

VI. AGRICULTURAL ISSUES AND TRENDS

This section briefly highlights critical issues facing the Jefferson County agricultural community and provides information on key trends and influences on the agricultural industry particularly related to sustainable development for diversification. Case studies of successful 'new' model farm operations are shared as models to potentially emulate. Key resource and reference information sources are shared for further exploration and strategy options are presented for discussion. Supplemental resources, documents and websites are listed in Appendix IX.

A. Key Issues and Trends

Farm consolidation, loss of farmland due to urbanization and the declining role of high revenue producing crops, such as tobacco are among the issues that challenge the remaining working farmers in Jefferson County, Indiana.

The Indiana Extension Service reports that in southern Indiana, tobacco farmers lost nearly 70% of their allotted acreage in the later part of the 1990s. Many traditional crop and livestock producers are adding horticultural crops to their mix and are contracting with food processors for an increasing acreage of farmlands. Around the state, small and mid-size producers of corn, soybeans and swine have had to take off-farm employment. Jefferson County has followed this trend as a comparison of figures from the 1997 and 1992 indicates.

Among the key trends depicted are:

- The total number of farms and farm acreage are in decline.
- The number of full time farm operators is down by 20%.
- Farm crops and products have changed significantly.
- Agriculture incomes are rising *modestly*, but do not account for inflation.

Many of these trends are reflected statewide. The total number of farms declined 8% between 1992 and 1997, with total cropland decreasing by nearly 10%. The number of full time farmers in Indiana also decreased by 15% during that timeframe. However, Jefferson County farms are significantly smaller than the state average measured by the market value of agricultural products sold, reflecting their relatively small size. The state average per farm in 1997 was \$90,303 compared to the Jefferson County farm average of \$29,453.

**Census of Agriculture in Jefferson County, Indiana
A Comparison of 1997 and 1992**

	1997	1992	+/- change	% change
Farms: #	796	914	-118	-13%
Land in farms: acres	126,379	130,826	-4,447	-3.4%
Total cropland: acres	80,534	84,756	-4,222	-5%
Farms by size:				
1 – 9 acres	78	96	-18	-19%
10-49 acres	187	213	-26	-12.2%
50-179 acres	355	409	-54	-13.2%
180-499 acres	136	153	-17	-11%
500-999 acres	21	31	-10	-32%
1,000 acres or more	19	12	+7	+58.3%
Farm operators as principal occupation	287	358	-71	-19.8%
Market value of ag products sold	\$23.4 mil	\$22.6 mil	\$0.8 mil	+3.5%
Average per farm	\$29,453	\$24,805	+4,648	+18.7%
Cattle/calves inventory: farms	413	442	-29	-6.5%
Beef cows: # of head	6,546	5,538	+1,008	+18.2%
Milk cows:	826	1,006	-180	-18%
Hogs/pigs inventory: farms	21	58	-37	-63.7%
Hogs and pigs: #	3,669	7,763	-4,094	-52.7%
Selected crops harvested: acres				
Corn for grain/seed	11,714	17,384	-5670	-32.6%
Corn for sil/green chop	769	638	+131	+20.5%
Wheat for grain	3,247	3,583	-336	-9.3%
Soybeans for beans	33,164	29,327	+3,837	+13%
Hay	11,375	9,714	+1,661	+17%
Vegetables	38	137	-99	-72.2%

Jefferson County is also not alone in its hopes to increase the profitability of small family farms as farming communities across the U.S. are aggressively working to keep farmers in business and farmland free from development. Some observers have termed this new wave of farming "entrepreneurial agriculture" or 'new agriculture.' This new agriculture is more consumer-focused, and responds quickly and directly to an emerging set of interests, needs and demands by consumers. It is also more closely linked to domestic consumers.

Regardless of the name, innovative farmers everywhere are diversifying crops and farm activities, adding new uses, utilizing value-added tools and tactics, developing complementary enterprises and working hard to eliminate the 'middle man' from farm to consumer. To many, the entrepreneurial, niche-focused farming practices being tested and employed in this decade are far removed from *traditional* farming of years past. But they are being proven to provide a profitable living for the small farm and are enabling an increasing number of families to remain on their farms full time.

On the national and regional levels there is an abundance of interest and support for innovative agricultural practices. The Entrepreneurial Education Foundation and Center for Entrepreneurial Leadership, Kauffman Foundation, along with a number of other major non-profit, philanthropic foundations have a strong interest in advancing entrepreneurial agriculture opportunities. They have expressed an interest in working with USDA agencies to enhance and employ entrepreneurial training to increase entrepreneurial activity and success in the agri-related sectors.

