Chapter 13: Marketing Organic Grain Crops and Budgets

NC STATE EXTENSION

Introduction

Marketing organic grains is very different from marketing conventional grains. Organic grain is usually sold to a specific buyer, while a farmer using conventional methods can deposit an entire harvest at the local grain elevator. For North Carolina farmers, the organic grain buyers are almost always farther away from farms than conventional markets, meaning freight costs are an additional consideration. The National Organic Final Rule (NOFR) requires that organic grain be handled, processed, and stored in facilities separate from conventionally grown and handled grain. This means that in a split operation (with both conventional and organic grain production), harvesting, transportation, and storage equipment for organic grain needs to be separate in time or space from equipment used in handling conventional grain. However, organically produced crops can bring higher prices than conventional crops, so the extra trouble in getting the crop to market may be financially beneficial.

The Marketplace

Nearly all organic grains are marketed as either livestock feed or as food for human consumption. Organic grain for human consumption, referred to here as “food-grade grain,” generally earns a higher premium than organic grain for livestock feed. However, growing for the livestock feed market lowers the risk of going organic for those who are new to organic farming. Growing organic grain for the food-grade market requires a lot of attention to detail and experience with organic grain production and marketing. Quality and cleanliness specifications are more stringent than for livestock-feed grain, and markets are usually harder to identify. Often a specific variety is required by a buyer of a food-grade grain. For most North Carolina farmers, the livestock feed market is more easily accessible than the food-grade grain market. However, there are markets in North Carolina for food-grade organic wheat, rye, and corn.

Marketing Plan

It is always a good idea to have a marketing plan, especially when marketing organic grains. Research is a key component to successfully marketing organic grains. Begin researching the market before the crop is planted. Talk to organic grain buyers, organic certifiers, suppliers, and other organic grain farmers to gather information on how best to market your crop. The Internet can be a good resource for current information. As a first step, see "Marketing Resources."

It is important to know your customers and know what they want, whether they are brokers,

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processors, retailers or end-users. Find out if buyers are looking for a certain variety of grain or a certain quantity and whether they have quality specifications for the grain. Most buyers want to buy organic grain on a clean, delivered basis. If other arrangements are desired, the farmer may need to negotiate with the buyer. It is also important to know what price buyers are willing to pay for grain, and when and how they will pay. Transportation is another critical consideration in a marketing plan. How will the product get to the buyer and when? What are the costs? Good recordkeeping is also a key part of a marketing plan and organic certification and will keep a farmer knowledgeable about how profitable the operation is and where improvements can be made.

Storage

Storage may be critical for marketing organic grains, especially wheat. Buyers often do not have sufficient storage capacity, cash flow, or both to accept an entire crop at one time. A crop may need to be stored for several weeks or months. Some farmers store grain for up to 11 months to meet market demand. Often a better price for the grain is offered a few months after harvest, so storage may also be an economic advantage. To maintain grain quality during storage, insects must be kept out, and the grain must be stored at proper temperature and moisture conditions. Split operations will need separate storage bins, or storage bins will need to be thoroughly cleaned (swept, vacuumed, blown out with pressurized air, or all of these) to prevent commingling of organic and conventional products. Storage bins should be labeled as organic, and records of their contents must be maintained.

The best way to manage insect pests in stored organic grains is to avoid them. It is important to prevent problems in stored grain by keeping bins, ducts, and augers clean and by storing grain at a temperature lower than 60°F and at low humidity. Another suggested and often used method to prevent insect pest problems in stored organic wheat and corn is to add food-grade diatomaceous earth (DE) to the grain as it is being loaded into the storage bins (at a rate of up to 40 pounds per 1,000 pounds of grain). Diatomaceous earth can be sprinkled on top of the grain while it is moving in the auger to the bin, and then on top of the grain after it is loaded. The surface of each particle of DE is very sharp on a microscopic level and these sharp edges cut into worms as they feed or move over the grain, causing them to desiccate. Be sure to talk to your grain buyer and certifier before using DE as a storage additive.

