PURDUE AGRICULTURAL ECONOMICS REPORT

JUNE 2002

Are Exports a Dependable Base for Farm Prosperity?

Otto Doering, Professor; Michael Boehlje, Professor; and Neil Meyer, Extension Professor, Dept. of Ag Econ. and Rural Sociology, University of Idaho

Lester Thurow says "what sounds sensible (export more) when heard separately in each country becomes nonsense when aggregated around the world. No one can have more net exports unless someone else has more net imports."

Thurow, Lester. 1999. *Building Wealth: The New Rules for Individuals, Companies and Nations in a Knowledge-Based Economy*. Harper Collins, New York, p. 71.

Background

We have a strong relationship between exports and farm prosperity in the United States. From the early 1900s to the early 1920s, increasing prices and export volumes made farming unusually prosperous and boosted land values. During World War II and its aftermath, another boom in prices and exports was experienced. A third boom occurred in the 1970s, which peaked in 1981. All the prosperous periods were the result of political decisions or crop failures.

If we calculated the full cost of exports, including government support to farmers, transportation subsidies, damage to the environment, etc., sometimes we ended up exporting commodities below our full internal costs of production. (Schmitz, et al.)

High commodity prices encourage all farmers to produce more. The high prices in 1995-97 certainly helped bring about our current oversupply of commodities. We know that increasing U.S. commodity prices through high loan rates in the 1970s increased the prices for farmers beyond our borders. We changed our policies in 1985 to avoid this by moving to lower loan rates and depending more on deficiency payments for our farmers, basing this on a target price set well above the loan rate.

What we see historically is long periods of moderate or low prices punctuated with shortages and high prices and export demand. Despite policies to boost grain exports, volume has been mostly flat since the 1980s. High prices from export booms have been rare (such as during the teens and during the 1970s).

Why Do We See What We See Today?

1. Agricultural commodity markets are mature. In a mature industry, technical changes tend to increase supply faster than demand. Agriculture commodities have an inelastic demand, therefore, supply increases cause larger percentage price decreases. To increase market share, one has to sell at lower prices. High prices encourage competitors to increase production.

   In the case of grains, a long period of low prices might discourage high cost producers and allow the U.S. to increase export share. The cost for this would be some producers going out of business or government transfers to farmers allowing them to maintain their incomes. Today's farm program is effectively doing this.

2. The export boom of the 1970s had some important agricultural drivers: (1) Bad weather around the world and (2) the corn blight in the U.S. The critical non-agricultural drivers were: (a) The decision of the Soviet Union and other Communist

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states to import grains, (b) freeing of the dollar from fixed exchange rates made our exports less expensive in terms of other currencies, and (c) recycling of petro-dollars, which resulted in international banks making vast loans to countries (in South America and Eastern Europe) that they used to buy grains.

3. Food is a strategic good. Politically, many countries have social policies to slow out-migration from agriculture and to encourage the maintenance of the present investment stock in agriculture.

4. Free markets in commodities and inputs, may not make for high prices and volumes. Prices and volumes would likely be different under free trade from where they would be otherwise, but farmers might not be more prosperous. Land values would be driven lower in those countries that previously subsidized their agriculture and their exports. This would hurt current owners. Free trade would not necessarily end the boom and bust cycles brought about when high international prices encourage everyone to invest, overshoot, and produce more. We continue to have the capacity in the U.S. to produce more than we need. As long as other world producers are in the same over-capacity position, or want to be self-sufficient, a U.S. free trade position will not necessarily bring prosperity to U.S. farmers.

Future Trends That Are Important to Us

1. The mobility of technology and the increasing speed of its development change the outlook for our exports. Lowered variable costs will become the driver of production through enhanced technology. International markets for technology will be opened, which profoundly effects the location of grain production.

2. With a slow down in population and income growth combined with productivity and acreage increases, demand for grains is unlikely to catch up with the current stockpiles unless there is abnormal weather.

3. Capital for investment in agricultural production and processing is very mobile. European and U.S. livestock, poultry, and potato processing companies are investing in production capacity in Latin America, Canada, and Eastern Europe. The key here is raw materials will be obtained near processing facilities.

Where Does This Leave Us?

In terms of our current situation of world oversupply, demand is not likely to grow quickly enough to take care of the problem. There has to be: (1) new forms of demand growth, (2) weather or policy-driven supply control, or (3) acceptance of a prolonged period of low prices. High prices stimulate oversupply because once demand shortages are met, the investment and production continue as long as variable costs are covered. If price is to be the mechanism to reduce supply, it then takes a long period of low prices to reduce world supply. Meanwhile, income support policies keep land in production.

Supply adjustment can come from reduced acreage or from reduced yields. Reduced yields will occur with reduced inputs (land, fertilizer, technology) or bad weather. Farmers don't take land out of production as long as they can cover variable costs.

A variety of factors involved in determining export growth are listed in Table 1. An assessment of these factors does not indicate export growth as a foregone conclusion even with more open trading rules.

The strongest potential growth avenue for grains may be processing, where most of the demand growth has occurred over the past 20 years. This goes beyond taxpayer subsidized ethanol production and price protected fructose production to such things as biochemicals and plastics. However, this usually requires price stability at moderate levels for the raw materials.

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Editor
Gerald A. Harrison
E-mail: harrisog@purdue.edu
Phone: 765-494-4216 or
toll free 1-888-398-4636

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Agricultural Economics Department
www.agecon.purdue.edu

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Purdue University
Cooperative Extension Service,
West Lafayette, IN

Table 1. A Scorecard of Factors Influencing Potential Export Growth.

Positive	Negative
Bad weather, crop failures overseas	Good weather, bumper crops overseas
Increasing consumer incomes overseas	Other country's export subsidies
Trade agreements	Motivation for self-sufficiency
Export subsidies	Strong dollar
Weak dollar	Technology diffusion and mobility
Comparative advantage	Expanded world capacity
Population growth overseas	Increased global productivity
Resource degradation overseas	Increased crop weather tolerance
	Mobility of investment capital

Summary
The long-run experience in creating agricultural prosperity through export growth is not very good. Technology moves across borders easily and rapidly. Price spikes encourage excess investment, which results in excess production. It can take many years for invested production capital to depreciate and reduce overall supply.

