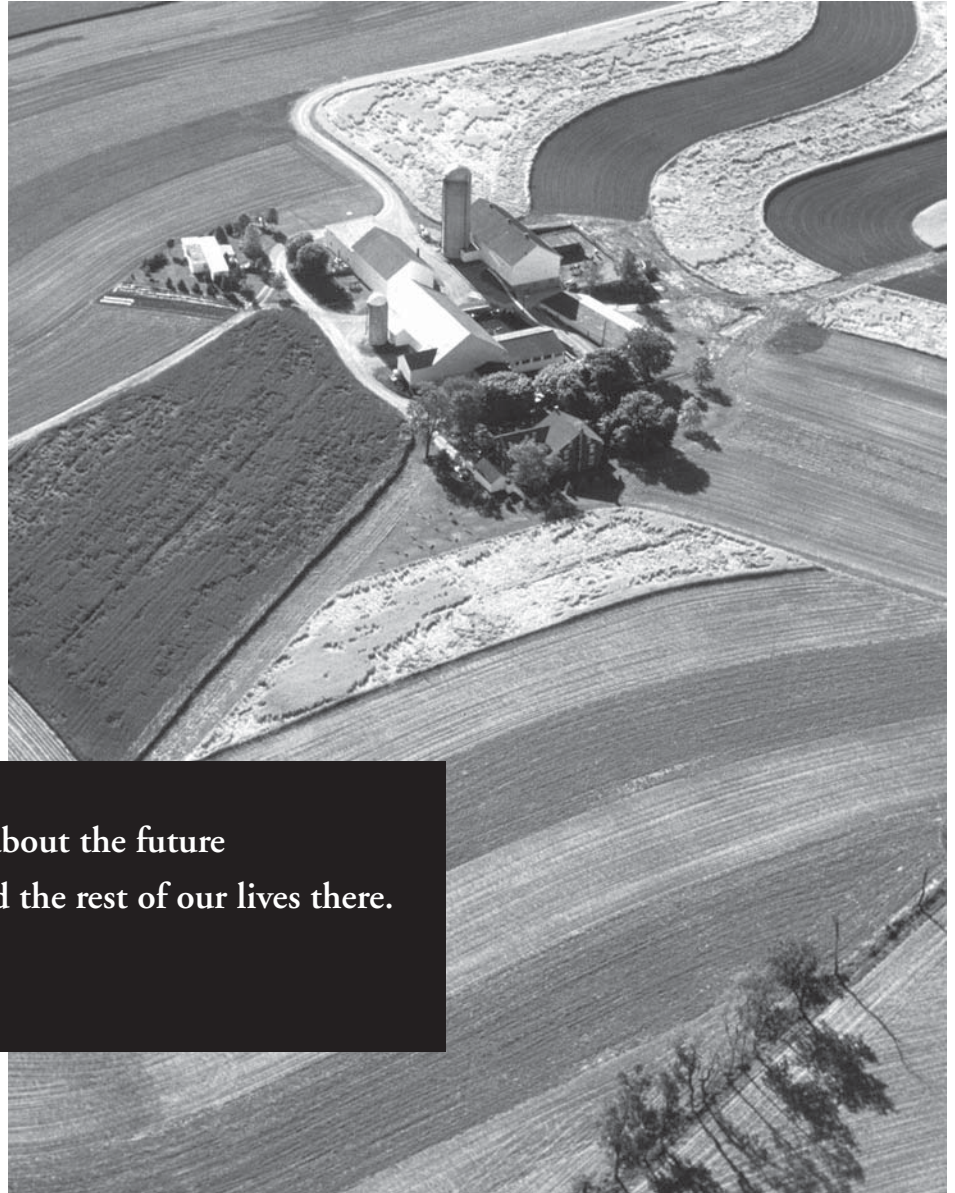


Agribusiness Planning

Providing Direction for Agricultural Firms



We should all be concerned about the future
because we will have to spend the rest of our lives there.