The Cooperative Extension System has expanded programming in entrepreneurial development in recent years. Successful ventures have been initiated under the Communities in Economic Transition Initiative. The new Managing Change in Agricultural Initiative supports expanded efforts in entrepreneurial development in an effort to support transition farming/ranching operations and the 'new age' agricultural economy of no subsidies and global markets.

One cutting edge program offered in the State of Indiana is a national entrepreneurial training center located at Ball State University and supported by the Entrepreneurial Education Foundation's "FASTTRAC" business development curriculum. The initiative is providing training to rural agriculture audiences via distance education instruction. As part of this effort, community entrepreneurial education networks are being designed to utilize bankers, accountants, attorneys, farm consultants, and others from private sector resources. The goal is to aid in making agri-development a community effort versus a farm interest effort. Low resource producers will gain access to the knowledge and insights of the business professionals in the community who serve as instructors and mentors in the network. These professionals will also gain insights into challenges and opportunities of the smaller scale producers in the region.

The remainder of this section will review innovative practices and case studies being successfully applied throughout the U.S. agriculture industry. The message that repeats itself throughout the stories and illustrations below is that farming has changed dramatically. Farmers will succeed only by embracing change and turning old assumptions on end. “The bottom line is that 10 acres, intensively managed to produce high valued products, may generate more profits than 1,000 acres used to produce bulk agricultural commodities.” Dr. John Ikerd, University of Missouri professor emeritus of agricultural economics.

B. Entrepreneurial Agriculture: Examples and Success Stories

Community Supported Agriculture: Investing in Farm Futures

Community supported agriculture (CSA) is a concept that took form in the early 1980s. It works in such a way that individual community members actually buy shares in local farms in exchange for some guarantee of fresh farm produce (and sometimes other products) during harvest season. Farmers benefit in particular by getting cash in the winter when they need it to prepare for the growing season. In the last twenty years, thousands of CSAs have developed around the country. Below are a few examples of how they work.

Example

In northern Michigan’s Emmet County, seven farms joined together during the 2001 growing season to grow food for 150 families in a ‘community supported agriculture’ project coordinated by the Wagbo Peace Center, a small farm and land trust.

The families buy shares of the seven farms’ products during the winter (when farmers need the cash) and then pick up everything from corn to flowers and milk and vegetables on a weekly basis during the season. They get to know the farm families and participate in the harvest as well.

Example

In northwest Michigan, 23 families invest \$275 each winter in Five Springs Farm of Bear Lake. In return they receive a two-person weekly share of fresh vegetables from April through October.

For many in Community Supported Agriculture programs, the benefits are more than just farm fresh produce. The advantages extend to participating in the rural farm experience, at least vicariously and knowing that they are choosing

to help preserve a vital part of our social heritage - the family farm. As one CSA member noted, *“Being a CSA member is a joy for busy people. It’s like having your own organic garden without the work. Excellent value, made easy.”*

Agri-Tourism

Like direct marketing and CSAs, agri-tourism facilitates interaction and shared values between the consumer and the farm community. Agricultural tourism takes many forms, ranging from farm and roadside stands to farm stays, where visitors may stay for several days. Other examples include: educational tours, dude ranches, agricultural heritage festivals, tasting events, ag museums, county fairs, commodity festivals, (such as Corn Festivals, Dairy Festivals, etc.) and a host of other events and opportunities for consumers and producers to enjoy a win-win experience.

The University of California and the Agri-tourism Workgroup of the Oregon Department of Agriculture identified the following sample list of agriculture and nature-based visitor activities.

POTENTIAL ENTERPRISES FOR AG & NATURE TOURISM

Agriculture Food & Craft Shows	Habitat Improvement Projects
Animal Feeding	Harvest Festivals
Archery Range	Hay Rides / Sleigh Rides
Arrowhead Hunting / Rock Collecting	Hiking / Cave Exploring
Barn Dances (Square Dancing, etc.)	Historical Museums and Displays (Ag History, Machinery, etc.)
Bed & Breakfast (Rural & Historical)	Horseback Riding
Bird Watching & Wildlife Viewing	Hunting Dog Training & Competition
Boating & Canoeing	Off-Road Motorcycling, ATV, Mountain Biking
Camping / Picnicking	Pack Trips
Children's Camp (Summer or Winter)	Petting Zoo
Corporate picnics	Photography / Painting
Cross-country Skiing	Ranch Skills (horseshoeing, leatherwork, camp cooking, horse