Prosperity from agriculture and food product production will come to those adding value to basic commodities supplying consumer desires and finding new uses for commodities. The largest returns will likely be to those meeting consumer demands by adding value and capturing market niches. For example production agriculture needs to look at things such as how healthy foods reduce heart disease, cancer, and other diseases. Producers must find ways to capture added value rather than produce more commodities.

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Doing Good While Doing Well

Conservation In the 2002 Farm Bill

Steve Lovejoy, Professor

The recently enacted 2002 Farm Bill is the most ambitious and costly set of stewardship programs ever proposed. While several issues must be addressed when USDA sets specific rules for participation in some programs, others seem relatively clear in the law as passed by Congress.

In the 2002 Farm Bill, Congress has authorized the spending of over $17 billion on a wide array of conservation programs; this represents significant growth in conservation programs. Many of the familiar environmental programs have been reauthorized, including the CRP, EQIP and WHIP. In addition, we have several new significant programs, including the CSP, a revamped FPP, and the GRP.

This new legislation is our first real attempt to utilize payments for environmentally sound behavior that falls outside the idea of adopting new practices or temporarily retiring the land. These "green payments" will be for behavior covered by contracts under the Conservation Security Program, and all agricultural producers will be eligible.

Several critical issues surround these new and reauthorized programs:

- As with every new program, rules will have to be established for operation of the CSP program. Until these rules are made, there is great uncertainty about how the program will operate and what its impact might be. The main concern is how these programs will be administered and how the participant selection process, ancillary technical services, monitoring, enforcement, and evaluation can be accomplished for such expanded programs. The rules governing the programs will be critical to the success or failure of the programs.

- The new Farm Bill proposes a tremendous ramp-up in the EQIP program. Key questions are (a) whether the nature of the program will change, (b) can adequate technical assistance be provided, (c) will the sheer size of the program prevent effective targeting, (d) will the increasing proportion of dollars spent on animal production units affect the overall objectives, and (e) what is the impact of allowing large livestock operators to participate.

- The impact that some of the rule changes will have on existing programs is in doubt. For example, what will be the impact of the new attempt to allow some economic use, such as grazing on lands in the CRP, CSP, FPP, and the GRP?

- While the legislation now allows for crop consultants and others to provide technical assistance to farmers and ranchers, it is unclear how this might work or who will be certified to provide information to program participants?

- Will the new and existing conservation programs be treated as neutral under the trade agreements? Will they maintain their "green box" status given the expansion of the programs and the increasing concern of our trading partners with the level and kinds of subsidies we provide to producers under the new Farm Bill? For example, if the EQIP program were seen as providing large capital inflows into the livestock industry for waste facilities that allowed the industry to concentrate more capital to greatly expand production at lower cost, this might be seen as trade-distorting. The critical issues will be whether the conservation expenditures are only minimally trade distorting and whether they actually do result in attaining conservation and environmental goals.

Concluding Comments

- Essentially, the conservation title is NOT a radical departure from the programs USDA has been implementing over the past several years.

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Evaluating Cooperation Between Hog Producers and Pork Packers[1]

Ken Foster, Professor; Joan Fulton, Associate Professor; Allan Gray, Assistant Professor; Elizabeth Beetschen, Graduate Research Assistant; and Suzanna Martin,[2] former Graduate Research Assistant

Changes in the hog industry over the past few years have altered the way packers and farmers relate to each other. Historically, the interface between packers and farmers could be characterized as an adversarial transaction. However, in the past decade the relationship between packers and larger-scale farms has become more cooperative as both parties are finding it increasingly important to manage risk and become more responsive to consumer demand. This article reports on research at Purdue University that analyzes how collective action by a cooperative of small-scale, independent producers could help them remain competitive. Various risk-sharing scenarios between producers and packers were analyzed to determine the potential for cooperation between a producer cooperative, consisting of small-scale producers, and a pork packer.

Net Present Value (NPV) of estimated cash flows was used to address the question of whether there are positive benefits to both the producer cooperative and the packer from these cooperative marketing arrangements. The producer cooperative is designed for use by small-scale pork producers and provides access to cost-reducing technologies that are difficult to independently implement in small-scale systems. On the marketing side, risk management implications of cooperative pricing strategies are identified.

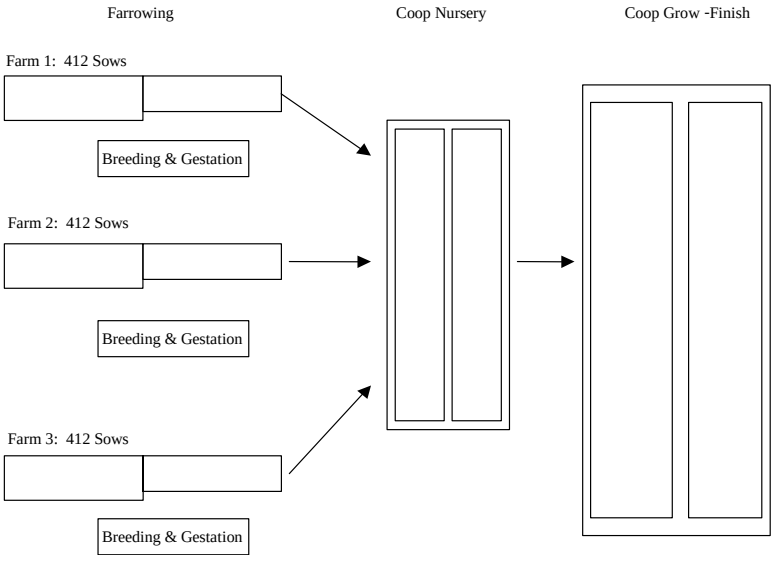
The risk-return tradeoff is the basis for potential cooperation between the cooperative and the packer. If we examine only the level of prices, then there is no potential for cooperation because higher prices paid to farmers mean lower returns for the packer. However, net returns to packer and net returns to hog production are historically negatively correlated. This means that some sharing mechanism could generate a risk-reducing portfolio for both.