Charles Kettering

PENNSSTATE



College of Agricultural Sciences

Agricultural Research and
Cooperative Extension

Introduction

Future outcomes are a function of today's decisions. Although there is a high degree of randomness and uncertainty associated with the future, you can increase the probability of a successful outcome by planning ahead. This is true in nearly every aspect of our lives, both personal and professional. For those who operate their own businesses, planning becomes increasingly important because the personal and professional aspects become more difficult to untangle. In agricultural businesses, planning may be even more vital because of the inherent uncertainty associated with agricultural production. Some important sources of uncertainty include production risk, price risk, financial (or interest rate) risk, and changes in government programs.

This publication discusses the importance of business planning for agricultural firms—from input suppliers to producers to processors—and describes the steps required to prepare a thorough business plan. The general process of business planning is the same for each type of firm. However, each may have differing individual aspects that affect its plan's contents. Regardless, we present a recommended format that should be useful for all types of agricultural firms as they develop written business plans. We use examples from the wide variety of agribusinesses to provide a broad context to the general theme of business planning.

About the Business Plan

One of the most important documents for any business is their business plan. It is common practice for consultants, lenders, potential business partners, and other business-associated individuals to request a business plan to make a more informed decision concerning their relationship with a business. However, business plans have many more direct benefits for the business owner. The planning process forces owners to systematically consider all facets of the business. In so doing, they become more knowledgeable of the business, the industry, and the market environment in which their business operates. The process also helps to define business goals and to assess the impact that uncertainty may have on future business outcomes. Perhaps most importantly, the written plan provides a well-defined direction for the business. Therefore, it can be used to keep all employees moving toward the common goals established within it.

Completing a business plan can be a time-consuming activity, but well worth the effort. Because businesses operate in an ever-changing environment, the plan should be revisited periodically to be sure that the business is headed in the proper direction or to formally alter the firm's course if circumstances dictate that this is necessary. Again, the systematic review of the business plan forces the owner, and potentially others, to look at the business as a whole and make better-informed decisions.

We provide an example format for you to use as a guide in developing your plan. Notice that there are several topics that should be addressed, corresponding to the four functional areas of management: marketing, production, finance, and human resources. By developing a section for each of these topics, the plan will be easy to follow as you revisit it or

as others review it. You should take some liberty as you develop your plan; feel free to customize it in a way that will fit your specific circumstances.

SWOT Analysis

Item A. Example Marketing SWOT Analysis for Carl's Custom Crop Scouting

Strengths

- Only specialized scouting operation in the county
- 3,700 acres under contract

Weaknesses

- No full-time sales person

Opportunities

- Expand operations to include planting and harvesting
- Partner with firm that only plants and harvests crops.

Threats

- Genetically modified corn kills insects. Scouting for those pests no longer important.

Performing a *SWOT analysis*, which stands for strengths, weaknesses, opportunities, and threats, lays the foundation for the business plan. Four separate SWOT analyses should be performed, each related to one of the four functional areas of management: marketing, production/operations, finances, and human resources.

When assessing strengths and weaknesses, the focus should be internal. Opportunities and threats, on the other hand, should reflect external factors. For example, proximity to a major market, such as a large city, may provide an opportunity to market processed dairy products directly to a restaurant. Threats may take the form of new competitors or changes in agricultural production or environmental policy.

Performing SWOT analyses is relatively easy. Simply divide a piece of paper into four quarters, label the quarters appropriately, and begin to write your thoughts down (see Item A). Because this is the foundation on which the planning process is based, be sure to take a broad perspective. In addition to incorporating the views of at least the owners and managers of the operation, it also might be a good idea to allow all employees, or at least a subset, to provide their perspectives. Some firms may also benefit from allowing professional advisors (such as veterinarians, bankers, nutritionists, etc.) to provide input. Although the top management should develop the plan, you should tap many sources of information. Finally, the raw results of the SWOT analyses might best be presented in an appendix, rather than in each of the four sections related to the functional areas. In the individual sections, a summarized version will suffice.

Example Business Plan Format

Item B. Sections of Business Plan

1. Introduction
2. Marketing Management
3. Production/Operations Management
4. Human Resources Management
5. Financial Management
6. Summary
7. Appendices

The format presented here represents one way to structure the business plan (see Item B). As noted, it covers the four managerial functional areas. We present the example structure and provide some ideas for what you will want to include in each section. Creating a thorough document the first time through is important. This will make follow-up revisions easier to implement.

