

**Table III-2--Panelists' "allocation of effects" on expected changes of crop mix from 1996 to 1997**

Effect	ND	KS	TX	IL	OH	GA	DLT
<i>Percent allocation</i>							
Changes in commodity programs 11		18	18	54	3	31	10
Market price expectations	75	39	39	35	38	80	51
Other	17	43	8	62	31	10	38

Source: Table IV-9

**Table III-3--Panelists' crop mix estimates for 1996 and expectations for 1997 and 2002, percent of all acreage managed**

Commodity	ND	KS	TX	IL	OH	GA*	DLT	CA
<b>Wheat:</b>								
1996	39	38	22	3	10			6
1997	40	28	19	2	9			8
2000-2002	45	23	16	3	9			10
<b>Corn:</b>								
1996		21	14	45	34			1
1997		21	12	45	42			1
2000-2002		22	16	45	39			1
<b>Soybeans:</b>								
1996	9		14	43	46		42	
1997	8		12	43	44		43	
2000-2002	8		16	43	42		28	
<b>Rice:</b>								
1996							12	61
1997							16	57
2000-2002							22	50
<b>Cotton:</b>								
1996							19	
1997							18	
2000-2002							22	
<b>Crops not listed, pasture and idle land:</b>								
1996	52	51	50	9	10		27	32
1997	52	51	57	10	5		23	34
2000-2002	47	55	52	9	10		28	39

\* Specific estimates were not collected from Georgia panelists.

#### IV. SELECTED REGIONAL COMPARISONS

This chapter provides very limited coverage of the eight panel sessions in order to facilitate certain comparisons among panel responses. The tables show data for all of the panels and the discussion points' similarities and differences among the panel responses.

The topics in this chapter are similar to those contained in the more detailed chapters for each of the panels which may be accessed by visiting the University of California, Davis, Department of Agricultural and Resources Economics Internet web site at <http://usdafarm.ucdavis.edu>. The posted chapters are the state and area panel reports and appendices. They summarize the responses of panelists at each of the eight panels regarding:

- changes in the management of farm resources and forces driving the changes,
- current economic and financial setting for farming,
- characteristics of farm leases,
- land values,
- commodity price expectations,
- expected crop mixes,
- management of production and marketing risks, and
- general prospects for agriculture.

Additional chapters on the web site include a selection of the panelists' specific comments about:

- farm management decisions in 1996,
- the early 1997 economic and financial setting for farming, and
- perspectives on 1997 and expected 2000-2002 changes in farmland leases and crop mixes.

##### **Prospective Changes in Management of Farm Resources**

Among the several 1996 changes in the management of farm resources reported by panelists, those related to marketing and commodity prices are the most prominent on their lists of prospective changes for the coming 5 years (table IV-1). For example, when the panelists were asked to identify three 1996 changes in management of farm resources that they expect to be the most pronounced in the next 5 years, 54 of the 62 panelists that participated in the 8 panel sessions marked "More attention to marketing" and 26 of the 62 also marked "Increased price volatility."

Greater adjustments of acreage among crops also ranked high as an expected change in management. However, its ranking in Kansas and in Illinois are somewhat less than in other States. The panels in North Dakota and Ohio gave greater prominence to the prospective use of new technologies than did the other panels. The reason for this contrast is not clear, as technology has had an overwhelming role in changing crop yields throughout the United States. Information technologies, and advances in seed genetics and pesticides are examples. Most panels included discussions about new or prospective technologies, but panelists did not always identify "use of new technologies" as one of their top forces influencing management decisions over the next 5 years.



## **Major Forces Driving Management Decisions**

The importance that panelists attach to marketing challenges and dealing with risks was also reflected in their designation of "forces expected to influence management decisions" in 1997 and in the 2000-2002 period (tables IV-2 and IV-3). The grouping of forces related to "commodity price levels" had 51 "hits" for 1997 decisions and 44 hits for 2000-2002 decisions when panelists were asked to identify 3 forces they expected to most affect management decisions. Equally notable is the large number of the panelists who felt that "program changes" were influencing their 1997 decisions and will influence their 2000-2002 decisions. The North Dakota, Illinois, Georgia, and Delta panelists gave more hits to program changes than they did to commodity price levels.