Hog Production Cooperative Model

A spreadsheet-based Hog Cooperative Simulation Model (HCM) was developed to estimate the expected net returns under various pricing strategies for a hog cooperative consisting of small-scale farms.[3] The model estimates the packer's expected returns (using a 12% discount rate on cash flows) under the various pricing strategies and the potential for cooperation between the packer and cooperative based on the associated risk and return trade-offs. The assumption made in this research is that individual producers will farrow sows in modified existing facilities and then transfer the weaned pigs to cooperative nursery and finishing units (see Figure 1). Individual producers are representative of small-scale producers who previously operated 150- to 300-sow farrow-to-finish units. By converting the existing farrow-to-finish facilities to specialize in farrowing, the producers gain greater access to cost-reducing technologies that have substantial economies of size.

The goal of the overall production scheduling was for the cooperative to mimic an operation with 1,236 sows that produces about 27,000 hogs per year, with each individual to supply the cooperative at regular three-week

Figure 1. Diagram of Hog Production Cooperative with Three Participants.



1 This research was funded by the USDA RMS-Cooperative Services, Cooperative Marketing Division through Cooperative Agreement RBS-99-14.

2 Suzanna Martin is currently an Extension Specialist with the University of Kentucky.

3 Further details of this cooperative can be found in Martin.

intervals.[4] The production schedules were derived from the computer program PIGFLOW Version 2.2 (a space management and building capacity design software designed by Jones and Mayrose). The individual producer's facilities can be converted to farrowing units. The research reported here assumes these were originally 150-sow farrow-to-finish units that were converted to farrowing units with 412 sows (see Chapter 13 in Boehlje et al. and Figure 1). Each of these farms acts as a farrowing room in a traditional system or two rooms, depending on whether the cooperative intends to farrow a group of sows every week or twice per week. To estimate the cost of conversion, a budget spreadsheet was adapted and updated from Boehlje et al. This model estimates the cost of converting existing nursery and grow-finish space to farrowing and gestation. However, the model assumes that the existing structures and equipment are fully depreciated and does not assign any interest or depreciation charge to that investment. As a consequence, some of the net return estimates may be high compared to those typically quoted for the industry, which include full capital recovery charges.

Six pricing scenarios were evaluated for the HCM. They include the hogs being sold on a standard carcass merit system, a component pricing system, wholesale component pricing with 50/50[5] risk sharing, component pricing with 60/40 risk sharing, component pricing with 40/60 risk sharing, component pricing with 75/25 risk sharing, and component pricing with 25/75 risk sharing. A list of scenarios and the acronym used to refer to each is shown in Table 1.

Table 1. Pricing Scenarios and Acronyms[a]

Scenario	Acronym
Carcass Merit/Current Wholesale	CM/CW
Component	COMP
Component with 75/25 Risk Share	75/25
Component with 60/40 Risk Share	60/40
Component with 50/50 Risk Share	50/50
Component with 40/60 Risk Share	40/60
Component with 25/75 Risk Share	25/75

a Component pricing values were based on wholesale values.

Carcass Merit Cooperative

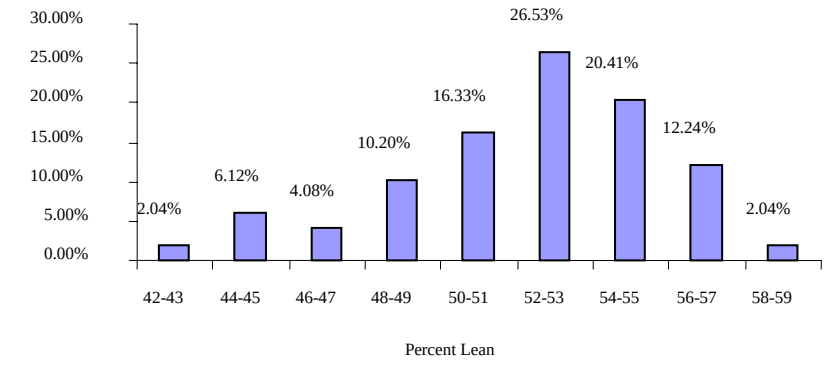
The carcass merit system bases payments on the percent lean and weight of the carcass. The data for percent lean were taken from the average of the 240 to 270 pound hogs in the Purdue Lean Growth Study and adjusted for changes in carcass composition that have occurred since the time that study was conducted. Based on the percent lean calculation, a bonus or premium was applied. If the hog is 50-percent lean or greater then the premium is equal to [(%Lean-50)*1.1 *Base Price]/100, and if the hog is less than 50- percent lean the discount is equal to [(%Lean-50)*1.5*Base Price]/100.[6] The final per cwt price is: Price/cwt = Base price + Bonus or Discount, or per head the value is: Value/head = Price/cwt * (Hot Carcass Weight/100).

Once the value per head is determined for each category of percent lean, that value is multiplied by the number of hogs that fit into that category based on the histogram in Figure 2 derived from the adjusted Purdue Lean Growth Study data. For example, 26.53 percent of the population fit into the 52-53 Percent Lean category. Therefore, 26.53 percent of the hogs sold are allocated the value based on the midpoint of the range, or 52.5 percent lean. This process of determining the value for each category of hogs is repeated for all categories defined in the histogram. Then, summing all categories generates the total estimated receipts for the cooperative selling under such a program.