Introduction

The introductory section gives a broad overview and background of the business. Several subsections (outlined below) should be included to provide a thorough overview. However, if there's something that you feel isn't applicable to your business, feel free to omit it from your plan.

Title Page

The first page should give the name of the document, the firm's name, and the names of all those involved in developing the plan. Dating the plan so that you can remember when it was developed or updated is also wise.

Executive Summary

This section, while appearing at the front of the business plan, is actually the last piece developed. Here you should present the most important information, which may include the firm's goals and objectives and associated target dates. Basically, the executive summary provides a concise overview of the business plan.

Table of Contents

The table of contents should provide the titles of all section headings in the plan and the page numbers on which the sections begin.

Item C. Example Vision Statements

AgChoice Farm Credit

AgChoice Farm Credit will be the first choice for financial services that help customers succeed.

NASDAQ

To build the world's first truly global securities market. . . . A worldwide market of markets built on a worldwide network of networks . . . linking pools of liquidity and connecting investors from all over the world . . . assuring the best possible price for securities at the lowest possible cost.

Northwest Airlines

To build together the first choice airline and global alliance network with the best people each committed to exceeding our customers' expectations every day.

DeLaval

Whenever dairy farmers have a need they should think first of DeLaval. We aim to always be there, always be available, always work on their behalf.

Item D. Example Mission Statements

Agway Cooperative

AGWAY is a farmer-owned business dedicated to improving the profitability of its members. We achieve profitability for our members by being the most effective partner on every farm we serve, by adding value to what farmers produce, and by using our capabilities to win nonfarm customers.

Land O' Lakes

We are a market- and customer-driven cooperative committed to optimizing the value of our members' dairy, crop, and livestock production.

Microsoft

To enable people and businesses throughout the world to realize their full potential

eBay

To help practically anyone trade practically anything on earth.

Vision and Mission Statements

These relatively brief statements tell the reader why the business is in operation and where the management team, or owner(s), plans to be in the future. The *vision statement* should tell the reader what business the firm is in, or plans to enter, and what the most important business goals are. That is, it should tell where the firm is going.

We have provided a few example vision statements for you to use as a guide when developing yours (Item C). Note that some are from very different industries. Regardless, they present a common theme of what their respective companies want their firms to be.

The *mission statement* provides a succinct overview of the firm's operation, including its collective values, its unique circumstances or industry position, what product(s) it sells, and why it is in business. As the business

evolves, the mission statement can be adapted to reflect the changing face of the firm.

The mission statement can provide more detailed information than the vision statement. We have provided some example mission statements that allow you to see how other firms—although maybe very different in nature—have defined their missions (Item D). Some are more specific than others. At a minimum, the mission statement should tell the reader why you are in business.

Business Organization

Briefly describe how the business is legally organized (for example, proprietorship, partnership, or corporation). Include the names and titles of the firm's managers (or board of directors). This section should be quite short.

Item E. Example Firm Chronology

July 2000

"Hanks' Harvesting" formed as partnership between Jerry and Ed Hanks.

Fall 2000

Harvested 4,300 acres of corn for grain and chopped 2,200 acres of corn silage.

March 2001

Purchased a new combine and a used chopper.

Fall 2001

Harvested 8,700 acres of corn for grain and 5,300 acres of corn silage.

January 2002

Contracted for 10,500 corn grain acres and 7,800 corn silage acres for fall 2002.

May 2002

Began to investigate custom planting services as a possible expansion of current operations.

Overview of Current Business

In general, the business plan is concerned with the firm's future. Here, however, you should review the firm's past and fully describe its present position. Although a business start-up may not have much to reveal, documenting the present situation is important. In doing so, it will be easier to document the firm's history as you revise the plan.

An overview of the firm's past helps to set the context of how the firm has evolved into its current form. This may be particularly useful if the plan is to be used to secure financing because the past reveals something about how the firm has been managed over time. A structured chronology can serve as an outline for this subsection (Item E). The narrative in this section should also provide an overview of how the business has been financed. Furthermore, discuss how profits, equity, and other important financial measures have changed over time.