In addition, world demand, weather, and production decisions were identified by panelists as major forces affecting 1997 decisions. The emphasis on world demand by the Illinois panel for 1997 and by the Illinois, Ohio, and Delta panels for 2000-2002 aligns with the dependence of these areas on exports for their major farm products. The evident limited attention to world demand by the other panels was somewhat surprising. The low rankings of weather by the California panel and by the Delta panel is accounted for, perhaps, by the extent of irrigation on the lands managed by the panelists.

## **Economic and Financial Setting**

The panelists identification of "increased risks," "program changes," and "increased importance of marketing" as significant changes in the current economic and financial setting for farming and then their ranking of these as the most important confirms the importance of these changes to farming (table IV-4). Admittedly, there are differences among the rankings by the individual panels. "Increased risks" received the most "hits" by the North Dakota and California panels; "program changes" by the Georgia and Delta panels; and "increased importance of marketing" by the Kansas and Illinois panels. "Increased land prices and rents" led the list in Ohio, and in Texas "increased risks" and "program changes" were equally identified.

The important point is that increased risks, importance of marketing, and program changes are at the top of the lists of how the economic and financial setting for farming has changed over the past year or so.

## **Leases and Land Values**

There is a contrast between the discussions about lease changes during the sessions and how the panelists ranked "land value and leases" when asked about management changes in the next 5 years. Discussions about leases were prominent in the panel sessions and a considerable amount of time during the panel sessions was devoted to the relationships of the 1996 Farm Act to lease provisions. In contrast "land values and leases" received only 13 hits out of a total of 193 when the panelists were asked to identify three of the major 1996 changes in the management of farm resources that they expect to be the most pronounced in the next 5 years (table IV-1).

There is one possible explanation that may be likely. It is that current attention to leases is associated particularly by the necessity to deal with how the production flexibility payments were to be divided. It may be that decisions for the 1996 and 1997 crops have set the stage, so to speak, for changes in future

years. Based on the discussions, these future changes would involve a continual shifting from crop share to cash leases or custom farming arrangements and making changes in lease provisions whereby the production flexibility payments go to the landowner in one form or another and risks are reallocated between landowners and tenants.

There are substantial differences in lease arrangements among regions of the country. Most leases are share leases, but not all. Most leases are 1-year leases, but, again, not all (table IV-5). For the panelists in the eight panel sessions combined, nearly three-fourths of the leases handled are share leases. The situation among the North Dakota panelists is sharply different, however. Among them, instead of three-fourths of the leases managed by the panelists being share leases, three-fourths are cash-rent leases. In addition, the proportion of single-year leases among the North Dakota panelists is relatively small, 19 percent. This emphasis on long-term cash leases may be associated with retirement objectives and the desire for a fixed income stream. The range of the average percents for 1-year leases for the other panels was from 56 percent (Texas) to 97 percent (Illinois). Texas and the Delta Region were also noted as having relatively large proportions (larger than the average) of cash leases in place for the 1996 crop year.

Of the 51 panelists providing estimates of changes in the value of the land that they manage, 41 reported that the value had increased over the past year, 9 reported "no change," and one reported a decline (table IV-6). As the numbers in the table indicate, the most bullish land market conditions among the States included in this project were reported in the Illinois and Ohio panels, with price increases more modest in North Dakota, Kansas, and the Delta. California panelists reported declining values for single-purpose rice land and increases in value for land with permanent crop potential. Although there are no specific numbers for land value for the Georgia panel, the discussion among panelists indicated that irrigated land in southwestern Georgia and southeastern Alabama is in strong demand and that the price increases have been substantial. Dryland cropland prices have not increased, however, according to the panelists.

### **Commodity Price Expectations**

The importance that panelists attach to marketing and price risks is possibly associated with their price expectations. As a group they are somewhat bearish about commodity prices (when measured against fall 1996 prices) and undoubtedly visualize that if their price expectations materialize, the revenue of their clients will not be as buoyant as in 1996, a year of great optimism about high commodity prices, especially in the first part of the year. These lower price anticipations create pressures to reduce costs, find crop mixes that lead to higher returns, and market products more expertly.