	training, etc.)
Educational or Technical Tours	Roadside Stands & Markets
Elder Hostel	Rock Climbing
Family Reunions	Rodeo
Farm or Ranch Work Experience (roundup, haying, fencing, calving, cutting wood etc.)	Self-Guided Driving Tours
Fee-Hunting	School & Educational Tours and Activities
Fee-Fishing (Ice Fishing in Winter)	Snowmobiling
Floral Arrangements	Swimming
Flower Shows or Festivals	Tee Pee Building
Fly Fishing and Tying Clinics	Trap & Skeet Shooting
Food Festivals	Tubing & Rafting
Gardens (flowers, greenery, herbs, dried flowers)	U-Pick Operations
Guided Crop Tours	Wagon Trains
Guiding and Outfitting	Wilderness Experiences

CASE STUDY: Fruit Loop Tour, Hood River, Oregon

Kay White, Director
www.hoodriverfruitloop.com
 800 366 3530

Background

In 1993, the Hood River Valley Fruit Loop was established to promote sustainable agricultural diversity in Hood River County. Over time, it has become well known for bringing diverse farm entities together with the public.

Approximately 45 miles long, the Fruit Loop, a self-led driving tour, leads visitors through the valley's orchards, forests, farmlands and friendly communities.

- All the people on the fruit loop sell direct to the public. One-half to two-thirds of members are big commercial growers and the remaining are small.
- There are 25 farmers in all.
- The farms experienced a 40% increase in sales last year attributable to the tour route.
- Kay White commented, "What we're trying to do is keep our farms ALIVE....this is their cash crop....they are staying alive through this."
- For nine years, this effort was an all-volunteer one. In just the last year, the director (and long time volunteer) became the first paid staff. They started producing a map that showed the farms and hosting small events. The Hood River Chamber had sponsored a small Pear and Wine Festival and cooking event and eventually asked the Fruit Loop Tour group to take this project on. Today, it is a large and significant event, marketed to national media.
- ***The Fruit Loop Cookbook*** profiles each of the participating member farms with a page written about each farm, followed by their families' favorite recipes. The cookbook has a fruit theme, with over 130 recipes featuring apples, pears, blueberries, cherries and other products grown or raised in the Hood River valley. The book also includes an interesting chapter on the history of agriculture in the Hood River Valley.
- Fruit loop agri-tourism offerings:
 - Group tours
 - Special events throughout growing season
 - Visitor packages—tours, lodging, food
 - Travel packages
 - Festival: May 17 – 19th
 - Fruit Loop Cookbook
 - Pearandwine website

Finances

The organization and staff are financed through the cookbook sales and through the Pear and Wine Festival. Grant writing activities are very aggressive. Grants have been obtained mostly from the Oregon Department of Agriculture and through the Oregon Tourism Commission.

Keys to Success

- "It takes somebody that is the catalyst to make it happen"
- Most grants won't pay for salary; have to be diversified.
- "Commitment"
- A person who can network!
- "In this day and age, most people in a community historically dependent on agri business understand what's happening to the small farm and want to help—give people an opportunity to help themselves you can build a network and make it happen."

EXAMPLE: Corn Mazes

The Purdue Boiler Mazer was a five-acre cornfield maze designed especially for the 2001 Farm Progress Show, which was held in Tippecanoe County, Indiana on September 25-27, 2001. The maze featured miles of trails to explore and also contained educational exhibits and crop trivia challenges at various locations within the maze. Maze travelers were able to navigate through the maze with the use of Global Positioning System (GPS) satellite receivers, handheld computers and navigation software programs.

Other core maze examples follow:

- A-Maze-in-Grace – A cornfield maze near Cloverdale, Indiana, sponsored by Grace Lutheran Church.
- A-maze-ing Farm Harvest – A cornfield maze near Sparta, Michigan.
- Amazing Maize Maze – Conceived by the American Maze Company whose objective is to prosper, promote the art of the maze and provide an opportunity for additional farm income and/or community fundraising events for qualified and like-minded individuals and institutions. The company specializes in creating mazes in maize (corn) fields. Other examples of their mazes are: "Cornelius, The Cobasaurus", Annville, PA, Sir Francis Drake's "The Golden Hinde", Shippensburg, PA, Lincoln-Mercury Amazing Maize Maze, Dearborn, MI and "The Locomotive Labyrinth", in Paradise, PA."
- Cherry-Crest Farm Maze – "The 6th Annual (2001) Amazing Maize Maze features several aspects of a farm plus a spectacular "Rooster Crowing at the Sun" floral artwork created out of 16,000 plants."
- Maize Adventure – A ten-acre cornfield maze near High Point, North Carolina.
- Maize Corn Mazes in Indiana – Ten acres of corn are cut into a maze of a train (Roanoke) and a clown (Peru).
- Maize Mazes by Adrian Fisher – "Adrian Fisher may be the king of maize maze designers! For 1999, he has been involved in 24 maize maze designs in the United States, Canada, England, Switzerland France, Spain and Australia."