Next, describe the present situation of the firm. You should provide information related to business location (include pictures if you like), current sales, assets, inventories, geographic market area, number of employees, and any other information you feel is appropriate in describing your current business. Upon reading this section, one should have a snapshot picture of your firm's current status.

Marketing Management

This and the three sections to follow provide the meat of the plan. These give the reader a thorough understanding of the firm's present and future. In the marketing management section, you should address several key factors, each in its own subsection.

Marketing SWOT Analysis

Provide a brief overview of the main results of the Marketing Management SWOT analysis. Let the reader know what the most important results were.

Products and/or Services Produced

Here, describe your product(s) or service(s) specifically. If you are in the custom heifer raising business, for example, your statement may be something similar to “We raise heifers for dairy producers.” If you are operating a dairy farm, your statement may be much more detailed because it is recommended that you include both the products you produce and the products you sell, listed separately. For example, you may produce corn silage, but may not sell it. Remember also that you sell bull calves and cull cows. These may not be your major enterprise, but should be listed as products sold.

Remember that differentiating your product may be an important aspect of your marketing strategy. While this is difficult to do with a commodity, it's not impossible. For example, maybe you feed for high-butterfat percentage to increase the price received for your milk. It's also possible that you operate an organic turkey farm in an attempt to extract higher market prices. There are also those who market kosher meats and dairy products. These types of efforts should be included here as part of your marketing efforts.

Industry Overview and Position of Firm

Describe your industry and how you fit into it. This may not be too difficult to write if you operate under contract production because this is specified in the contract. It may also be relatively simple for anyone producing a commodity and selling it by the typical means (such as selling corn to a grain elevator or hogs to a pork processor). A *custom business* operator may have a more difficult time defining the

industry and describing how the firm fits. However, this section is important for at least two reasons. First, it forces the planner to analyze the industry and determine the firm's relative position in terms of competitive advantages.

Second, it provides important evaluative information for “outsiders” to better understand the business and its relationship with the industry.

In describing the industry, include as much information as you feel is necessary to define the firm and the market. Consider including the following: volume sold (in production units),¹ total annual sales in dollars, trends in industry sales, competitors, new marketing opportunities, prevailing prices, and how prices are determined (for example, cash market, contract price, cost-plus). Also, describe the customer. Who is purchasing your product? What type of person is likely to buy your product? Again, those selling an undifferentiated commodity may have little to write. Those selling custom services or, even more importantly, those engaged in marketing agricultural products directly to the consumer may need to more thoroughly describe the customer base. This will help you better define your target market.

Managerial Expertise

Here, take stock of the total managerial expertise used by the firm. What marketing-related special knowledge do the managers possess? Is there one manager who has particular expertise in marketing? Thinking beyond the organization is wise; those in production agriculture have other sources of knowledge that may exist outside of the firm. For example, consultants may be available to provide information related

1. This may be, for example, hundredweights if describing the dairy industry, head if describing beef, or acres scouted if describing a custom crop scouting operation.

to the current economic situation and outlook. Also, the Cooperative Extension system and the USDA provide a great deal of information and data on agricultural prices and marketing.

Marketing Strategy

This is where you lay out your plan and future expectations, which are founded on all of the preceding information in this section. Here, you should describe any marketing opportunities you face and how you plan to take advantage of those. What advertising or promotional programs will you undertake? How will you distribute your product? How will you determine if your marketing plan is successful? For this, you should have clearly defined targets. For example, “We will market at least 2.5 million pounds of milk each year.” You may also want to set targets for number of customers, market share, or any other measure(s) that you might use to determine whether your firm has been successful in marketing.

Finally, be sure to employ any appropriate risk-management tactics. In marketing, you will want to manage risks associated with input and output prices. Can you contract for some inputs to lock-in a particular price? If processing on the farm, have you contracted with a retailer or wholesaler to be sure that someone will take your product? In production agriculture, the farm owner or manager should understand and analyze futures and options markets as tools to manage price volatility. You should also understand any relevant government programs such as Loan Deficiency Payments (LDPs) that affect your price.