In the short run, the bearishness of panelists in early 1997 was particularly associated with feed grains, wheat, and soybeans--the markets that experienced the largest relative increases of prices in 1996. For example, 41 of 44 panelists with interests in corn indicated that they expect September-December 1997 corn prices to be below September-December 1996 corn prices (table IV-7). One panelist indicated unchanged. Only two indicated higher. For wheat, 38 of 44 anticipate September-December 1997 prices below September-December 1996 prices and for soybeans 32 of 39. For these commodities, there was a slight shift in the bearishness-bullishness balance when the panelists were asked to anticipate prices in 2000-2002: 34 rather than 41 expected corn prices to be below September-December 1996 prices; 26 rather than 38 expected wheat prices to be below; and 22 rather than 32 expected soybean prices to be below.

Only two panels focused on cotton prices, Georgia and the Delta. Again there was a shift in the bearishness-bullishness balance with respect to 1997 and 2000-2002, expected prices. Three-fourths of those responding thought that fall 1997 cotton prices will be lower than the fall 1996 prices. For 2000-2002, nine of 16 did.

The greatest shift from 1997 expectations to the 2000-2002 expectations was for rice. In addition, there were contrasting expectations between Delta panelists and California panelists for 1997 rice prices. Six of 8 Delta panelists expected 1997 fall prices to be higher than they were in the fall of 1996. But in California, only 1 of 8 expected 1997 fall prices to be higher. Both the California and the Delta panels as a whole expected rice prices in 2000-2002 to be higher than fall 1996 prices--7 of 8 in Delta and 6 of 8 in California.

### **Expected Crop Mix Changes**

Key observations about prospective changes in crop mixes are elusive except that a large proportion of the panelists anticipate that the crop mixes on the land they manage in 1997 and in the 2000-2002 period will be different than they were in 1996. For example, of 38 panelists who manage some wheat land, 24 expected the wheat acreage in 1997 on the land they manage to be different than in 1996 and 32 of them expected 2000-2002 acreage to be different than in 1996 (table IV-8). Similar ratios held for corn. Although the reported numbers and implied changes in crop mixes differ among States, the number of observations are insufficient to draw specific conclusions beyond that they affirm this positive attitude panelists in all of the sessions had toward the near elimination of planting restrictions by the 1996 Farm Act.

Panelists were asked to allocate their expected changes in crop mix from 1996 to 1997 among three categories of causation--"changes in commodity programs," "market price expectations," and "other" (table IV-9). The panelists' allocations varied widely. However, for the majority of panels, market price expectations dwarf the attributions to changes in commodity programs and the category "other" which reflected agronomic, rotational, and weather considerations. However, for the Texas panel, changes in commodity programs had the highest attribution, and, for Kansas and Illinois, the category "other" had the highest.

**Table IV-1-- Major 1996 changes in management of farm resources expected to be the most pronounced in the next 5 years**

Type of change	Total	ND	KS	TX	IL	OH	GA	DLT	CA
More attention to marketing	46	7	7	7	7	8	7	3	8
Greater adjustment of acreage among crops	41	5	3	6	4	6	11	6	8
Use of new technologies	30	7	3	4	2	7	4	3	1
Increased price volatility	19		4	6	6			3	7
Land values and leases (13):									
Higher cash rents & land values	8		2		3			3	
Longer cash leases	5					2	3		
Changes in production practices (10):									
Less tillage	3	3							
Less fallow	2	2							
Irrigation development	5			1				4	
Risk management (5):									
Management of production and marketing risk	2		2						
Development of coops	2	2							
Increased contract production	1			1					
Competition among renters (for land)	5				2	1		2	
<b>Totals</b>	<b>193</b>	<b>26</b>	<b>21</b>	<b>25</b>	<b>24</b>	<b>24</b>	<b>25</b>	<b>24</b>	<b>24</b>

**Table IV-2--Major forces expected to influence 1997 management decisions**

Type of force	Total	ND	KS	TX	IL	OH	GA	DLT	CA
Commodity price levels (51):									
Commodity price uncertainty	4		6	4				5	4
Higher commodity prices	12	4		1	2	3	1	1	5
Lower commodity prices	20		1	3	1	4	6		
Program changes (48):									
Elimination of planting restrictions	35	5	3	7	5	4	3	8	
Defined program benefits	13	1		3	2	1	4	2	
Weather	27	6	4	3	6	6		2	
Production decisions (25):									
Higher input costs	16		6	3					7
Insect problems and environmental concerns	9						4		5
World demand	18		1	1	8	4		3	1
Use of new technologies	7	5						2	
Competitive pressures (3):									
Urban land use pressure	2					2			
Competition for land	1							1	
Commodity changes (3):									
Lower peanut quota	2						2		
Higher value or value-added crops	1	1							
Totals	182	22	21	25	24	24	20	24	22

