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# NDSU

## Where to Find Information for Value-Added Production Possibilities

*A Guide for North Dakotans*

by

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# Where to Find Information for Value-Added Production Possibilities

## *A Guide for North Dakotans*

North Dakota has many examples of farmers who have individually or collectively invested in production activities that add value to agricultural commodities. The new wave of cooperatives practicing "value-added" agriculture has captured the imagination of farmers and other entrepreneurs throughout North Dakota and much of the United States. Many ask how they too can begin manufacturing processed food or industrial products rather than settle for the small share of the food dollar farmers usually receive. Unfortunately, because many people have the same idea and large corporations already manufacture similar processed food or industrial products, all new enterprises can not be profitable. This publication describes a strategy for evaluating the potential profitability of value-added production and lists various resources for information and other assistance.

The basic idea of value-added agriculture is to capture more profit by moving up the marketing chain. Commodities traditionally have been sold to grain elevators or other assemblers; who sold the commodities to processors and packagers; who sold their product to wholesalers or brokers; who sold it to retail stores, restaurants, and institutions who sold it to their customers. With all of the processing, handling, transportation, and each of these middlemen keeping some profit for themselves, the farmers' portion of the consumer dollar remained small. However, by adding assembly and processing to the production of commodities, farmers are able to get more value, and potentially more profit, from their product.

Recent cooperative processing start-ups in North Dakota include Dakota Growers Pasta in Carrington and the North American Bison Cooperative in New Rockford. These cooperatives were able to find markets, form a business plan, attract investments, hire management, build production facilities, produce, and sell their product. These are steps that any successful new enterprise must accomplish. This booklet is designed to help you find the resources and information you need to accomplish the first three tasks: (1) finding markets, (2) forming a business plan, and (3) attracting investments.

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## Feeding Crops to Livestock

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A traditional form of adding value to crop production is feeding it to livestock. Although livestock enterprises must conform to the resources and goals of each farm, this form of value-added agriculture has been thoroughly researched and abundant educational materials have been made available to assist livestock producers. Much of this information can be accessed for little or no charge from the North Dakota State University (NDSU) Cooperative Extension Service. Interested persons should contact their county extension office.

Feeding grain to livestock does present additional marketing challenges, but the NDSU extension service is ready to provide information. The challenge of marketing livestock is still considerably less than that of marketing processed products largely because there is a wealth of information about livestock markets available from public sources. In contrast, most information about processed product markets is held by private business which is sometimes reluctant to share this knowledge with potential competitors.

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## Start with Knowing the Market

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The business plan for any product must start with a thorough understanding of the market. Many projects would be feasible if the producer knew the desired quantity of product could be sold at the currently observed price. However, consumers may be very loyal to established brand-name products similar to your own. Generic and institutional buyers of your product may have also established long-term sales contracts with particular suppliers. In such cases, the quantity that you would be able to sell at current, or near current prices, may be limited.

Three major categories of markets exist for processed agricultural products:

- 1) The U.S. domestic food market,
- 2) The international food market, and
- 3) The market for industrial uses of agricultural products.

These markets present different marketing opportunities and challenges. The U.S. domestic food market is commonly called a "mature" market. This means that there are many well-established companies that manufacture and sell a variety of different products. Few opportunities exist to introduce a new product that would not have similar products competing with it. This does not mean that new products cannot be introduced, but it does mean that you will have to carefully study the pricing and promotional practices of competing manufacturers.

In contrast, many international food markets are still developing. American manufacturers may find no close competitors for their products, particularly in the developing countries of Latin America, Asia, Africa, the Middle East, and Eastern Europe. However, exporting food products to other countries requires learning about new cultures, foreign government regulations, import taxes, foreign currency exchange, export financing, and foreign political risks. Furthermore, many large U.S. corporations have already established their food products in these markets, particularly fast-food restaurants such as McDonald's and Pizza Hut.