Production/Operations Management²

Through the production of goods and services the firm generates profits. Therefore, assessing the production/operations process and making plans for the future is vitally important. This may be particularly important in cases where a farm is planning to expand or where a change in business enterprises is to occur.

Production SWOT Analysis

Provide a summary of the SWOT analysis for production/operations. This may be the most important area to gather input from employees, who are likely the ones most closely associated with daily production. Therefore, their insights could provide a valuable additional perspective.

Overview of Productive Assets

Outline what productive assets are necessary to make your product or provide your service. The following deserve particular attention:

1. Land
2. Buildings
3. Other Facilities (particularly if on-farm processing is involved)
4. Equipment and Machinery
5. Materials and Supplies

Focus on what the firm currently owns, the quality of those assets, and how others will be obtained, if needed. Only discuss the resources needed. Save any discussion of financing these assets for the Financial Management section.

2. We differentiate “production” and “operations” based on whether the firm’s product is a good or a service. However, in many cases, we use “production” to denote either case.

Managerial Expertise

Here again, note the special expertise held by management in the area of production/operations. For example, is the herdsman on a dairy farm trained in dairy science? Does the crops manager have a background in agronomy, soil science, or other related field? How many years of experience in this type of position does this person have?

Production/Operations Performance

Describe your current production practices. How much do you produce? When do you produce it? You may want to develop a visual approach to help tell this story. A time line could help to describe when products are made or services are sold. The more complex the business is, the more useful a visual might be.

Regulatory Considerations

Government regulations affect production in many industries. This is particularly the case in production agriculture. If producing agricultural products, be sure that you are complying with all relevant regulations. These include, but may not be limited to:

- Manure management
- Soil conservation
- Worker Safety
- Zoning
- Inspections of the product and of the production facilities

You can gain information on relevant policies and regulations from business consultants, Cooperative Extension, agricultural cooperatives, and government agency Web sites.

Production/Operations Strategy

Now that you have laid out your current production practices and defined some firm and industry trends as they relate to some important benchmark mea-

asures, it is time to describe your production- or operations-related plans. As you do this, be sure to set specific production goals, outline potential changes in enterprises or production practices, and describe how you plan to locate and purchase inputs. The following list of questions may be useful to you as you develop this section. Again, not all are relevant for all types of operations. Also, you may think of others that should be addressed.

1. How long will your current productive assets be of use? When do leases on land and equipment expire? How soon can you expect to replace important machinery and equipment?
2. Where can you find other inputs, such as feed, in the future—particularly if you are expanding your operation?
3. Should you consider hiring a custom operator to perform a portion of the production tasks?
4. Are there new production practices or machinery you should consider adopting?
5. How many units of product do you want to sell over your planning period? Provide specific targets and a time line, if appropriate.
6. Do you need to develop a nutrient management plan or update an existing one? Are there other environmental plans that should be developed?
7. If expanding, how will new construction or other changes affect output? How will these changes affect your resources? Will you be able to operate in a timely manner without affecting the quality of your product(s)?
8. Are there new enterprises that should be explored?

Human Resources Management

One of the most important—yet most often overlooked—inputs is labor. The competency of your human resources may dictate how successfully your business will perform. Use this section to outline your current human resource (HR) policies, how these may change over the planning period, and what you or other managers may need to do to improve HR management.

Human Resources SWOT Analysis

Provide the reader with the summarized results of the human resource management SWOT analysis. This is another point at which the insights of the employees may be particularly useful. Their perception of your HR policies could be substantially different from yours.

Organizational Chart and Related Information

Begin by providing a current organizational chart. When doing so, you should follow very distinct guidelines. However, our example chart (Figure 1) should provide enough guidance to help you if you've not yet developed one. If your organization is particularly large, you may lump several individual positions into one box, as long as the box describes those positions. In Figure 1, for example, the three parlor operators might be represented by only one box if their job descriptions are the same.