**Table IV-3--Major forces expected to influence 2000-2002 management decisions**

Type of force	Total	ND	KS	TX	IL	OH	GA	DLT	CA
Commodity price levels (44):									
Commodity price uncertainty	19		7	3				4	5
Higher commodity prices	14	5		2	1	3	3		
Lower commodity prices	11			2	2	2	2		3
Program changes (43):									
Elimination of planting restrictions	27	5	2	4	6	2	3	4	1
Defined program benefits	10	1		3			3	3	
Lower peanut quota	4						4		
End of government programs?	2				1				1
World demand	26		2	3	8	5		7	1
Weather	25	3	4	4	6	6		2	
Production decisions (26):									
Increased input prices	14	1	6	2					5
Insect problems and environmental concerns	12						7		5
New crops and technologies (10):									
New technologies	4	4							
Pest technologies	3							3	
Higher value or value-added crops	2	2							
New crops and technologies	1							1	
Competitive pressures (7):									
Competitive farm pressures	4					4			
Urban land use pressure	3					3			
Totals	181	21	21	23	24	25	22	24	

**Table IV-4-- Major changes in the current economic and financial setting for farming**

Type of change	Total	ND	KS	TX	IL	OH	GA	DLT	CA
Increased risks (54):									
Increased risks	46	7	5	7	5	5	5	4	8
Safety net change	27			1	1	1		1	3
Use of crop insurance	1				1				
Program changes (40):									
Increased planting flexibility	24	4	3	4	5	2	2	3	1
Flexibility payments	11		2	4		1		3	1
Defined program changes	2						2		
Change in peanut program	2						2		
Regulatory change	1				1				
Increased importance of marketing	39		7	5	8	5	3	5	6
Increased land prices and rents	18	4	2		3	6	1	2	
Commodity price levels (13):									
Lower commodity prices	6	1	1	2		1			1
Higher commodity prices	5			1		1		3	
Large grain inventories	1		1						
World supply and demand	1								1
Structural dimensions (5):									
Big farms getting bigger	4						4		
Stronger financial situation of producers	1							1	
Higher input prices	5						2	2	1
Totals	174	16	21	24	24	22	21	24	22

**Table IV-5--Characteristics of managed leases, 1996 crop year**

Number or percent of leases	Total	ND	KS	TX	IL	OH	GA*	DLT	CA
				<i>Number</i>					
Number of leases managed in 1996	3,264	584	530	27	1540	156	n/a	426	77
				<i>Percent</i>					
Percent of leases -									
- Share-rent leases	72	25	89	78	80	68	n/a	74	82
- Cash-rent leases	24	75	11	22	12	32	n/a	26	18
- Direct/custom operations	4				8				
- One-year leases	81	19	95	56	97	93	n/a	87	82
- Multiple-year leases	19	81	5	44	3	7	n/a	13	18
- Substantial 1996 change in lease terms	11	24	4	0	6	18	n/a	22	3

\*Specific estimates were not collected from Georgia panelists.

**Table IV-6--Percentage change in land values, last year to current year**

Percent change	Total	ND	KS	TX	IL	OH	GA*	DLT	CA
Increases									
16 to 20%	3					2		1	
11 to 15%	10	1		1	3	4		1	
6 to 10 %	16	2	3	1	5	2		3	2
0 to 5%	9	3	3	1				2	1
No change									
0 %	6			5				1	3
Decreases									
0 to -5%	0								
-6 to -10%	1	1							
Totals	51	7	6	8	8	8	n/a	8	6

\*Specific estimates were not collected from Georgia panelists.