- [McMaze Indiana](#) - A cornfield maze located at Dougherty Orchards, near Cambridge City, in east central Indiana.
- [Meadows Corn Maze](#) - "Just over the Pitt River Bridge in beautiful Pitt Meadows, B.C., an aMAZEing adventure awaits you!! The popularity of corn mazes is a phenomenon that has spread from the eastern United States to British Columbia."
- [Sever's Corn Maze](#) - A cornfield maze near Shakopee, Minnesota.
- [The Farm](#) - Designed as a giant map of Washington State.
- [Tom's Maze](#) - An eight-acre cornfield maze near Germantown, Ohio.

Corn Maze Resources for getting started include:

- [Cornfield Maze](#) - Claims to be the world's largest corn maze company.
- [Corn Maze Network](#) - An information database on all known cornfield mazes.
- [Dynamic Maze Designs](#) - Custom corn maze designs and landscaping.
- [Event Management Company](#) - Producers of the Wisconsin CornMaze and organizers of corn maze seminars designed to assist you in designing and creating cornfield mazes.
- [Indiana Corn Maze Site](#) - Several mazes created in Elkhart County, Indiana.
- [Great Adventure Corn Maze Business Opportunities](#) - Corn Maze Designs, Onsite GPS Mapping, Onsite Corn Maze Cutting, Planning & Support, Corn Maze Supplies
- [Example of a Great Adventure Maze](#)
 - Mullin Farm, Inc., 10478 N County Road, 900 E Brownsburg, IN 46112
 - Marketing theme: "Let our Family Show Your Family A Good Time"
 - Maze opens in September running through October 2001.
 - Admission: 12 & older - \$5.00 Children under 12 FREE Included with admission:
 - 11-acre Corn Maze
 - Hay Ride to Pumpkin Path
 - Petting Farm
 - U-Pick Pumpkins - \$0 .25 per pound
 - Spooky Barn
 - Johnny Appleseed
 - www.mullinfarm.com

Farmer's Markets

The U.S. Department of Agriculture estimates that the number of farmer's markets has increased 63% from 1994 to 2000. Sales at the over 3,000 markets are estimated to exceed \$1 billion annually. In the year 2000, Indiana was home to 57 markets, compared to 129 in Illinois and 72 in Ohio. The markets are a good example of new models for agri-business that benefit consumers and producers. Informed consumers want to know where their food comes from and who grows it. Farmer's benefit by charging retail prices and eliminating the middleman. Communities gain by protecting farmland and boosting downtown districts.



Two Oregon agricultural specialists have studied the economic impacts of farmer's markets. Larry Lev, an Oregon State University (OSU) Extension agricultural economist noticed in his travels to France, that the French are willing to seek out farmers' markets and pay premium prices for choice produce and other goods. They enjoy both the quality and the market experience. So Lev asked, "Do we in Oregon have the types of producers and consumers who can revitalize this seemingly old-fashioned marketing system?"

Garry Stephenson, an OSU Extension small farms agent, also was interested in finding whether better marketing could help these smaller agricultural operations improve their farmers' market sales. *"Back in 2000, I met with groups of small farmers to get their input on what issues they thought were critical. They told me they knew where to get the information on pests, diseases and other problems. But their greatest need was marketing their products."*

Lev and Stephenson surveyed five farmers markets on a single day in the summer 2000. The markets represented three urban and two smaller communities. Average attendance on the day surveyed was 2,421. Average spending per household was \$14.38. At least 25% of those surveyed said they would have bought more, but couldn't carry the load. Impacts on downtown are also very positive, with an estimated 20% or higher visiting the market also doing other shopping in the area.