Component Cooperative

The next marketing strategy considered for the cooperative is component pricing. This type of pricing computes the value of the animal as the sum of the wholesale market values of all of the cuts and byproducts based on wholesale market prices and the average adjusted weights of various components from the Purdue Lean Growth Study. From this gross value, a processing cost of $10.28 per hundredweight ($25.49 per head for a

Figure 2. Distribution of Percent Lean in Hog Carcasses



4 The system can easily be expanded in multiples of 600 and 1200 sows to mimic even larger operations and to include more farms. However, as the number of farms increases the system becomes less manageable due to the relationship and production risks inherent in larger groups.

5 The first number represents the share the cooperative receives, and the second number is the share the packer receives.

6 Based on information obtained from a collaborating packer.

Table 2. Statistical Results of HCM Net Present Value of Eight-Year Cash Flows (Thousands of Dollars)

Scenario	Mean	Standard Deviation	Minimum	Maximum
Cooperative				
CM/CW	1,340	1,881	(1,635)[c]	4,338
COMP	2,747	2,078	(470)	6,529
75/25[b]	2,061	1,559	(352)	4,897
60/40	1,648	1,247	(282)	3,917
50/50	1,374	1,039	(235)	3,265
40/60	1,099	831	(188)	2,612
25/75	687	520	(117)	(1,632)
Packer				
CM/CW	1,407	197	1,086	1,909
COMP	0	0	0	0
75/25	687	520	(117)	1632
60/40	1,099	831	(188)	2,612
50/50	1,374	1,039	(235)	3,265
40/60	1,648	1,247	(282)	3,917
25/75	2,061	1,559	(352)	4,897

b Recall that the first number in the risk sharing arrangement represents the cooperative's share.

c Parentheses imply a negative discounted cash flow.

248 pound pig) was subtracted.[7] For the COMP scenario, the cooperative's net return is the wholesale value of the hogs minus the sum of the packers processing costs and the farm level production expenses of the cooperative producers. When the risk-sharing scenarios are analyzed, the cooperative's and the packer's net returns are their respective shares of the wholesale value minus the sum of the packer's and the cooperative's costs.

For example, if the risk share agreement is 50/50, then wholesale value minus the sum of the processing cost and the cooperative's production cost is divided in half, and the net return to the cooperative would be 50 percent of the total net value over all system costs. This process is done similarly for all risk sharing scenarios listed in Table 1, by adjusting the percentages.

The Packer's Returns

Packer risks and returns were also approximated for all of the pricing alternatives discussed for the cooperative. Examining the alternatives from both perspectives is essential for evaluating the potential for cooperation. When hogs are sold by the cooperative on a carcass merit system, the packer is assumed to sell the meat on a wholesale basis. The calculation for wholesale returns begins with the wholesale carcass (component) value minus the cost of processing. In addition, the packer must also pay the cost for purchasing the hogs. This is simply the cost that was calculated for gross receipts to the cooperative under carcass merit pricing. The calculation of packer net returns under component pricing with risk sharing is the same as for the cooperative described above. Alternatively stated, the packer's net return is total wholesale value net of both party's costs minus the cooperative's share.

Results

The spreadsheet allowed the prices of hogs, carcass components, corn, and soybean meal to vary according to their historic values between 1980 and 1999.[8] To approximate the price patterns of the four-year hog cycle, prices for intervals of eight consecutive years were drawn randomly with replacement from all possible eight-year intervals.[9] A total of 1,000 random draws were made, and net cash flow for each of the eight years and each scenario was calculated. The net cash flows were then discounted and summed to obtain 1,000 eight-year horizon NPV estimates. The statistical characteristics of these simulated NPV's are presented in Table 2 for both the cooperative and the packer.

The 40/60 risk sharing and 25/75 risk sharing both have fairly low average NPV's for the cooperative, but these scenarios generate lower standard deviations (less risk). This might be indicative of pricing strategies that smooth income over time for the cooperative, and cooperative members might choose such strategies to manage risk. At the same time, COMP possesses the highest mean but also the highest standard deviation (greatest risk) for the cooperative. It is also interesting to notice that CM/CW, which is the pricing strategy most commonly used in the industry today, has a fairly high mean but also a high standard deviation (much risk). In addition, the range of possible outcomes under the CM/CW scenario is quite wide. From these statistics, a more risk-averse cooperative membership would prefer a pricing strategy that receives at least some of the wholesale value of the pork cuts.

From the packer standpoint, CM/CW has a moderate to low average NPV and has a low standard deviation (low risk). Table 2 shows the minimum expected for the packer to be quite high under CM/CW, suggesting that this alternative has little downside risk for the packer. The 25/75 risk sharing arrangement has the highest mean but also the highest standard deviation (greatest risk) for the packer.

7 The processing cost estimate was based on the research of McDonald and Ollinger.

8 The prices were deflated to 1999 values.

9 To avoid over sampling data in the middle years of the sample period, the intervals were looped from the end of the sample back to the beginning such that one possible draw from the historical distribution of prices might have been 1997,98,99,80,81,…,84 for example.

The next step in the analysis was to rank the alternatives from the perspective of a cooperative and a packer with varying degrees of risk aversion. Six different degrees of risk aversion were evaluated ranging from risk neutral to extremely risk averse. The derived rankings of the pricing scenarios for the cooperative and the packer are shown in Table 3.

These rankings reflect the optimal risk and return (standard deviation and mean) tradeoffs for entities with the implied risk preferences. For example, for a risk-neutral to slightly risk-averse cooperative, COMP is the preferred alternative, followed by 75/25 risk sharing and 60/40 risk sharing, because they have the highest mean discounted cash flows and the risk neutral cooperative is not concerned with the risk. The very and extremely risk-averse cooperatives would prefer to transfer a substantial part of the risk to the packer, and are willing to compensate the packer by taking only a small share of the component value under the 25/75 risk-sharing approach. For the risk neutral-packer, the 25/75 risk-sharing arrangement is also the most preferred scenario.