**Table IV-7--Panelist price expectations of 1997 and 2000-2002 crop prices relative to Sept.-Dec. 1996 actual crop prices**

Crop/panel expectations	ND	KS	TX	IL	OH	GA	DLT	CA
<i>Number of responses</i>								
<b>Corn-5 panels</b>								
Expected Sept.-Dec. 1997 prices:								
Below Sept. - Dec. 1996 prices		7	8	8	8	6		4
Equal to Sept.- Dec. 1996 prices		0	0	0	0	1		0
Above Sept.- Dec. 1996 prices		0	0	0	0	1		1
Expected 2000-2002 prices:								
Below Sept.- Dec. 1996 prices		4	7	7	5	6		5
Equal to Sept.- Dec. 1996 prices		1	0	0	0	1		0
Above Sept. - Dec. 1996 prices		2	1	1	3	2		0
<b>Wheat - 5 panels</b>								
Expected Sept.-Dec. 1997 prices:								
Below Sept. - Dec. 1996 prices	7	7	7	6	7			4
Equal to Sept.- Dec. 1996 prices	0	0	0	0	0			1
Above Sept.- Dec. 1996 prices	1	0	1	2	1			0
Expected 2000-2002 prices:								
Below Sept.- Dec. 1996 prices	4	5	4	6	3			4
Equal to Sept.- Dec. 1996 prices	1	0	0	0	0			1
Above Sept. - Dec. 1996 prices	2	2	4	2	5			0
<b>Soybeans - 5 panels</b>								
Expected Sept.- Dec. 1997 prices:								
Below Sept. - Dec. 1996 prices	6			6	7	5	8	
Equal to Sept.- Dec. 1996 prices	0			0	0	1	0	
Above Sept.- Dec. 1996 prices	1			2	1	2	0	
Expected 2000-2002 prices -								
Below Sept.- Dec. 1996 prices:	4			5	4	4	5	
Equal to Sept.- Dec. 1996 prices	2			0	0	1	0	
Above Sept. - Dec. 1996 prices	1			3	4	2	3	
<b>Corn-barley &amp; cotton</b>								
	<b>Barley - 1 panel</b>			<b>Cotton - 2 panels</b>				
Expected Sept.-Dec.1997 prices:	ND			GA	DLT			
Below Sept. - Dec. 1996 prices	6			7	5			
Equal to Sept.- Dec. 1996 prices	0			0	0			
Above Sept.- Dec. 1996 prices	1			1	3			
Expected 2000-2002 prices:								
Below Sept.- Dec. 1996 prices	3				5	4		
Equal to Sept.- Dec. 1996 prices	3				0	0		
Above Sept. - Dec. 1996 prices	1				3	4		
<b>Grain sorghum &amp; rice</b>								
	<b>Grain sorghum - 2 panels</b>			<b>Rice - 2 panels</b>				
	KS	TX				DLT	CA	
Expected Sept.- Dec. 1997 prices:								
Below Sept. - Dec. 1996 prices	7	7				2	5	
Equal to Sept.- Dec. 1996 prices	0	0				0	2	
Above Sept.- Dec. 1996 prices	0	0				6	1	
Expected 2000-2002 prices:								
Below Sept.- Dec. 1996 prices	5	6				1	2	
Equal to Sept.- Dec. 1996 prices	0	0				0	0	
Above Sept. - Dec. 1996 prices	2	1				7	6	

**Table IV-8--Panelist crop mix expectations of 1997 and 2000-2002 crop mix percentages relative to 1996 crop percentages**