The market for industrial uses of agricultural products is also developing, but agricultural products often compete with low-cost, synthetic substitutes in the industrial markets. Selling to industrial users requires a thorough knowledge of the input characteristics these industries are seeking, the synthetic substitute inputs, the major manufacturing companies in the industry, and the markets for the final products.

Whatever the market, you need to understand how it operates, who your customers are, who your competitors are, what marketing activities will be required to sell your product, and approximately how much can be sold and at what price. This knowledge will largely determine the kind of product you can profitably produce. The general range of prices at which the product can be sold needs to be determined before costs of production are analyzed. Spending money on production feasibility studies before you understand the market would be *placing the cart before the horse*.

There is an abundance of previous marketing studies available at the state universities, state government agencies, and cooperative organizations. The same organizations are often willing to provide information about additional markets or to update information, if requested.

University sources include the Institute for Business and Industry Development (IBID), North Dakota State University, in Fargo (231-1001), the Center for Innovation and Business Development (CIBD), University of North Dakota, in Grand Forks, and the Business and Community Assistance Center (BCAC), Minot State University, in Minot. The Department of Agricultural Economics at North Dakota State University (231-7441) has published dozens of market analyses and feasibility studies, most of which are available for no cost or can be found in North Dakota university libraries. North Dakota State University specialists also can provide information on alternative crops (Greg Endres, Carrington, 652-2951), horticulture (Dr. Ronald Smith, Fargo, 231-8161), natural fibers (Ann Braaten, Fargo, 231-7367, and Tim Faller, Hettinger 567-4323), waxy hulless barley (Patricia Berglund, Fargo, 231-7843) and specialty crops (Rudy Radke, Valley City, 845-8528).

Many state agencies and local economic development offices in North Dakota also have market information to share. The N.D. Agricultural Products Utilization Commission (APUC, 328-4760) has sponsored dozens of studies. Reports are usually available at the State Library or from APUC. The N.D. Department of Agriculture's Marketing Division (328-2231) keeps a databank of information about market opportunities and has specialists ready to help analyze new market opportunities. The N.D. Department of Economic Development and Finance (328-5300) also has a library of market studies and a staff that is ready to assist with new market research. Local economic development offices and Chambers of Commerce are often able to provide market information from local experience, personal networks, and national publications.

The Rural Electric Cooperatives (RECs) and Regional Councils have assisted in the development of many new manufacturing enterprises and thus have valuable guidance to offer. Among North Dakota Rural Electric Cooperatives, Basin Electric (224-5355), Tri-County Electric (652-3156), and Cass County Electric (428-3292) have been particularly active in helping new enterprises. Eight regional planning councils are located in Williston (774-4278), Minot (839-6641), Devils Lake (662-8131), Grafton (352-3550), Fargo (239-5373), Jamestown (252-8060), Bismarck (255-4591), and Dickinson (227-1241).

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## Collecting Additional Market Information

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Previous studies are useful, but only a start. Your information has to be current and specific to the product that you want to produce. The organizations previously listed may be able to help, but staff are limited, so you will have to do a lot of research on your own. Additional information can also be obtained by paying for commercial market reports or consultants, but collect what you can for free before purchasing such services.

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## Domestic Food Markets

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For domestic food markets, grocery stores are the first place to look for the product and substitute products. Identify the major manufacturers, find out where they manufacture and how many other products they sell. Monitor how the products are promoted over an extended period. Are they advertised in the paper? Are coupons provided? Are there in-store promotions? Also evaluate how the products are labeled and displayed. Do the labels emphasize regional, ethnic, or international themes, health trends, luxury, or other identifiable themes? You will probably want to emphasize a different theme in your marketing to differentiate your product. Finally, observe how much shelf space the competing products have. If grocery store managers squeeze your product in, will customers be able to find it?

Second, ask restaurant and institutional food providers about their needs. They may be less tied to established brand-name products than grocery stores, especially if the quality of your product is higher than that of competing products. Introduce yourself and find out what convenience food products they would like to have. What additional products do they need for new recipes? Who are their current suppliers and how happy are they with the prices and services of those suppliers? Identify what you can do better than their current suppliers.