Lev and Stephenson have continued to study consumer behavior at farmer's markets with the results indicating that strong support for local agriculture cuts across income and educational categories as well as community boundaries. While consumers clearly feel that local products are of superior quality, this wasn't the only reason they made their purchases. They also wanted to use their dollars to directly support local farmers and the local economy. Age seemed to be the biggest factor in the willingness of consumers to buy local products; younger adults were the least likely to make

the effort. Lev said the bottom line is clear: *"Farmers can increase their return significantly at markets and consumers become loyal to their local farmers creating a win-win experience."*

CASE STUDY: Beaverton Farmer's Market/suburban Portland, Oregon

www.beavertonfarmersmarket.com

503 643-5345

Background

- Oregon's largest farmer's market with 160 vending stalls and 300,000 visitors/year
- 15th season with fresh produce, snacks and entertainment.
- Open: 9 AM to 1:30 PM Saturdays May 11 through October. A smaller market is open on Wednesdays, 4-7 PM from July 3 through September.
- Paid market manager.
- Market focuses on variety and quality. Vendors must be there on a weekly basis. Market has worked to keep an agricultural focus and has limited the number of prepared food vendors. No crafts, soaps, etc. Quality entertainment is available.
- Manager says: "We are very picky. It has to be authentic and made from scratch."

Results

- Participating farmers report the market is extremely profitable as demonstrated by the fact that reserved spots make up 85% to 90%. A vendor has to wait three years to get the same reserved spot at the market.
- The market itself has become key to farmers' marketing.
- On the web site, all 200 growers/vendors are listed; a vendor application is available; newsletter, map with directions, etc.
- 'Great traffic' keeps farmers coming back and as one farmer commented, "Farmer's markets have given farmers more financial freedom. It's just more secure than selling to a grocery chain."

Commercial Kitchens

In addition to tapping farmer's markets outlets, some crop farmers are adding value to their operations by packaging their own products or creating new ones at commercial kitchens.

CASE STUDY: Columbia Gorge Community College/ Commercial Kitchen/Business Incubator

The Dalles, Oregon

Bob Cole, Director

541-298-3117

Background

- Kitchen has operated for three years, hosted by the Columbia Gorge Community College. Refurbished an old building.
- It may be unique in that it truly views its activities as a business incubator and offers a 'soup to nuts' program for start-up companies.
- Incubator is connected to Small Business Development Center and enables users to get help with business planning, marketing, etc.
- Kitchen users must have one of the following: commercial kitchen license, restaurant license or bakery license.
- Cooking classes are offered to public.
- Had a part time kitchen manager up until a few months ago – an important position for overall operations management.

Finances

- The kitchen charges users \$10/hour. It does not operate on a break-even basis, but is subsidized by the college as an educational operation and through the SBDC.
- The philosophy is: "We must give people opportunity and a controlled environment otherwise we're not supporting innovation."
- Ideally, have 15 steady users per month. This would allow for a full time kitchen manager who can also market the program.
- Kitchen gets reimbursed for every hour of business counseling provided. Bob Cole says: "The state is committed to promoting entrepreneurship. We are almost requiring that everyone go through counseling."
- Through a new program, Small Business Management Program, the kitchen can gain \$2,000-3,000 for each kitchen user.
- Significant grant funding got the kitchen going, approximately \$550,000 total.
- Funds are generated from the U.S. Forest Service, the National Scenic Area Fund, the U.S. Department of Agriculture and the State Economic and Community Development Department.

Results

- Mixed results; presently the kitchen doesn't generate enough revenue to support hiring a kitchen manager. Unable to use grant funds to pay for personnel.
- Many, many people interested in producing gourmet foods; most have very little biz experience.
- After doing business plans, many discover they don't have a business but an expensive hobby. As a consequence, they quit.
- Recently the kitchen lost its biggest user (River Bend Store in Hood River) that was making 100 pies a day. However, people are coming from a great distances due to the cost savings and other advantages the kitchen offers. Bob Cole commented: *"One challenge that all our specialty food product people are facing is 'how do you compete with Smuckers?' Very hard to get shelf space @ grocery stores – big guys pay for their shelf space. Major competition is controlling the market...how do you grab any part of the market?"*
- Another challenge noted was that individuals' interest in producing specialty foods is often short-lived! *"Grandma's fudge is fun to make at Christmas, but very tedious to make on a daily basis."*

Keys to Success

- Must have a champion or a sponsor! (e.g., college, city government)
- Ongoing marketing of the facility: send teams to tradeshow and farmer's markets.
- Locate kitchens away from large competition so there is no perception of 'subsidizing businesses.'