Crop/panel expectations	ND	KS	TX	IL	OH	GA	DLT	CA
Number of responses								
Expected 1997 crop mix percentage:								
Below 1996 percentage	2	1	3	7	4			0
Equal to 1996 percentage	2	4	4	0	4			2
Above 1996 percentage	3	2	1	1	0			1
Expected 2000-2002 crop mix percentage:								
Below 1996 percentage	1	6	5	5	5			1
Equal to 1996 percentage	0	0	3	1	2			1
Above 1996 percentage	5	1	0	2	1			1
Corn - 4 panels								
Expected 1997 crop mix percentage:								
Below 1996 percentage		0	1	3	1			2
Equal to 1996 percentage		5	1	1	1			0
Above 1996 percentage		1	4	4	6			4
Expected 2000-2002 crop mix percentage:								
Below 1996 percentage		2	2	2	1			2
Equal to 1996 percentage		1	0	3	1			0
Above 1996 percentage		3	4	3	6			4
Soybeans - 4 panels								
Expected 1997 crop mix percentage:								
Below 1996 percentage	1			0	5	3		
Equal to 1996 percentage	3			4	1	2		
Above 1996 percentage	0			4	2	3		
Expected 2000-2002 crop mix percentage:								
Below 1996 percentage	1			0	5	5		
Equal to 1996 percentage	2			3	1	1		
Above 1996 percentage	1			5	2	2		
Barley & cotton								
	Barley - 1 panel				Cotton - 2 panels			
Expected 1997 crop mix percentage:	ND					GA	DLT	
Below 1996 percentage	3						2	
Equal to 1996 percentage	2						3	
Above 1996 percentage	1						1	
Expected 2000-2002 crop mix percentage:								
Below 1996 percentage	4						1	
Equal to 1996 percentage	1						0	
Above 1996 percentage	1						5	
Grain sorghum & rice								
	Grain sorghum - 2 panels				Rice - 2 panels			
Expected 1997 crop mix percentage:		KS	TX				DLT	CA
Below 1996 percentage		1	4				0	2
Equal to 1996 percentage		5	1				1	3
Above 1996 percentage		0	2				6	3
Expected 2000-2002 crop mix percentage:								
Below 1996 percentage		0	3				0	6
Equal to 1996 percentage		1	0				0	0
Above 1996 percentage		5	4				7	2

**Table IV-9--Panelists' "allocation of effects" on expected changes of crop mix from 1996 to 1997**

Effect	ND	KS	TX	IL	OH	GA	DLT
	<i>Percent allocation</i>						
Changes in commodity programs	18	18	54	3	31	10	11
Market price expectations	75	39	39	35	38	80	51
Other	17	43	8	62	31	10	38

## V. INFORMATION AND ANALYSIS NEEDS

One of the most critical questions, but also, one of the most difficult questions to answer, is:

*To what extent are the changes that are occurring in the management of farm resources being caused by the 1996 Farm Act?*

The simple answer that everything that has happened since the Act became law is due to the Act is not satisfactory. Nor is it satisfactory to argue that the 1996 Farm Act has had no effect and will not affect farm management decisions in the future. Changes in key phenomena and the possible interaction of these changes with provisions of the 1996 Farm Act merit attention as analytical questions and hypotheses are posed and examined, as surveys of the farm sector are planned and conducted, and as alternative policy approaches are conceptualized and considered.

This chapter has two parts. The first part identifies five current developments that were highlighted in the panel discussions. Related provisions of the 1996 Farm Act are identified as are other interacting phenomena. Preliminary hypotheses focused on the relationships that possibly undergird the major developments are included.

The second part brings together in one place the information and analysis needs identified in Chapter III. Including a listing of these needs in this chapter facilitates the consideration of them with the other analytical challenges identified in this chapter.

### Five Current Developments

What follows is a listing of five current developments as revealed by the panel discussions. For each development, two sets of information--"Related Provisions of the 1996 Farm Act" and "Interacting Developments"--are then presented. This is done because particular developments may be explained by several phenomena.

Then for each development, hypotheses focused on relationships that may undergird the developments are specified. Any of these hypotheses could be stated differently. For example, one might state that PFCs are being capitalized into land prices. Alternatively, one might state that PFCs are having no effect on land prices. The approach chosen for this report was to state the hypotheses to reflect the relationships that, based on panel discussions, are thought to be most likely. Thus, in most cases, for analytical purposes it would be important to invert the hypotheses when testing them.

**Development 1:** Higher farmland values in many regions of the country. These higher land values are being reflected in higher rents and higher land transfer prices.

Related Provisions of  
1996 Farm Act

- Assurance of production flexibility contract payments (PFCPs) for 7 years to individuals associated with farmland in the future so long as the land qualified for payments under the 1990 Farm Act in one of the 5 years 1991-1995 and the land is used for an agricultural or related activity.
- Transferability of rights to PFCPs with transfer of land.
- Amount of PFCPs.

Interacting  
Developments

- Optimistic commodity market expectations during much of 1996.
- Bullish security markets.
- Favorable financial condition of farming sector as a whole.