Handling stored grain

Stored-grain management is a long-term approach to maintaining postharvest grain quality, minimizing inputs, and preserving the integrity of the grain storage system. To implement an effective management program, you must understand the ecology of the storage system. Storage management must focus on the following factors:

- Grain temperature
- Grain moisture
- Air relative humidity

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- Storage time

An excellent preventive postharvest grain management approach is the SLAM system (Sanitize and Seal, Load, Aerate, Monitor).

Sanitize and seal

- Housekeeping: Clean the bin, aeration ducts, and auger trenches where insects thrive on dust and foreign material.
- Cleanup: Clean up around the bin removing weeds, trash, and moldy grain.
- Seal bin: Seal all openings to provide barrier protection again insect entry all locations below the roof eaves.

Load

- Load clean, dry grain: High levels of grain moisture increase the potential for high populations of stored-grain insects and molds. In North Carolina, corn that will be stored for more than 6 months should be dried to 13.5 percent moisture.
- Core the grain: This involves operating the unload auger to pull the peak down and remove the center core of the bin that contains most fines and small foreign matter.
- Spreading and leveling grain: A level grain surface is easier to manage and less likely to change temperature during storage.

Aerate

- Maintain grain temperature: Grain temperature should be below 60°F to control insects and mold. Grain temperatures should be reduced to the optimum storage level as early as possible following harvest, and grain temperature should be managed by aeration of grain in the fall, winter, and early spring. The aeration time necessary to achieve 60°F will vary due to the airflow rates of the equipment used and ambient temperatures. Aeration can also reduce grain moisture content from 0.25 to 0.5 percent during one aeration cycle.
- Use aeration to prevent moisture migration: In most grain bins, moisture migration occurs due to significant temperature differences that develop within the grain mass. These temperature differences are caused by changes in outside temperatures and humidity throughout the year and result in changes in the equilibrium moisture of the grain. Operators must constantly monitor grain condition particularly during periods of temperature change (fall or spring) to determine how temperature differences are affecting moisture migration in the bin. Aeration can be used to equalize grain temperature and moisture throughout the bin.
- Monitor: Use a grain thermometer to track grain temperature. Schedule regular grain sampling and monitoring. Aerate by turning hot spots when they are detected.

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Genetic Contamination

Organic integrity must be maintained throughout the growing, harvesting, storage, and transportation processes. Because organic standards prohibit the use of genetically modified organisms, proper harvesting and storage procedures are an essential part of organic grain marketing. A positive test result (a GMO percentage above a certain level) can cause a buyer to reject an entire load. If the farm is a split operation, thorough cleaning of harvest equipment (including hauling equipment and all augers) between operations for conventional and organic crops is very important. Grain-receiving pits, augers or conveyors, elevator legs, dryers, and storage bins are all sources of contamination and should be cleaned to minimize mixing. Running some organic grain at maximum capacity through the system to clean out any residual transgenic grain can also help reduce contamination risks.

Transportation

Organic grain buyers generally need the grain delivered to their facilities, and they pay on a delivered basis. This means that the grower is often responsible for transportation. Trucks that transport grain from the farm to buyers should be cleaned thoroughly before loading organic grain. It is important to remember to clean the hopper bottoms and any covering (such as canvas) on the truck as well as the bed. Document the cleaning, as this will be needed by the buyer and the certifier. Documentation can be a written statement or affidavit that says when and how the cleaning was done. It shows that the producer is taking responsibility for the cleanliness of the transportation vehicle.

Grain Quality

Grain quality is very important to food-grade grain as well as livestock-feed grain. The quality of the grain determines its value. High-quality grain must be clean and free of weed seed, undamaged, uncontaminated, and identifiable. Controlling weeds, pests, and volunteer crops in the field can help keep quality high. Also, proper combine settings will help keep grain dirt free and undamaged.