However, for every other level of risk aversion, the CM/CW scenario is the most preferred by the packer. This is not surprising, because the discounted cash flows are never expected to go below zero for CM/CW.

Conclusions

This research reveals potential for cooperation between a hog production cooperative and packer. A carcass component pricing approach with risk sharing that awards 25 percent of the wholesale carcass value (net of system costs) to the cooperative and 75 percent to the packer is a preferred arrangement for an extremely risk-averse cooperative membership and a risk neutral packer. At the same time, slightly risk-averse to extremely risk-averse packers are shown to prefer the traditional method of pricing, but, for the slightly to moderately risk-averse packer, the 25/75 approach ranked second. Past research suggests that publicly traded firms such as some of the large packing companies are likely to behave in a risk-neutral fashion, while pork producers, still reeling from the low prices of 1998 and 1999 and facing declining prices in 2002, are probably quite risk averse. Consequently, we believe there is substantial room for cooperative strategies in today's pork industry. In fact, such cooperation has already emerged to a degree in the form of producers who are willing to sign production contracts with packers that guarantee a relatively low payment with very little variation. Adoption of contracting is often motivated by a lender who refuses to provide financing to farmers without a contract. In such cases, the risk aversion of the lending institution is motivating the change in structure.

In addition, the cooperative always prefers to receive at least some of the component/wholesale value, because traditional carcass merit pricing was the least preferred scenario for every level of risk aversion. In fact, carcass merit pricing was easily dominated by direct component pricing whereby the cooperative retains 100 percent of the wholesale value and incurs the packer's costs as a toll slaughter charge.[10] The direct component alternative for the cooperative can also be viewed as the potential gains and "best" case scenario for producer cooperative ownership of a pork slaughter plant, suggesting that downstream ownership is an option that producers should examine. However, in an earlier paper, Maung and Foster suggested a cautious approach to this decision due to the great uncertainty in the pork industry and concerns about market power among existing packers.

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Table 3. Rankings for Different Risk Aversion Levels[d]

Risk Aversion	Ranking
Cooperative	
Risk Neutral	COMP, 75/25, 60/40, CM/CW, 50/50, 40/60, 25/75
Slightly Risk Averse	COMP, 75/25, 60/40, 50/50, 40/60, 25/75, CM/CW
Moderately Risk Averse	COMP, 50/50, 60/40, 40/60, 75/25, 25/75, CM/CW
Moderate/Very Risk Averse	40/60, 50/50, 25/75, Comp, 60/40, 75/25, CM/CW
Very Risk Averse	25/75, 40/60, 50/50, 60/40, COMP, 75/25, CM/CW
Extremely Risk Averse	25/75, 40/60, 50/50, 60/40, COMP, 75/25, CM/CW
Packer	
Risk Neutral	25/75, 40/60, CM/CW, 50/50, 60/40, 75/25, COMP
Slightly Risk Averse	CM/CW, 25/75, 40/60, 50/50, 60/40, 75/25, COMP
Moderately Risk Averse	CM/CW, 25/75, 40/60, 50/50, 60/40, 75/25, COMP
Moderate/Very Risk Averse	CM/CW, 50/50, 40/60, 60/40, 25/75, 75/25, COMP
Very Risk Averse	CM/CW, 60/40, 50/50, 75/25, 40/60, 25/75, COMP
Extremely Risk Averse	CM/CW, 75/25, 60/40, 50/50, 40/60, 25/75, COMP

d Rankings are from most to least preferred

10 This analysis did not include the possibility of selling hogs on a carcass merit program and hedging in the futures and/or options markets as a means to manage risk.

Continued from page 3.

- The Conservation Security Program (CSP) is a new and very different approach to conservation and stewardship.
  - It encompasses a much broader segment of the agricultural community by including producers of all commodities.
  - It rewards those producers who presently maintain or agree to begin a more sustainable production system.
  - It shifts the distribution of payments geographically, by commodity, by size of operation.
- This farm bill greatly increases the resources available to assist agricultural producers and landowners in reducing environmental harms and increasing the environmental amenities provided by the agricultural sector.
- An area of concern is that the increased subsidies for agricultural production will make higher incentives for conservation behavior necessary, increase the required conservation expenditures and intensify the competition between the conservation and commodity programs.

The 2002 Farm Bill is very aggressive at protecting the environment and offers a tremendous opportunity for farmers to provide environmental amenities while also contributing to their bottom line and their business's viability (Doing good while doing well). For more information on the Conservation provisions contact your local Cooperative Extension Office for CES paper 344 or obtain a copy on-line at http://www.ces.purdue.edu/farmbill/. That site also has information on the commodity portions of the new Farm Bill.

Acronyms, Farm Security and Investment Act of 2002 (2002 Farm Bill)

CCEP	Comprehensive Conservation Enhancement Program
CRP	Conservation Reserve Program
CSP	Conservation Security Program
EQIP	Environmental Quality Incentive Program
FPP	Farmland Protection Program
GRP	Grasslands Reserve Program
NRCS	Natural Resources Conservation Service
USDA	U.S. Department of Agriculture
WHIP	Wildlife Habitat Improvement Program
WRP	Wetland Reserve Program

Land Use Team Honored for Educational Efforts

Jennifer Doup, Writer, Purdue Agricultural Communication Service and Gerald A. Harrison, Professor

The 2002 recipient of the Purdue University Agricultural Dean's Team Award is the Purdue University Cooperative Extension Service Land Use Team. The Dean's Team Award annually recognizes the faculty and staff achievements of those collaborating on interdisciplinary teams. The land use team is comprised of specialists, educators and administrators from 11 counties and five educational areas.

The 22-member land use team was the first-ever collaboration of county educators and campus specialists devoted to working on a public issue, such as land use. Janet Ayres, an Ag. Econ. Professor, developed and lead this activity through most of its productive work. District Extension Director, Rick Chase is now the interim head. The Land Use Team continues to deliver seminars and contribute to programs throughout Indiana and in neighboring states.

