Local Foods - Growing Opportunity for Kentucky Agriculture

“Local” – referring to the source of origin for food products, is having an increasingly large and positive impact on every dimension of the food industry. A recent study (report forthcoming) assessed current and expected purchasing of locally-produced food in Fayette County. At over $10 million in purchasing for 2014, demand for local products is currently strong and rapidly growing. Restaurants and direct-to-consumer purchasing (e.g. CSAs, farmers markets) represent the two largest market channels for the purchase of local products with two-thirds of all local purchasing. The other one-third was bought by schools, grocery stores, and hotels. Most of these buyers are resellers – like restaurants buying local products and then serving them to diners. Only 22% of direct-to-consumer purchases were by final users/households.

The evidence shows that “local” is a meaningful term to consumers (it really does have an impact on buying behavior) – but takes different forms depending on the buyer, consumer, or researcher. Several studies have investigated consumers’ perceptions of the term. Research findings indicate diverse opinions. Some buyers consider local to be within a few miles, while others will place foods in the local designation from as far as several hundred miles. Sometime the term is associated with a geographical designation, such as Kentucky grown. The ambiguity hints that buyers may not have a well-developed rationale for buying local or that they may hold many different reasons for their preference.

Consumers care about “local” for a variety of reasons. Some see local as fresher, since it implies that the food was produced closer to the buyer. Others give preference to “local” to reduce fuel used in transportation. And some consumers want to use their purchases to have a positive impact on farmers that they may know, or at least live close by. Critics may question the authenticity of some of these reasons, but regardless, these preferences are driving markets.

Economists have differing views on the “local” movement. Some prefer to let markets work without designating products according to place of origin. But others see benefits – improving profitability of regional farm operations, supporting a farm economy which may be more responsive because market signals are more clearly transmitted, enhancing the tax base of local economies, creating jobs, and boosting the whole local economy as incomes have a multiplier impact.

Does the local emphasis matter for farmers? Yes, of course depending on the types of crops grown and markets. One reason it matters is that the local label differentiates products from competitors’. In addition, the demand for “local” is growing. So by positioning products in the local category, long term growth can be enhanced and opportunities for new enterprises created. While vegetables dominate the local category by volume, other farm products are also benefiting. Proteins – beef, dairy, pork, chicken, lamb and goat - are strong farm enterprises in Kentucky, but a vast proportion move through large commercial channels beyond the region. Kentucky has a created a strong meat processing industry with the potential to provide access for animal producers to local markets. With the prices of meats at much higher levels than produce, the protein category can provide a big boost to economic growth. Even row crop commodities have some potential benefit from increasing emphasis on local. Specialized crops can serve niche markets (like corn for the bourbon industry, high protein wheat for bread, traditional soft wheat for “local” biscuits) at surprisingly high prices.

With expected annual growth rates of 5 to 10%, the local foods sector has the potential to build on the significant base that already exists. Many production and processing challenges exist to create long term growth, but the benefits suggest that overcoming them would contribute to a more broadly based regional economy.

Lee Meyer, lee.meyer@uky.edu
Jairus Rossi, jairusrossi@uky.edu
Determining the Economic Value of Poultry Litter

As the poultry industry continues to grow across Kentucky, so does the opportunity to use poultry litter. Litter can be used as a nutrient source in crop and pasture production as well as provide additional income for poultry producers from the sale of litter. With this opportunity begs the question “what is the value of poultry litter?” The answer to this question depends on numerous factors such as the nutrient content of the litter, market price for commercial fertilizer, when the litter is applied, nutrient availability, cost of transport/delivery, and individual soil test data, just to name a few. Let's begin to answer this question by addressing the first factor, nutrient content.

Understanding the nutrient content of a ton of poultry litter that you are purchasing/selling is critical. How are you supposed to determine the value of litter if you don’t know its content? That is why sampling poultry litter for nutrient content is so important and is the first step at determining the value. Dr. Edwin Ritchey, Extension Specialist in the Department of Plant and Soil Science at the University of Kentucky, has reviewed over 700 samples of litter across the state and one thing is clear, there is significant variability in nutrient content. What does this mean? The value of poultry litter will vary and there are risks involved from not testing for nutrient content.

The table below summarizes the samples reviewed by Dr. Ritchey and the range in actual nutrient content is significant. For example, actual nitrogen ranges from 7 lbs per ton (dry) to 186 lbs per ton (dry). However, not all of the nutrients identified during testing will be available to the crop like traditional commercial fertilizer. Nutrient loss will occur based on the timing of application, method of application and soil conditions. Nitrogen has the potential for significant loss after application due to ammonia volatilization, denitrification and/or leaching.

Estimates for nutrient availability to the crop can be found in the University of Kentucky’s AGR-146 Using Animal Manures as Nutrient Sources. Using the nutrient availability in AGR-146 and today’s fertilizer prices, the value per ton (before delivery and application) are calculated and presented in the table. With this wide range in value also comes risk. Of the samples collected by Dr. Richey, 35% had a value less than $40/ton (before delivery and application).