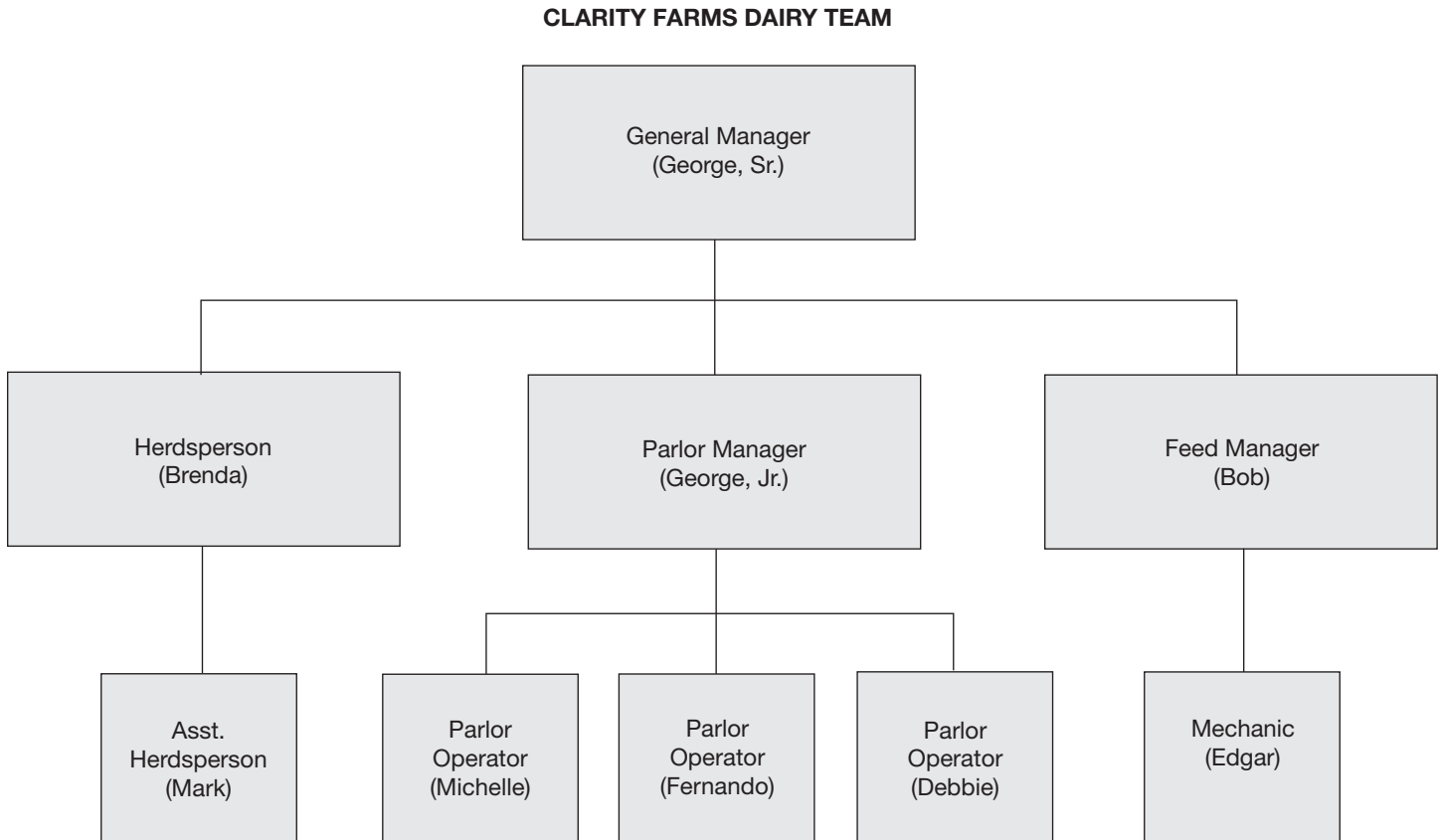
The organizational chart allows the employees to see their position in the firm. Also, the chart should show that each person has only one immediate supervisor. We cannot stress this point enough. Defining the managerial

structure so that employees directly answer to only one person is very important. Often the partners who own the farm tend to supervise employees together. This results in a situation in which the employee may get conflicting directions. If the employee has only one direct supervisor, this situation can be avoided.