The Purdue Extension Land Use Team collaborates with other state and local organizations, including Ball State University, Indiana Land Resources Council, Indiana Land Use Consortium, Indiana Farm Bureau and Indiana Planning Association to develop and deliver timely educational programs on land use, taxation of land use alternatives and related public issues.

The group also has delivered several programs, seminars, and resources to professionals, local citizens, elected officials, organizations and youth.

A Web site <http://www.anr.ces.purdue.edu/landuse/> offers resources for anyone who has an interest in how decisions are being made that affect land use in Indiana. At that site you will find online publications and articles offer information that can help the public make better land use decisions, and this delivery method allows us to get information out more quickly. You may call your local Purdue Cooperative Extension Service Office for assistance for how they or the land use team may assist you or your community. You may reach West Lafayette Campus Extension Specialists by calling 1-888-EXT-INFO toll free.

The Purdue land use team members honored are:

Extension Educators-
Chris Bitler, Newton County, deceased; Jon Cain, Hendricks County; Gerald Dryden, Harrison County; Michael Ferree, Bartholomew County; Phil Gordon, Elkhart County; Roger Moll, Allen County; Phillip Schmidt, Spencer County; Valynnda Slack, Whitley County; Mark Spelbring, Parke County; and James Woolf, Tipton County.

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35th Anniversary Top Farmer Crop Workshop Purdue Campus, July 21-24, 2002

D. Howard Doster, Professor Emeritus

Perhaps you will decide to attend and use our computer program to "test before you invest." Since 1968, we've helped 7,000 mostly cornbelt farmers interpret 25,000 computer solutions as they looked for ways to "get better, get bigger, get better." Over half the 2002 participants will be repeating the workshop, and they are not slow learners! Often, a person will attend 3-4 times in 6-7 years as he learns how to effectively grow his business. Bring your spouse or partner. It's more fun and more productive to evaluate some things together.

Starting with the first 1968 workshop, we have always featured technology transfer and application. Of the many technology presentations: about one-third are farmer-speakers, one-third are industry-speakers, and one-third are professor-speakers.

Get In and Out of Farming

To start the workshop, we will have you form teams to advise a young farmer how to strategically structure his business relationship with his father. Later, we will consider how another family got the present generation into an ownership position using a unique partnership arrangement, and we will learn the plan for the next generation to enter the business. I conclude most families spend most of the time "in transition," either getting in, or getting out of the business.

The 1:00 p.m. Monday session is our personnel management program. Send me suggested problems you want Jonathon Finck to analyze. Then, look ahead to Tuesday morning when an Illinois farmer's daughter relates her experience in evaluating her Dad's business.

I met our second speaker this spring on a farmland presentation tour in the eastern U.S. Now, with the provisions in the farm bill, more persons will consider selling their development rights. Several states, including Indiana, will need to pass legislation in order for their farmers to participate.

Adapt to the Farm Bill

Monday morning, we have several people presenting farm bill issues, and then we look at tillage. Much of the rest of Monday, we will look again at site-specific farming issues as we've done each year since we first coined the name in 1983. I wonder how "Greenstar" will get along with "Fieldstar." I'm curious about how even the twin-row corn will look, and I wonder how many of you will bring your PDA.

We like to have at least one company president speaker. This year, it's the president of Beck's Hybrids. In addition to sharing his insights on why his firm is flourishing, he may tell us the yields he's getting in his test plots growing corn in different rotations. Someday, we may want to grow more than 50% corn. Agronomist Bob Nielsen may ask you to also help identify those relationships.

Rate Your Marketing Skill

Maybe you will want to hedge

nitrogen prices using natural gas futures. Maybe you'll want your kids or grandkids to become DNA researchers. Maybe you will participate in the lease survey, learn the differences in profits from your leases, and then learn how others plan to change their leases for 2003. Maybe you will want to help start a buyer group or locate a dairyman on your farm, or contract specialty crops.

Maybe you will quit trying to beat the market. Maybe you won't. Maybe you will move to South America, at least in your mind, as you hear what our Wednesday morning speaker is doing.

Maybe you will put all these things in perspective as you listen to what our final speaker is planning to do—that is our goal as we wind up another workshop. Count on meeting some of the best farmers in the cornbelt, and plan to network with them until next year's workshop.

Before the workshop, do your homework, and get plenty of sleep. You will not have time for much of either during your 69 hours on campus. You will be in six hours of computer sessions; hear 52 speakers, including 16 farmers, 18 professors, and 18 industry persons; tour part of the Purdue Agronomy Farm and banquet at The Trails Party House.

Meet the Staff

At this workshop, you will meet Professor Craig Dobbins, who wrote this, the sixth version of our linear program software. At the Tuesday banquet, look for Cathy Malady, our keypuncher. She and I are the only people who have worked at all the July workshops. Also get acquainted with George Patrick, Alan Miller and a crew of able graduate student teaching assistants led by Steve Slinsky, as well as some undergrads led by Eric Schuler. Eric, a new grad student, is now working on what may become the seventh version of our software. In it, he's considering each lease as a separate farm, and he will also include an entry for you to indicate the "good weather" time it takes you to move machinery to each farm. You will use part of his new input form to enter your lease survey information this year.

Send in your registration soon so we can send you the homework. The program for the 35th Top Farmer Crop Workshop and registration form is online at: www.agecon.purdue.edu/extensio/Top_Farmer/index.htm. For more information, contact me at (765)494-4250 or by email: doster@purdue.edu.

Farmland Lease Law Reminder

Gerald A. Harrison, Extension Economist and member Indiana Bar

Farmland lease decisions are often put off until late fall if not ignored. Often landowners and tenants do not readily communicate their concerns, and difficult times in crop farming may contribute to a need to renegotiate lease terms. Occasionally, disputes arise over whether there was a timely notice to terminate a lease, more specifically, whether there is a valid lease for the following year.