However, the value of litter can vary from the above values. The assumed availability of nutrients will change based on when the litter is applied (spring vs. fall application), how it is applied (incorporated vs. non-incorporated) and individual soil test data. This coupled with transportation/delivery costs, application costs, and the variability in fertilizer prices all contribute to the value of poultry litter varying on a site specific basis and year to year.

To help individuals address these factors, look forward to an upcoming extension program this winter by Dr. Jordan Shockley, Dr. Edwin Ritchey and Dr. Josh McGrath and that will help you with litter management and determine the economic value of poultry litter.

Jordan Shockley, Jordan.shockley@uky.edu

Table: Actual nutrient content and value (before delivery and application) of poultry litter sampled across Kentucky.

<table>
<thead>
<tr>
<th></th>
<th>Nitrogen (lbs/ton)</th>
<th>Phosphorus (lbs/ton)</th>
<th>Potassium (lbs/ton)</th>
<th>Value ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>50</td>
<td>56</td>
<td>47</td>
<td>$43</td>
</tr>
<tr>
<td>Minimum</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>$3</td>
</tr>
<tr>
<td>Maximum</td>
<td>186</td>
<td>124</td>
<td>109</td>
<td>$108</td>
</tr>
</tbody>
</table>

- Assumed 35% N, 80% P2O5, and 100% K2O nutrient availability to the crop.
- Fertilizer prices used: $0.41/lb N, $0.43/lb P2O5, and $0.35/lb K2O
2015 is shaping up to be a financially challenging year for agriculture producers. The next few years are projected to be unprofitable for grain farms. In the previous years, that were so gainful, most producers opted to defer their tax liability by carrying over their grain inventory, prepaying for inputs and/or purchasing capital items. This means that even though it might be an unprofitable year for the 2015 crop, the tax liability from the previous years’ remains a problem.

On top of this, the main thing farm banks and financial institutions want producers to do is to increase liquidity. That means producers need to retain as much cash as they can in this type of economic environment. Remember, cash is king. With that being said, now is not a good time to be paying cash out for income taxes. What is a producer to do under these circumstances?

For one, it is almost for certain that Congress and the President are going to reinstate the higher rate of Section 179 election. Farm equipment purchases up to $500,000 could be deducted in the year placed in service with phase out beginning at $2,000,000 of overall capital items. Also, bonus depreciation of 50% of new purchases should return. Producers need to keep in mind this has not been passed into law yet. If Congress and the President do not update the tax code, the Section 179 deduction will remain at $25,000 for 2015 and there will not be any bonus depreciation. Also, producers should not purchase equipment or improvements out of their line of credit, because this would reduce their liquidity.

Another way producers can manage their tax liability is to defer income. If grain has been delivered to elevators, deferred grain contracts must be written so the producer does not have access to the money until after the first of the year.

Third, producers can prepay farm expenses. If a taxpayer uses the cash method of accounting to report income and expenses, the deduction for prepaid farm supplies in the year you pay for them may be limited to 50% of your other deductible farm expenses for the year (all Schedule F deductions except prepaid farm supplies).

Producers should spend some time with their specialist or tax preparer to make sure they know where they are on these tax situations. It is better to plan before the end of the year versus after the year is closed.

Rush Midkiff, rush.midkiff@uky.edu

Kentucky Farm Business Management Associations

Coming next month: Kentucky Agricultural Economic Forecasts for 2016
It’s OK to Do Something Else

One of best things about farms is that they are “family businesses.” One of the worst things about farms is that they are “family businesses.” This is not a revelation to anyone in a farm family. Generally the benefits of working with family, raising kids on the farm, and learning and teaching across generations outweigh the disadvantages of putting up with family every day.

In many multi-generational farms the notion of heritage is a strong and positive motivator. We’re often proud of being 5th generation farmers. It can be, however, a mill stone around the neck. When family members want to work together and get along well, it’s one of the most beautiful things in the world. When things don’t go well, it can be one of the most miserable places to work and live, and one of the hardest places to leave.

Financial stress associated with low prices and reduced profits (or losses) can conspire to make a tolerable situation worse. And, when tough business decisions run head-on into family dynamics the sparks can fly. As family farms face tougher times communication and transparency on the business side are more critical than ever. Ignoring or delaying tough decisions doesn’t make them go away.

While few pasture pundits see this farm financial downturn being as catastrophic as the 80s, it is inevitable that some farms will fail financially. Some will be restructured. Some families will part ways. One of the perils of being one of those pundits for a few decades now is observing that many of these “failures” could have been averted with earlier action.

One of those actions could have been “letting go” or “doing something else.” If an accountant decides to become a school teacher, it’s a career change. If a teacher decides to become a forest ranger, it’s a career change. But, if a farmer decides to do anything else, it’s a failure…even if it’s a perfectly good career move. It’s high time to allow voluntary exit from farming without the family and community stigma of “failure.” Sometimes it’s ok to do something else.

Steve Isaacs, SIsaacs@uky.edu

University of Kentucky Department of Agricultural Economics: Economic & Policy Update

View all issues online at http://www.uky.edu/Ag/AgEcon/extbluesheet.php

315 Charles E. Barnhart Bldg. Lexington, KY 40546-0276
Phone: 859-257-7288
Fax: 859-257-7290
http://www.uky.edu/Ag/AgEcon/extbluesheet.php