Value Added/Diversification

Examples of traditional farm operations diversifying through the addition of products, services or innovative commercial operations are abundant in the literature of agricultural entrepreneurship. This section highlights a few more examples that might be applied in Jefferson County.

CASE STUDY: Joe Huber Family Farm and Restaurant
Starlight, Indiana
812-923-5597

Background

- 7th generation of farming initiated the diversification of farm operations when a restaurant was added adjacent to the farm in 1983.
- This success story continues to appear in agricultural write-ups, even after 20 years.

- Farm is 360 acres with 48 different fruits and vegetables.
- 15 miles NW of downtown Louisville.
- Message that is sent is: *“Come and experience a taste of the country where everyone is treated like family.”*
- Open year round.

What’s Offered

- Farm market and gift shop/local crafts
- Farm product gift baskets
- Able to shop online
- Group tours and discounts
- Special event – year round
- Special recreation for children
- Day lily gardens
- Winery

Results

- Restaurant serves over 6,000 meals a week.
- Almost 20 years in business.

Keys to Success

- Multiple activities and outlets to sell their product.
- Continual change and innovation.

CASE STUDY: Lopez Community Land Trust

San Juan County, Washington, Mobile Processing Unit

Bruce Dunlop, organizer, designer and member of local Farmer’s Cooperative, 360-468-4620

Background:

Bruce summarized the philosophy and impetus of local farmers who pushed for the mobile processing unit:

“Historically, you are at the mercy of price setters at auction. Prices are cyclical. The farmer’s percentage is pretty low. If you’re selling an all natural or grass fed, you are losing the value in this process. Farmers are changing from just producing their product to focusing on marketing as well. If there were USDA inspection slaughter/processing plants in every county—we wouldn’t have dreamed this up. But, for many farmers, it is very inconvenient and time draining to drive to inspectors. We wanted to find a more sustainable way.”

The drive for a mobile unit was started years ago by a group of livestock producers trying to find a better way. It took about a year for Bruce to design the unit and another year to build it. The Land Trust owns the unit. The San Juan farmer’s cooperative is in the process of leasing the unit from the land trust. The member farmers who want this service are really supporting it financially. There are 20 members right now. Anyone in San Juan County who wants it can use it.

This is a pilot project– the first of its kind. Concern for a long while was whether the unit would get USDA approval. Custom slaughter has to be through USDA, but the standards are the same as for other slaughter. USDA accepted the argument that there would be a learning curve. The unit has undergone testing under USDA inspection for on-farm processing of beef, hogs, lamb and goats. The unit was approved in January 2002.

The unit will deliver inspected carcasses to approved cut and wrap facilities in the area, providing livestock producers with additional options for marketing their meat products. It will also provide retail sales of locally grown meat ‘by the cut’ to consumers who want to purchase local meat products. Now the processing unit is operating on a regular schedule every other week, a few days a week. They are gradually figuring out how to handle every animal.

Bruce believes there will be at least another unit built three years from now. The issue is not ‘technology,’ but rather cost and sponsorship. The cost of the entire project from design and construction through testing was \$150,000.

Marketing Innovations

- Agricultural Cooperatives help members gain market power through joint marketing, processing, bargaining and purchasing supplies and services. It is viewed as an option for small producers to consider to add more value to their products and capture more income. The cooperative business structure applied to agriculture dates back to Franklin Roosevelt who championed co-ops in an effort to bring services to rural America. Today, more than 4,000 agricultural co-ops operate in the US with a total net income of nearly \$1.7 billion, according to the USDA.

Although they vary in structure and purpose, the most common types of agricultural co-ops are marketing, farm supply or service co-ops. For example, marketing co-ops arrange to assemble, pack, process and sell members' products in domestic and foreign markets. Farm supply co-ops purchase in bulk services and products like fertilizers, fuel, feed and crop protectants; obtain volume discounts and pass savings on to members. Machinery pools illustrate how producers co-operate to pool machine resources and share in the use of machines for fieldwork and harvesting.

Example

The Hermitage Tomato Cooperative in Hermitage, AR was formed in 1996 by 15 farmer members, many on them on the verge of bankruptcy. The impetus was that most of the small farmers lacked the marketing clout and economies of scale to do business with big buyers. Backed by federal loan guarantees, the co-op now provides 100 jobs in Bradley County, AR, as a tomato supplier for Burger King.