Hypotheses

- The PFCPs will be nearly fully capitalized into farmland transfer prices and correspondingly reflected in cash rents. Less quickly, but in the same manner, the capitalization of PFCPs will be reflected in crop-share rents through adjustments of lease provisions.
- The capitalized value of the PFCPs will reflect their amount, as well as (a) the assurance of their receipt throughout the years 1996-2002 regardless of commodity prices, wealth and income of recipients, and Federal budget deficits and (b) the uncertainty as to whether they will be continued beyond 2002.
- The capitalized value of, say, \$1,000 of PFCPs in a given time period is greater than an expected \$1,000 of deficiency payments in the same time period because the amount of the PFCPs is known and, in contrast, market contingencies are associated with deficiency payments.
- Transfers from the Federal Government would not be capitalized if they were attached to individuals, landowners, operators, or hired labor and were not transferable.

**Development 2:** Increased competition among operators for land to rent and, in turn, (a) lower returns to operating farmland and (b) higher returns to farmland ownership.

Related Provisions of  
1996 Farm Act

- Tying of the PFCPs to the land.
- The fixed nature of the Production Flexibility Contract Payments (they are like bonds with a fixed specified return, but with a maturity value of zero.)
- The Secretary of Agriculture to provide adequate safeguards to protect interests of tenants and sharecroppers.
- Elimination of target prices and deficiency payments that had been paid pursuant to 1990 Farm Act.

Interacting  
Developments

- Optimistic commodity market expectations during much of 1996.

- Continued introduction and adoption of technology that fosters increased scale of farm operations.

#### Hypotheses

- Competition among farm operators is sufficiently intense that income transfers from the Federal Government to the farm sector will increasingly accrue to landowners with returns to land operators approximating what they would be without the income transfers.
- Steps by the Secretary of Agriculture to protect the interests of tenants and sharecroppers may delay, but are not likely to prevent, the associated transfers from being accrued to the benefit of landowners.
- Competition for leases among farm tenants will erode operating margins. The ultimate effects of this competition for leases will include increased scale of operation for some, but for others, accelerated exit from farming.
- In some cases, farm operators are better informed about policy provisions and program opportunities than are landowners. In other cases, the reverse is true.

**Development 3:** Accelerated shifts from crop share to cash rents and in some cases shifts from leases to custom farming.

#### Related Provisions of 1996 Farm Act

- Tying of PFCPs to land parcels and making them transferable with the land.

#### Interacting Developments

- Shift from crop share to cash rents had been occurring previous to the passage of the 1996 Farm Act.
- In some cases there are close personal relationships between landowners and the tenants operating their land.
- Customs and traditions in many communities for land to be crop share-rented.
- Revaluations of traditional lease structures advanced by new policy setting for farming.

#### Hypotheses

- Shifts to cash leases were accelerated by the provisions of the 1996 Farm Act.
- Making the PFCPs transferable with land rather than attaching them to operators accelerated the shift from crop share to cash leases.
- Custom farming opportunities will increase with availability of contract services and with narrowing margins of farm operations.

**Development 4:** Increased awareness that attention to marketing and price risk may increase returns.

#### Related Provisions of 1996 Farm Act

- Elimination of deficiency payments that under the 1990 Farm Act were based on the difference between market prices and legislated target prices.
- Capping of loan rates together with optimism that wheat, corn, rice, cotton, and soybean prices will be higher than these loan rates over the course of the 1996 Farm Act.

Interacting  
Developments

- Publicity of how the changes in farm commodity legislation will lead to greater variability of commodity prices and that the Act removed the safety net provided by deficiency payments.
- Education programs designed to interest producers in risk transfer instruments.
- Awareness of increased risk environment by agricultural credit institutions.

Hypotheses

- The majority of those who give major attention to marketing will enhance their revenue.
- A significant portion of those who give major attention to marketing will begin speculating with commodity futures and options.

**Development 5:**

Greater use of farmland suitable for farming and modest changes in acreage mix among crops.

Related Provisions of  
1996 Farm Act

- Elimination of Acreage Reserve Program which in selected years required the withholding of some farmland from production of designated crops in order to qualify to receive deficiency payments.
- Elimination of most legislative provisions that restrained decisions as to which crops to plant and harvest.