Third, evaluate the sales trends and financial conditions of competitors. Steadily increasing sales usually indicate strong, aggressive management, excellent products, or both. Stagnant or decreasing sales may indicate that an aggressive newcomer can capture a large market share. Alternatively, stagnant or decreasing sales may indicate that consumers are tired of the product.

You can evaluate the management of competitors by reading relevant business and trade magazines. Useful business magazines include *Business Week*, *Forbes*, *Fortune*, and *Inc.* Business newspapers such as the *Journal of Commerce and Commercial* and the *Wall Street Journal* are also useful.

Trade publications provide much useful information about new management trends and strategies for major companies. Useful publications for food products include *Food Industry News* (708-699-3300), *Food Processing* (312-644-2020), *Food Technology* (312-782-8424), *Frozen Food Digest* (212-557-8600), *Milling and Baking News* (816-756-1000), *Nation's Restaurant News* (212-756-5000), *The Packer* (913-451-2200), *Progressive Grocer* (203-325-



3500), *Restaurant Hospitality* (216-696-7000), and *Restaurants & Institutions* (708-635-8800). Stock investment reports from such companies as Moody's, Standard and Poors, and Value-Line also provide good information on sales, profits, and financial condition. Annual reports for public companies are often available in libraries. These sources can indicate how well the competitors are managed and how much they can spend on advertising and promotions.

In general, you need to assess the strengths and the weaknesses of competitors. Keep in mind that your competitors may not sell the same product as you do, but customers may view them as interchangeable or close substitutes. **Most importantly, you will have to identify and promote what is unique and different about your product.**

Finally, you need to monitor consumer trends that will affect the demand for your product. For example, if you are thinking of manufacturing a breakfast cereal, is consumption of breakfast cereals increasing, decreasing, or stagnant? Within the breakfast cereal group, are sales of children's cereals, or adult cereals increasing more rapidly? Are low-fat cereals selling better than regular cereals? Are cereals promoted for high nutrition selling better than cereals promoted for sweetness and taste? Are sales of generic or store-brand products increasing faster than sales of brand-name products? What has been the recent pattern of prices for related products and how have consumers responded to price changes? This information will help you estimate the volume that you could sell if you are able to successfully finance, manufacture, and market your product.

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## Foreign Food Markets

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If it is possible for you to visit foreign markets, you should. Collect the same type of information you would for domestic food markets. Although it is more difficult to understand the language, culture, and buying habits in many other countries than at home, ultimately you or your broker will have to understand the differences in order to be successful. One common difference between foreign food markets and U.S. food markets is the different types of stores in which the products are sold. Although supermarket grocery stores are increasing in popularity in many countries, more food is sold in small specialty stores than in the U.S.

Therefore, you will need to look for your product or competing products in different kinds of stores. For each type of store, you need to evaluate who the customers are and their buying habits. How often do they shop? How much do they purchase in each trip? Are they primarily interested in fresh, packaged, canned, or frozen products? Are they more or less responsive to advertising, word-of-mouth, and pricing than customers in other types of stores or customers in the U.S.? You should also study advertisements in local newspapers, magazines, radio, and television. What themes are emphasized? What kinds of U.S. products are popular? Is U.S. culture used to promote popular products? This information will help you determine whether customers will be receptive to an imported product and how you can effectively promote it.

Both the state and federal government can assist you in identifying potential foreign markets and collecting information about them. These agencies can also help you identify reputable distributors for your product in other countries. The N.D. Department of Economic



Development and Finance (328-5300) has an international trade specialist who can provide information and referrals. The N.D. Department of Agriculture's Marketing Division (328-2231) hosts foreign trade delegations and sponsors international trade shows. The Marketing Division works with the Mid-America Agri-Trade Council (MIATCO) in Chicago (312-944-3090). MIATCO is a network of 12 state departments of agriculture which share information about international markets and work with companies to promote food products in export markets. MIATCO can also provide research reports and calendars of international market events.