Example

Consolidation and the low profit margins for pork have led small and medium-sized hog producers in Missouri to create to a cooperative marketing venture. Patchwork Family Farms, a marketing cooperative supported by the Missouri Rural Crisis Center, rewards 15 pork producers for their dedication to "sustainable" and "humane" growing standards with a fair price, regardless of the market. The market for this Missouri pork is hot. The co-op has seen a doubling in sales volume each year since it was founded in 1994. In 2000, Patchwork earned \$250,000 in gross sales.

Patchwork's expansion has been steady. Originally, the co-op sold to three restaurants. Today, it sells pork to about 40 restaurants, to grocery stores, at community events and directly from the co-op's Columbia office. "It has taken a lot of knocking on doors," said Lindsay Howerton, Patchwork marketing coordinator. "We have tremendous success with the media. I'll send out a press release and suddenly I'll have three TV stations in our yard."

Howerton attributes the intense interest to the co-op's unique pricing structure – 43 cents per pound or 15% over market price – and dedication to raising pork not in confinement, without hormones and without continuous feeding of antibiotics. "We've stepped out of the system," Howerton said, "and are being extremely successful at it."

In 2000, Patchwork producers received \$50,000 more than if they had sold their hogs on the open market. Producers saw these payments up front, not after the product was sold. Ovid and Mary Jo Lyon, Patchwork producers for several years, have seen the economic benefits.

"Patchwork supports independent family farmers; we just couldn't continue to raise hogs without this project," said Mary Jo Lyon. "Patchwork gives my family a way to produce hogs in the same way we always have, out in the open with plenty of sunshine, and we get a fair price for our hogs."

Other hog producers in Missouri may have an opportunity to tap niche markets, thanks to A Family Farm Pork Cooperative, which has researched consumer support for the concept. What began as a small project blossomed to serve producers in 20 counties with a pork-slaughtering plant and a cooperative marketing plan, initially in the St. Louis area.

Feasibility studies for value-added pork "have shown this will be a good venture," said Russell Kremer, president of the Missouri Farmers Union and co-op director, who received a SARE grant to explore alternative ways to distribute Missouri-grown food. Producers interested in the slaughtering plant have offered some 250,000 hogs per year.

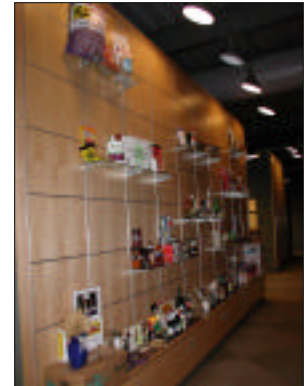
As in many other instances of successful farm diversification, a critical success factor is sound, aggressive marketing with a clear message. Beyond Missouri, hog producers are developing a niche markets for their pork by emphasizing the animal welfare benefits or environmentally friendly aspects of their systems. A survey of Colorado, Utah and New Mexico grocery shoppers determined that many – especially high-income frequent pork consumers and those concerned about growth hormones and antibiotic use – are willing to pay a premium. "These target consumers are very concerned about the production practices utilized by the producers," writes Jennifer Grannis and Dawn Thilmany of Colorado State University, who surveyed 2,200 shoppers and analyzed 1,400 responses in 1999. "A highly visible and descriptive label that highlights production practices must be part of the packaging."

Research funded by the Leopold Center at Ames, Iowa, found that consumers would pay nearly \$1 more for a package of pork chops labeled as produced under an environmentally friendly alternative system. (The study defined the "most environmentally raised pork product" as being produced in a way that results in 80% to 90% odor abatement and 40% to 50% reduction in surface water pollution.) The study by ISU economics professor

James Kliebenstein surveyed randomly selected consumers in four diverse market areas. Of those, 62% said they would pay a premium for pork raised with such a guarantee.

- Food Innovation Center, Portland, Oregon was formed in 1996 by the Oregon Agriculture Department with the primary goal to match buyers and sellers/farmers. Oregon produces over 200 specialty products. For producers, the most critical concern is market access, particularly in light of grocery store consolidations, growing agricultural imports and severe competition for shelf space.

The Food Innovation Center offers a variety of services and programs related to: marketing and packaging, export trading, public relations, food testing, government relations, contacts with suppliers/providers/buyers, trade show exhibiting and other needs. Farmers can visit the center for special educational programs, technical assistance from staff or use of the on-site laboratory for export and related product testing.



Natural/Organic Foods

One particular agricultural niche market that is 'exploding', according to one industry observer at the Supermarket Industry Convention in Chicago, May 2002, is natural and organic foods. Industry trend watchers note that profitability can be many times over the standard profits for the same conventional grown products.