Rent adjustments may depend upon the existing agreement. Many tenants and landlords may be looking for a new lease with features that factor in the new Farm Bill provisions as well as deal with risk and uncertainty. For assistance with developing lease and rental terms, see Howard Doster's publication "What is the Right Rent?" EC-708. You may locate this publication online at: <http://persephone.agcom.purdue.edu/AgCom/Pubs/EC/EC-708.pdf>.

Notice to Quit

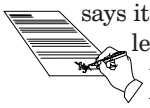
If there are serious problems with the shares or rent, the first step may be to terminate the lease. If a lease is not effectively terminated, the tenant may have a lease on the same terms as for the current year. A written notice is best, and requires an expression of the termination, the identification of the existing landlord and tenant, description of the land, date, and signature of the notice maker. An example of a notice is in the Indiana law at 32-7-1-4 which states that:

> *The following form of notice, or one substantially like it, may be used in the case of a tenancy from year to year, the date, names and description being changed to suit each particular case:*
>
> *Georgetown, Floyd County, Indiana, November 30, 1879.*
>
> *To William Brown: You are hereby notified to deliver up to me, at the expiration of the current year of the tenancy, the possession of the following described premises, viz: the south-east quarter of section six, in township two, south of range five (5), east in the county of Floyd, and State of Indiana, now held of me, by you, as tenant. Isaac R. Keller (Indiana laws may be found on the Internet at: <www.IN.gov/legislative/ic_iac/>.)*

Effective delivery of the notice is also important. The most effective proof of delivery may be a "sheriff's receipt."

A lawyer's assistance is recommended.

The above procedure may be appropriate or required in situations where there is no written lease in force at the time, but in fact the lease is oral. Oral leases are legal in Indiana, and while they are not recommended, many parcels are believed to be rented in this manner. Often the parties begin with a written lease and then in following years renew orally.



When a notice is required, the law says it must be delivered at least three months before the end of the "lease year." A lease year-end is not in the law. By custom, it may be the day before March 1. This is why it is thought that the notice is timely if delivered before Dec. 1 of the current crop year. But that may not be the effective date in a specific situation. Thus, it is wise to get the notice out perhaps as early as possible to be sure the notice is timely. An early notice date gives the tenant time to make appropriate management decisions. An important consideration is maintaining enrollment in the "government program" which requires proof of a lease on the land before a "producer" is entitled to program payments. Government program payments are major items of "profit" for crop producers.

Most acreage is rented with a written lease. A written lease should deal with the requirements for renewal. The lease may be drafted as a "term lease." A term lease is specified as existing between a beginning and ending date. A term lease needs no notice to terminate it under Indiana law. But when in doubt the notice should do no harm, or simply set-up a meeting to review the lease and make necessary changes while there is amble time to make management decisions. Then sign a lease or rental arrangement that is acceptable to both the landlord and tenant.

Death and Land for Sale

Tenants may find themselves dealing with a deceased landowner's estate or a landowner who has the land for sale. The law leaves the lease unchanged in the event the death of the landlord or when the land is for sale. To be able to rent the property to a new tenant or for a new owner to take over the newly purchased parcel, the existing tenant must be properly terminated. That is, a tenant's rights are good against a decedent's estate or a new owner should the die or the leased property be sold.

Death may be unexpected. The personal representatives (executor or executrix) of the estate will be subject to the existing lease and related law. If death of a landlord is anticipated, and when property is going to be for sale, it is wise to plan ahead. Make special arrangements in a lease so that the property might be sold free of a lease. Otherwise, a buyer will buy subject to an existing lease. A tenant would expect to be properly compensated for work and expenses in a "for sale" arrangement. You may find "Legal Aspects of Indiana Farmland Leases and Federal Tax Considerations" online at: http://persephone.agcom.purdue.edu/AgCom/Pubs/EC/EC-713.pdf or by contacting the author by E-mail: harrisog@purdue.edu or by calling 765-494-4216 or use the Purdue Campus Cooperative Extension Service toll free at 1-888-398-4636 and ask for Gerald A. Harrison.

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seed to area farmers. Total fertilizer and spraying coverage exceeds 20,000 acres per year. All of their farmland is within 3 ½ miles and their fertilizer/chemical customers within 15 miles.

The managerial demands of operating two businesses with overlapping labor requirements in the spring are intense. The brothers have learned to manage these requirements with common goals, clear lines of communication, extraordinary hours of hard work, and emphasis on providing high-quality services and products with honesty and integrity.

5) Rex and Susan Kuhn Farm – Shelby County – Mini-tours on no-till crop production, specialty grain production, and laying cable at 10:15 a.m.; Interview at 11:15 a.m.

What do grain production, grain and feed trucking, sand and gravel hauling, seed sales, and laying cable have in common? They are all enterprises that have been a part of the farm experiences of Rex and Susan Kuhn. In the current business environment, many farmers are looking for alternatives. Here is a chance to learn first hand from a farm family with experience in diversifying the farm business by combining farm enterprises with off-farm enterprises. This tour stop will highlight no-till crop production, specialty grain production, and cable laying. Rex will also share his insights on the challenge of knowing when and how to change directions in one's business activities.

The Shelby County Beef Cattle Association will serve lunch at 12:15 p.m. at the Foltz Farm; area agribusinesses are sponsoring the meal; a limited supply of free lunch tickets will be available at the first three farms on the tour.