Contracts

Organic grain buyers will sometimes contract with producers to supply a grain crop within a specific time at a specified price. Contracts are legal agreements between the farmer and the buyer and are more common to large grain producers in the western states than grain producers in the eastern states. However, some organic grain buyers in North Carolina are starting to contract for organic grain based on acreage. The buyer will sign a contract with a farmer to buy all the grain coming from an agreed upon number of acres. This reduces the risk to the farmer if there is a poor yield, as the farmer is only obliged to sell the yield from the contracted acres. Some specialty organic grain crops, such as canola, spelt, or sunflowers, may require contracts.

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Getting Paid

To ensure that you are paid once your crop is harvested and delivered, start by finding out information about the buyer. How soon after the crop is delivered will the buyer pay? What experiences have other farmers had with the buyer? Check with the buyer's organic certification agency or your certification agency and ask if other organic growers had problems with the buyer. When dealing with a new buyer, it may be prudent to sell the minimum quantity at first to avoid major losses.

Completed paperwork may be needed to get paid. Organic grain marketing depends on documentation. When delivering grain to a buyer, be sure to have all required paperwork, such as a bill of lading, clean-truck affidavit or truck-cleaning document, weigh slip, and a copy of the organic certificate under which the product is certified. Proof of certification is critical. Lot numbers assigned to field, harvested crop, and trucking help to track the crop. Check with the buyer to see if any other documentation will be required.

Finding Organic Grain Buyers

To find a buyer for your organic grain, contact organic grain mills, brokers, and processors directly. Networking with other farmers, buyers, or state agencies may also be very helpful in finding buyers. You can see the list of buyers interested in North Carolina-produced organic grains on the NC State University website Buyers of North Carolina Organic Grains. This list is not comprehensive and there may be other companies that will buy North Carolina organic grain. One way to find new buyers for organic grain is to explore the Internet.

Alternative Marketing Techniques

Direct marketing to the end user is another way of selling an organic grain crop. This may work best for livestock feed grains. There are several producers in the Carolinas who are very interested in producing organic livestock. To be able to certify livestock as organic, the animals must be fed organic feed from organically grown crops. A relationship with one or more livestock producers would give the grain or forage farmer and the livestock producer an advantage in pricing. The livestock producer can get a better price for the organic grain for feed, and the grain producer can get a price for the crop without the "middleman" costs. This arrangement can work for livestock producers who are able to store and mix their own feed. When in this situation, organic grain farmers may have to store grain for a longer time than usual and deliver the grain on multiple occasions. Or the grain farmer can grind and mix feed to be delivered to or picked up by livestock producers as they need it. Organic forage crops can also be sold in this way. Grain farmers can find livestock producers who may need organic feed through organic certification agencies or organizations such as the Carolina Farm Stewardship Association (CFSA), Rural Advancement Foundation International (RAFI-USA), the American Livestock Breeds Conservancy (ALBC) or through this website: https://organiccommodities.ces.ncsu.edu.

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Adding value to the initial organic grain crop product through some type of processing is another way to market organic grains. Processing can be as simple as cleaning and bagging the grain or as complex as milling the grain and producing baked goods from the milled grain. You may need additional equipment to do any on-farm processing, certification for the process and equipment, and, possibly, liability insurance. However, it may be very worthwhile to investigate the options. One organic grain farmer in North Carolina had a small corn mill that he used to process his own corn into meal, grits, and cracked corn for chicken feed. He then sold these value-added products, packaged, to retailers or marketed them directly to consumers.

Cooperative marketing may work for organic grain producers who do not have the labor, time, or equipment to deal with the quality and delivery specifications or cleaning and storage operations. These marketing costs can reduce the price premiums of organic grains, especially for smaller producers. Transportation, storage, and cleaning costs may be reduced by cooperative or collaborative marketing. Finding and working with other organic grain producers may also be a way to sell smaller quantities of organic grains or alternative grain crops.

Authors

Molly Hamilton
Extension Assistant Crop & Soil Sciences

Ron Heiniger
Professor and Extension Specialist, Corn/Soybeans/Small Grains Crop & Soil Sciences

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Other Publications in North Carolina Organic Commodities Production Guide

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