The principal agencies in the federal government providing assistance for international sales of value-added agricultural products are the Department of Commerce's Foreign Commercial Service and the Department of Agriculture's Foreign Agricultural Service. The nearest office for the Foreign Commercial Service is the Minneapolis District office (612-348-1638). Foreign Commercial Officers are stationed in most American Embassies and many American Consulates around the world, where they monitor markets and import regulations, arrange meetings with potential distributors, sponsor trade shows, and arrange travel by foreign business persons to view American products.

The Commercial Service also provides an extremely useful source of information on foreign markets called the National Trade Data Bank, which is available on CD-ROM disks in many libraries and on the Internet. The National Trade Data Bank includes trade statistics, general descriptions of foreign country markets, recent trade leads, names and telephone numbers of contact persons, and reports by Foreign Commercial Officers about recent developments in the markets for specific products and economic policies in foreign countries.

The USDA Foreign Agricultural Service (FAS) publishes regular reports on foreign agricultural markets and stations agricultural attaches in most American embassies. The primary emphasis of the Foreign Agricultural Service is on agricultural commodities rather than value-added products, but the agricultural attaches do monitor foreign food markets and policies affecting foreign food demand and food imports. A good place to start looking for FAS information is the Trade Assistance and Promotion Office in Washington (202-720-7420).

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## Industrial Markets

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Information on industrial markets is more difficult to obtain than information on food markets because there are generally no retail markets available for public viewing. The primary industrial customers for agricultural products are other manufacturing companies, who often have a proprietary interest in keeping information secret. Nevertheless, there are industry observers, trade associations, and trade magazines that identify new trends and major manufacturers.

Much of the published information is most easily found through computerized databases on the INTERNET or World Wide Web. The F&S Index on WinSPIRS at the NDSU library is a good example. The Help/SVP Home Page on the World Wide Web has listings of excellent, but expensive, commercial market reports. Any of the university centers such as IBID, CIBD, or

BCAC, the Marketing Division of the N.D. Department of Agriculture, or the N.D. Department of Economic Development and Finance could help you with such computer searches.

More conventional sources of information on industrial uses of agricultural products include the *USDA Industrial Uses of Agricultural Materials Situation and Outlook Report* (quarterly), the *Thomas Register of American Manufacturers* (annual), trade magazines, and professional journals. Useful trade magazines and journals include *Chemical Engineering* (800-525-5003), the *International News on Fats, Oils, and Related Materials*, the *Journal of the American Oil Chemists' Society*, and *Modern Paint and Coatings*. Most of these are available in university libraries.

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## Production on a Commercial Scale

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After you have identified markets and a marketing strategy for your product, you need to investigate whether you can produce on a commercial scale at a competitive price. Unless you have a strong background in engineering, you will probably need to get some help from private or public consultants.

Some engineering help is available from public organizations such as IBID at North Dakota State University. University researchers often are willing to do detailed feasibility studies supported by a research grant. State government agencies, the Rural Electric Cooperatives, and the Regional Development Councils often can refer you to reputable private consultants based on their previous experience. The N.D. Department of Economic Development and Finance has a directory of consultants that they will provide free of charge. However, they have no first-hand experience with some of these consultants and the quality of consulting analyses has varied. Two of the most frequently used consulting companies in North Dakota are Senechal, Jorgenson, Hale, and Co. (Boston, 800-847-2157) and Experience Incorporated (Minneapolis, 612-338-7844). All of these consultants and researchers can describe the facilities and equipment you will need and provide estimates of their cost.

If your product is not a food, some additional assistance may be available from the USDA Alternative Agricultural Research and Commercialization (AARC) Center. The Center was founded in 1990 to develop new uses for agricultural products. In addition, the Agricultural Utilization Research Institute in Crookston, Minnesota works closely with the AARC. If you want to develop a non-food product and are able to provide at least a 50 percent match for any federal funds, you may apply for AARC assistance (fax: 202-690-1655). If your project is approved, the AARC will not only assist with developing commercial-scale production technology, but can also assist with financing.