Interacting  
Developments

- Withdrawal of some land from CRP.
- Growth in demand for niche products.
- Need to address agronomic concerns.
- Increased competition for farmland.

Hypotheses:

- The economic efficiency of U.S. farming is enhanced with the near elimination of planting restrictions that had been used as an eligibility criteria for farm program benefits, including deficiency payments.
- The capitalization of PFCPs into land values distorts factor price ratios and distorts mix of inputs.
- Changes in mix of crops directly attributable to changes in farm commodity legislation instituted by the 1996 Farm Act will be very modest. Weather, farm cultural, yield, and price factors will, in combination, continue to be more important.
- The near elimination of planting restrictions will contribute to increased production of niche products grown under contracts. The extent of this kind of production will be affected by profitability and risks in growing and marketing the major crops vs growing and marketing the niche products.
- The restrictions on fruit and vegetable production will protect selected current producers of fruits and vegetables at the expense of other landowners and operators, as well as consumers.

- Elimination of Acreage Reserve Programs will lead to larger combined acreages of major crops in years in which ARPs might have been implemented. However, the effects on production will not be proportional since ARP-designated land was often the lowest productive land in the farming operation. Also, ARP lands may not be used to produce the crops previously grown on them.
- Increased concentration of farming enterprises will continue and perhaps be accelerated by the 1996 Farm Act. This possible acceleration may be associated with the PFCPs, which are "bankable" and useful in borrowing money for expansion. However, the effects of the Act may be very hard to identify since a significant force driving increased size of farm operating units continues to be technologies that are scale increasing.

## Information Needs

The following is a summary presentation of information and analysis needs important to assessing the effects of the 1996 Farm Act.

- Information that reveals attitudes of significant groups of people involved in farming and ranching toward the major provisions of the 1996 Farm Act, including tenant operators, nonfarming landowners, and individuals who operate land that they own.
- Information that depicts the extent to which landowners and tenants:
  - Are aware of the direct and indirect effects of the PFCPs on them,
  - Are aware that the PFCPs are not now scheduled to adjust upward if commodity prices drop to low levels,
  - Are aware that the 1996 Farm Act does not provide for supply-constraining programs in response to declines in commodity prices toward the maximum loan rates (support price levels), and
  - Recognize the scheduled adjustments in PFCPs--an increase from 1997FY (\$5.6 billion) to 1998FY (\$5.8 billion) with subsequent annual declines to a level in 2002FY (\$4.0) that is about one-third less than the peak year, 1998FY.
- Information that indicates the distribution of the PFCPs between landowners and tenants over the term of the 1996 Farm Act with comparisons to the distribution of the deficiency payments under the 1990 Farm Act.
- Information about lease provisions, particularly for crop-share leases.
 

Crop-share percentages will be useful. However, information about several other lease provisions will be essential if the objective is to understand the economic value of the PFCPs and the distribution of the income flows associated with them. There are substantial differences among the States in which panel sessions were held with respect to the proportion of rental arrangements which are for cash. Any collection of lease information will need to give careful attention to this diversity in lease arrangements across the country. A development closely related to leases is custom farming. Thus, information about this development is also important.
- Information that measures the extent of separation of ownership and operation of land and other resources used in farming.



- Information that reveals the economic and distribution effects of the income streams and wealth increases associated with the PFCPs.
- Analyses of property right aspects of farm program transfers including:  
Comparisons of (1) the effects of attaching program benefits to land and (2) the effects of attaching program benefits to individuals.
- Analyses that measure the linkages among changes in crop mix, farm returns, and the economic efficiency of the sector.
- Examination of the effects of PFCPs on the availability of land for farm expansion and for new entries to farming.
- Examination of the effects of changes and levels of wealth on supply response and related farm management decisions.
- Examination of societal benefits and costs to subsidizing risk transfers from production agriculture to the Federal Government.
- Estimates of the amount of subsidies required to achieve widespread transfers of risks from farmland owners and producers.
- Estimates of the income streams associated with government-supported insurance programs among different types of operators and landowners and whether the benefits are capitalized in farm or nonfarm assets.
- Analyses of the relationships between private initiatives to develop commercial risk transfer instruments and government-sponsored activities in order to identify ways to design governmental activities that minimize expectations by producers, landowners, and officers of risk transfer institutions that the subsidies will continue.

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