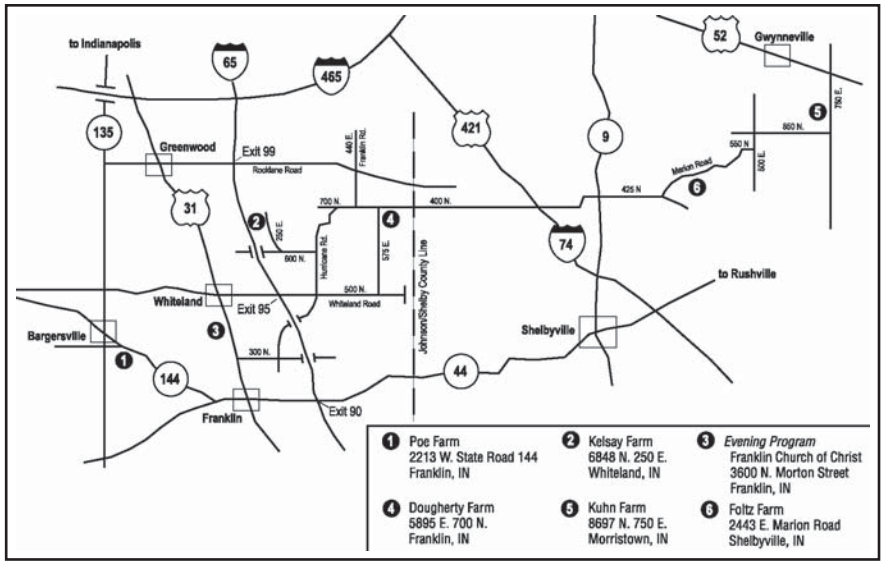
6) Foltz & Sons Farms, Inc. – Shelby County – Mini-tours on aerial photography, soil sampling, and on-farm experimentation at 1:30 p.m.; Interview at 2:30 p.m.

Foltz & Sons Farms produces corn and soybeans on about 3,300 acres in Shelby and Rush Counties with four full-time employees and two part-time workers. They combine a traditional view of family farming with up-to-date technology and business management. All of their crop acres have been contracted for the last 20 years. Currently, they produce 100% waxy corn and 100% seed soybeans. They have been using aerial photography for crop management since 1993, yield monitoring with a global positioning system (GPS) since 1995, GPS guidance since 1997, and, in 2001, they evaluated a precision anhydrous ammonia application system. Three mini-tours will help tour participants understand more about the Foltz family's experience with technology. Various types of low-cost handheld GPS equipment will be on display. Purdue staff will be on hand to answer GPS questions.

Franklin Hotels: There are several hotels to choose from in Franklin, Indiana and also to the north in Greenwood, Indiana, including the following:

- Quality Inn – 150 Lovers Lane – (317) 346-6444
- Howard Johnson – 176 Lovers Lane – (317) 738-4448

For more information about local arrangements for the farm management tour call Kimberly Carter, Purdue Extension, Johnson County (317) 736-3724) or Scott Gabbard, Purdue Extension, Shelby County (317) 392-6460.



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West Lafayette Campus Extension Specialists-

Janet Ayres, Extension Leadership specialist; Lawrence DeBoer Jr., Purdue Extension agricultural economics specialist; Bernard Engel, Agricultural and Biological Engineering; Jane Frankenberger, Agricultural and biological engineering; Gerald Harrison, Extension Economist and Member Indiana Bar; Laura Hoelscher, Editor, Agricultural Communication Service; William Hoover, Forestry and Natural Resources; Don Jones, Agricultural and Biological Engineering; Brad Lee, Agronomy; Robert McCormick, Forestry and Natural Resources; and Brian Miller, Forestry and Natural Resources.

Extension Administration-

Rick Chase, Central District Director, Indianapolis.

Indiana Farm Management Tour

Johnson and Shelby Counties
July 9 and 10, 2002

Tuesday, July 9

1) Poe Stock Farm – Johnson County – Interview at 1:00 p.m.; Mini-tours on direct meat sales and sheep management at 1:45 p.m.

The Poe Family Farm is a partnership between Stanley Poe II (Stan) and his parents. The farm consists of 300 registered Hampshire and Hampshire/Suffolk crossbred brood ewes, 70 replacement ewe lambs, 15 rams, 820 acres of cropland, 125 acres of hay, and 70 acres of pasture. Stan took over management responsibilities for the farm from his grandfather when he finished college in 1988. The farm currently sells lambs nationally for show and seed stock. And Stan has developed two direct sales markets: hay and lamb. The hay is marketed for horses, while meat from the farm is served in downtown Indianapolis restaurants and at the Indiana State Fair. The stop features a working sheepdog, the dos and don'ts of direct marketing meat, and sheep production management.

2) Kelsay Farms – Johnson County – Interview at 3:00 p.m.; Mini-tours on the milking facilities, manure processing and nutrient management systems, and feeding program at 3:45 p.m.

This fifth generation family-owned dairy farm bordering on I-65 is coping with growing urban pressure. In 1946, Joe R. Kelsay started milking 40 cows in stanchions. His only son, Merrill, joined the operation in 1970. After a period of diversification, the operation has focused on the dairy enterprise. Merrill recently brought two of his sons, Russ and Joe, into the operation. Today the farm has about 500 cows milked three times per day in a double 16 milking parlor and about 2,200 acres of crops and roughages. A manure management system, consisting of a manure processor and a two-stage lagoon system, has been developed, with the solids being used as bedding in the free stalls. With 15 or more people involved in management and operations, coordination of activities and training of employees are vital. The Kelsays have been active in local community organizations, working with neighbors to preserve a country lifestyle for everyone.

3) 7:30 p.m. Fred Whitford, Director - Purdue Pesticide Programs, "Relationships: Across the Counter and Across the Fence," Franklin Church of Christ.

Wednesday, July 10

4) Bruce and David Dougherty Farm – Johnson County – Doughnuts and milk at 7:30 a.m.; Interview at 8:00 a.m.; Mini-tours on GPS technology and a guided tour of the Dougherty's liquid fertilizer/ chemical building at 8:45 a.m.

Bruce and David Dougherty operate a 1,500-acre crop and livestock farm and feed 100 head of cattle in a 50/50 partnership. In addition, they jointly own Dougherty Fertilizer, Inc., which provides fertilizer, chemicals, spraying, and

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Gerald A. Harrison
Purdue University
Department of Agricultural Economics
1145 Krannert Building, Room 630
West Lafayette, IN 47907-1145