Several sources of public funding are available for feasibility studies, although most of them require a financial contribution from the persons or businesses that will benefit from the study. The N.D. Agricultural Product Utilization Commission (APUC) (328-4760) is probably the most popular source of funding for feasibility studies in North Dakota. APUC was founded by the North Dakota Legislative Assembly in 1979 for the purpose of creating new wealth and jobs

through value-added utilization of agricultural products. Because APUC funding is competitive and the ranking of proposals is partially based on the financial contribution of the applicant, your financial contribution greatly increases the chances of success. The Rural Electric Cooperatives have often contributed to the financing of feasibility studies for new enterprises in the areas they serve.

USDA grants have been another important source of funding, although budget cuts are reducing the amount of funds available. These grants usually require working with a university researcher and results are generally not obtained as quickly as with APUC funding, due to the frequent involvement of students and other faculty responsibilities. Finally, regional and local economic development organizations often have made small contributions to feasibility studies of enterprises that would have a strong economic development impact.

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## The Business Plan

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Several actions are required to obtain financing for a value-added enterprise. **First**, you need a marketing plan and an estimate of how much it will cost to build and operate the production facility. **Second**, you need to decide what legal form of organization your enterprise will have. Will this be a sole-proprietorship, partnership, corporation, cooperative, or limited liability company? **Third**, if you choose to organize as a corporation, cooperative, or limited liability company, you need to take the necessary legal steps to establish your organization. **Fourth**, you need to write a business plan to present to equity investors (if applicable) and potential creditors. This business plan will include a detailed marketing plan, construction and production plans, and a financing plan. **Fifth**, you need to identify your management team. You may not be able to get firm commitments from prospective management employees until you have secured financing, but identification of a strong management team will help you obtain financing. **Sixth**, you need to plan the sources of financing for the proposed business enterprise.

The type of business organization you choose will largely determine where you can obtain equity capital and credit. A sole-proprietorship requires the least effort, but one person will have to provide all the equity capital and accept full responsibility for any debts. A partnership also requires little effort to establish, but individual responsibilities must be identified and each of the partners becomes fully liable for any debts of the partnership. Corporations, cooperatives, and limited liability companies will require the services of an attorney to establish, but limit the liability of equity investors.

Each of these options has advantages and disadvantages as a form of organization, which you should discuss with advisors. These advisors could be lawyers, consultants, university business assistance centers (IBID, CIBD, BCAC), Small Business Development Centers, or specialists at other government agencies. The Burdick Center for Cooperatives (231-9590) at NDSU is a good source of information about the advantages and disadvantages of cooperative organization. Among the advantages of cooperative organization is qualifying for financing from the St. Paul Bank for Cooperatives, which has supported many new enterprises in North Dakota.

In addition to all of the sources of information for your marketing and production plans, there are additional organizations that can assist you with making business plans. Five Small Business Development Center (SBDC) offices are ready to provide reference materials and individual counseling. They are located in Bismarck (223-8583), Dickinson (227-2096), Minot (852-8861), Grand Forks (772-8502), and Fargo (237-0986). Most North Dakota cities and counties also have Economic Development Corporations and Chambers of Commerce which can provide assistance.

The University Business Assistance Network (UBAN) provides assistance from Bismarck State College (224-2301), Dickinson State University (227-2333), Mayville State University (786-2301), Minot State University (BCAC, 857-3825), the North Dakota State College of Science (671-2181), North Dakota State University (IBID, 231-1001), NDSU Bottineau (228-5453), the University of North Dakota (CIBD, 777-3132), the UND-Lake Region (662-8653), the UND-Williston (775-4266), and Valley City State University (845-7721).