While traders were bidding corn and soybeans at low levels across town at the Chicago Board of Trade, food buyers at the Supermarket Industry Convention were contributing to the growing national trend of natural foods. Originally more of a specialty market, natural/ organic food has exploded into the fastest growing segment of the food industry, according to Barrington, IL based Pure Farms. The products range from fruits and vegetables to natural meats like beef and chicken. "The natural segment is the fastest growing trend for supermarkets. People are definitely much more aware of what's going into all of their food products," reported one industry observer.

Over the past five years, this category has grown at an average of more than 12% per year, outpacing conventional supermarket categories. Some natural product producers claim a growing market share. Maverick Ranch of Colorado began marketing its natural meat products in 1985 to one health food store. It is now in 8% of the nation's grocery stores.

Farmland Protection Programs

The Jefferson County farm community has repeatedly expressed concern of the rapid development of the county's prime agricultural land. Nationwide, public support has been growing for government farmland protection programs. Behind this support is the perception that farmland produces more for society than food and fiber, including scenic views, environmental benefits and an agrarian heritage. The U.S. Department of Agriculture notes that designing and implementing a farmland protection program that is cost-effective and that provides the greatest possible benefits requires an understanding of public preferences for particular rural amenities, as well as which of these amenities is best provided through farmland preservation.

Many communities have successfully organized to stop farmland encroachment. Montgomery County, Maryland – though less than 15 miles from the Capital Beltway of Washington, DC – is viewed as the single most successful program in the nation. In short, the county planning board established a 90,000-acre agricultural reserve where the residential density was set at 1 house per 25 acres. To offset shrinking land values caused by the new zoning (a device known as transferable development rights) was established allowing farmers to sell the rights from their land, calculated on the basis of prior zoning, to developers for use in county 'receiving areas' where normal residential densities were increased accordingly. The agricultural plan was passed in 1980 and is still going strong. One local planner, Judy Daniel, commented that: "The longer we have the program, the deeper is the commitment to retain it and the more people recognize its uniqueness."

The State of Indiana has also begun addressing farmland protection issues. The Indiana Land Resources Council recently released The Hoosier Farmland Preservation Task Force Report to the Governor. Among its findings are:

- Indiana ranks second nationally in having the highest percentage of prime farmland, approximately 58%.
- Much of Indiana's land area contains over 78% prime farmland according to USDA-Natural Resources Conservation Service. (National Resources Inventory)
- Indiana is 38th in size, and is sometimes overlooked in terms of production agriculture, but Indiana ranks 14th nationally in the production of all agricultural commodities.
- Indiana's non-prime farmland is productive and lends itself to support livestock systems.

A synopsis of the Task Force's recommendations follows.

1. Establish an Indiana Land Resources Council.
2. Require Farmland Impact Assessments from IDOC and INDOT.
3. Adopt Local Ordinances that Encourage Greater Housing Density.
4. Enact Enabling Legislation Allowing Local Areas to Voluntarily Adopt the Following Programs: Agricultural Protection Zoning, Agricultural District Programs, Purchase of Development Rights and Transfer of Development Rights.
5. Foster and Enhance Urban Revitalization Programs.
6. Protect the Right to Farm and Private Property Rights.
7. Develop Incentives to Encourage Development Where Infrastructure is in Place.
8. Update Land Classification Using Geographical Information Systems (GIS).
9. Encourage Development Along Existing Sewer Lines.

The Indiana Land Resources Council is already hard at work. Its purpose is to collect information and provide assistance and advice to local governments regarding land use strategies and issues across the state. The Indiana General Assembly identified several goals for the council:

1. Provide technical assistance and information about land use strategies.
2. Facilitate collaboration among commonly affected state, county and local government units.
3. Compile and maintain a land use planning information library, both hard copy and electronic, that includes current data on land resources in Indiana.
4. Establish or coordinate educational programs for governmental units, nongovernmental units, and the public – with special consideration for local planning commission members and county commissioners.
5. Provide counties and local communities conducting land use planning with access to technical and legal assistance through a referral service.
6. Provide information to local authorities on model ordinances for programs and techniques on land use.
7. Obtain grants, assist counties and local communities in locating additional funding sources for planning projects.
8. Make recommendations to the legislature and other governmental bodies concerning land resources.
9. Advise the legislature, when requested, on proposals relating to land resources.

For more information on the ILRC, call (317) 234-5262, or visit www.in.gov/oca/ilrc.