Overview of Current Policies

Whether formalized or not, your firm has HR policies. While we encourage you to formalize those if they are not already, you should complete this section with the most accurate information you have at your disposal. Think about the following individual points as you consider what you would like to include in this section. Also, remember to include information regarding all employees of the business, including the management team.

Figure 1. Example Organizational Chart



Source: Stup, R. "Job Descriptions." Accessed on the Web at www.dairyalliance.com.

1. Compensation and Benefits³—How much do you pay your employees? At what intervals are they paid (for example, weekly or monthly)? What sort of benefits package is offered? Does the package differ by type of employee? Do you have an incentive plan for employees? Are owner/operators paid a salary or do they capture retained earnings?
2. Job Descriptions and Recruiting—Does each position have a written job description? Are these used to assess the suitability of potential employees? How do you recruit new workers/managers? Provide written copies of job announcements and descriptions in an appendix.
3. Training and Standard Operating Procedures—What training is provided for new employees? What training is provided when employees assume new responsibilities? Are common task sequences documented with written standard operating procedures (SOPs)?
4. Performance Evaluation and Performance Feedback—Is there a formal mechanism for evaluating workers' performances? If so, how frequently is performance assessed? How does the employee receive the manager's assessment? Are salaries or wages based at least partially on these evaluations?

3. Incorporation of this information may dictate that a portion of the plan be labeled as confidential. Thus, only certain members of the ownership or management team would have rights to view this type of information.

Managerial Expertise

Cooperative Extension provides materials to help develop job descriptions, SOPs, and other important HR documents. Business consultants with expertise in HR management should also be used in many instances to help the business owner develop the best HR policies possible for that particular business.

Human Resource Strategy

Once you have outlined your production and marketing plans, you must evaluate the ramifications of those plans for the firm's human resources. Will the plan require any shift in HR policy? If so, how? For example, an expanding custom heifer grower may need to hire a full-time nutritionist to be sure that the heifers are receiving a properly balanced ration as they develop. The best way to reflect these changes may be to provide one or more additional organizational charts showing how the organization is expected to change over time. In the text, be specific as to what changes are to be made and when.

Also, be sure to describe any changes you plan to make in your HR management. If you don't have formal job descriptions, standard operating procedures, or evaluations, for example, you should consider putting those in writing. Also indicate if the plan will require additional training of existing and new employees. Finally, if expanding, describe where you might find potential employees.

Financial Management

This section is the most crucial from a potential lender's perspective. Here, you should tie together the details in the rest of the plan in terms of how they affect the firm's financial performance.

Ultimately, operating a business is about making money. Therefore, this section needs to allow the reader to assess where the firm is and where it intends to go over the planning horizon. Although you should provide current and projected future ("pro forma") financial statements with the plan, they might be best presented in an appendix. This section should be mostly a verbal explanation of the business's finances, with perhaps a few tables to highlight important information.

Because this section is so important, especially if financing is being pursued, we highly recommend that you work with a business consultant, accountant, or other financial advisor to develop it.

Financial SWOT Analysis

Perform a SWOT analysis of the firm's financial position. Unlike some other areas, your frontline workers may not have as much to provide in this analysis. However, depending on the firm's "culture,"⁴ you may still want to invite their input.

Review of Current Financial Situation

Here you should highlight the important points of your financial statements (income statement, balance sheet, and statement of cash flows). Focus on the positive aspects, while not ignoring the negative. You do not want to provide a potential lender with an impression that

4. The firm's "culture" is the accepted values and norms under which it operates. Some firms may be quite "laid back," allowing employees a good bit of decision-making authority. Others might be more "straight-laced" following a well-established set of rules, whether written or unwritten.

Item F. Commonly Used Financial Measures*

Profitability

- Net income
- Rate of return on assets
- Rate of return on equity
- Profit margin

Financial Efficiency

- Asset turnover ratio
- Operating expense ratio

Liquidity

- Current ratio
- Working capital to value of production ratio

Solvency

- Leverage ratio
- Debt to asset ratio

*See glossary for definitions

you are trying to hide information. It might help if you work with a financial advisor to develop this narrative.