Another good source of guidance for business plans is SCORE, the Service Corps of Retired Executives Association. This is a volunteer organization of retired executives, sponsored by the U.S. Small Business Administration, with over 100 counselors in North Dakota. SCORE offices are located in Bismarck (250-4303), Minot (852-6883), Grand Forks (772-7271), and Fargo (239-5677).

The federal government offers additional business plan assistance to Native American and minority-owned enterprises. The North Dakota / South Dakota Native American Business Development Center in Bismarck (255-6849) will help Native Americans develop business plans and provides other assistance. The Minority Contractors Association in Bismarck (255-3002) provides business plan and other assistance for minority, disadvantaged, and women-owned business enterprises.

The business plan must include a detailed financial analysis of your value-added enterprise. The balance sheet must show all of the assets for the enterprise (most of which will usually be pledged as collateral for loans), all debt obligations (mostly loans and accounts payable), and all equity. The income statement will project your annual income and expenses.

Probably the most important financial statement for a new enterprise is the cash flow budget. This projects your monthly cash outflows and inflows, including inflows of credit and outflows for loan repayments. The cash flow statement must provide for all cash obligations, including all tax and payroll obligations, and some reserve for unexpected expenses or lower than expected revenues. Most creditors will ask you to project these three financial statements for at least the first three years of your enterprise. It is a good idea to develop a set of financial statement projections for a worse-than-expected and a better-than-expected scenario in addition to those for the expected scenario. The projected financial results for alternative scenarios will help equity investors and creditors assess the risks of investing in your enterprise.

## == Financing the Investment and Initial Operating Costs ==

After completing the business plan, you will be ready seek financing for the investment and initial operating costs. If you are planning on equity investments from partners, cooperative members, or other persons, these should be collected first. Lenders will want to see as much equity investment as possible because it shows commitment to make the project succeed and reduces the lenders' risk.

Then, you can show your business plan to lenders and apply for loans. In addition to commercial banks, savings and loan associations, and credit unions, several other sources of loans are available for value-added agricultural enterprises. Several commercial loan programs are coordinated by the Bank of North Dakota (328-5691), mostly in cooperation with other lenders. These loan programs include Business Development Loans, the Small Business Loan Program, the Partnership in Assisting Community Expansion (PACE) Fund, AG PACE loans for on-farm businesses, the Micro Business Tourism, Recreation, and Investment (TRIP) Loan Program, MATCH Loans, and Small Business Administration (SBA) Loan Purchases.

Other loan programs are offered by the N.D. Department of Economic Development and Finance, the N.D. Regional Planning Councils, the Rural Electric Cooperatives, the U.S. Small Business Administration (SBA), the Bureau of Indian Affairs, and the St. Paul Bank for Cooperatives. The N.D. Department of Economic Development and Finance (328-5300) provides loans and/or equity investments from the Future Fund, Technology Transfer, Inc. (TTI), and Mini & Incentive Grant programs.

The eight Regional Planning Councils in North Dakota collaborate with state and federal government agencies to provide a variety of small loan programs. The Lake Agassiz Regional Council (contact any of the eight Regional Councils) administers the SBA's Microloan Program for all of North Dakota. The Rural Electric Cooperatives have a zero interest loan program for rural economic development projects. The Bureau of Indian Affairs Financial Assistance Program (605-226-7381) provides a variety of loans for projects that will benefit the economy of an Indian reservation. Cooperatives can apply for loans from the St. Paul Bank for Cooperatives (612-282-8200 or 237-0456 in Fargo).

Additional information about all of these loan programs is included in the two publications, *Economic Development Guide*, available from the N.D. Department of Economic Development and Finance (328-5300), and the *Marketplace of Ideas: Resource Directory*, available from U.S. Senator Kent Conrad's office (258-4678) or the N.D. Department of Agriculture (328-2231). These two publications also contain a wealth of additional information about sources of information for new value-added agricultural enterprises.

For additional copies, please contact:

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Bismarck, ND 58504-6708**

Tel: (701) 328-5300

Fax: (701) 328-5320

TTY: (800) 366-6888 (Relay ND)

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**February, 1996**

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