Provide a table of current outstanding debt. Include the terms of the debt, the lender(s), the principle amount(s), your payment amount(s), how frequently you make payments, and how many payments remain. Furthermore, a table of financial ratios would be useful in providing a snapshot view of the firm. You will want to provide measures of profitability, financial efficiency, liquidity, and solvency. Although your financial advisor may have some specific advice, we provide a few commonly used measures (Item F), which are defined in the glossary.

Managerial Expertise

Provide other sources of managerial decision-making input. For many farm owners, this is the most difficult facet to monitor. Using a business consultant, a CPA, or some other financial advisor may increase farm profits as you allow some of these individuals to help analyze financial data and make recommendations for you to review.

Financial Strategy

At this point, you need to set forth your plan for financing the firm's operations over the planning period. Where will you get money when you need to purchase a new truck or replace your barn, for example? Present the highlights of the pro forma financial statements as discussed earlier. Also, you should relate your financial plan to your production, marketing, and human resources plans. A time line relating events planned in the other sections to financing may help to clarify this section's message for the reader.

In your discussion, be sure to let the reader know how you will assess financial performance. As in other sections, be specific. Will you require that net income grow at 8 percent per year, for example? Set goals for the measures you have used previously to describe the health of the business. Therefore, you should aim for specific values for your selected measures of profitability, financial efficiency, solvency, and liquidity. Also, do not forget that an information management system should be in place so that the financial data you gather is accurate.⁵

You should be realistic with your plans, yet push yourself. Stated differently, you should plan to succeed, not just survive. If your business is to be viable over the long term, then you should generate returns to grow the business, grow equity, improve your credit-worthiness, and otherwise improve the odds of operating this business well into the future.

5. An information management system (IMS) is any system that you can use to track important information regarding financial performance, in this case. Actually, you should have a system of information management that provides high-quality information for each of the four facets of management. This might include a production record-keeping system (DHIA for dairy farms), an accounting system, an inventory list, employee time sheets, and so forth.

If the plan covers a major shift in the business's operations, such as a large expansion, then special care is needed to discuss how cost overruns might be handled, when production will begin in a new facility, when debt repayment will commence, and so forth. Although the planning process should reduce the amount of uncertainty associated with such a change, it can never eliminate uncertainty. Therefore, it should be noted that insurance may be used to protect the firm against financial losses that may be associated with operating a business. Be sure to define your insurance needs in this section of the business plan.

Uncertainty should also be accounted for in your financial forecasts. Let the reader know what assumptions you have made when developing the proforma statements. Also, some sensitivity analyses would be useful to show how your statements would change if output or input prices were different from your projections. If appropriate, set forth some contingency plans to be enacted if certain undesired outcomes are realized. For example, if milk production suffers from a hot, dry summer, you should have a contingency plan in place to help cash flow the business until production increases. For example, such a plan might include a revolving line of credit with the local bank.

Summary

The body of your business plan should have a final section in which you again tell the reader the highlights of the plan. Highlight the most important features of your plan. Restate your most important goals and briefly mention how you will achieve them. Here again, a time line might help to state what your goals are and when your firm expects to reach them. Remember, you have already provided many details, so keep this section relatively brief, referring the reader to earlier material where necessary.

In this section, draw focus on what your plan means for future profitability, efficiency, liquidity, and solvency. That is, all of your plans will likely affect the farm's financial status. Because this is a business plan, and businesses continue to operate only when profitable, this should be the major thrust. However, remind the reader of what may happen if your assumptions, particularly those related to input and output prices and quantities produced, are not realized. Refer to your contingency plans and sensitivity analyses.

If the business is a family-run operation, as many farms and other small agricultural businesses are, then you may want to include some family goals in your plan. Although you should try to separate family issues from business issues to the extent possible, completely divorcing the two is not always possible. Highlight where business success coincides with success in meeting the family's goals.

Finally, a concluding paragraph should draw the plan together and reinforce for the reader that your firm is committed to working collectively toward the plan's goals. Leave no doubt in the reader's mind that, barring detrimental outside influences, the goals of the plan will be reached.

Appendices

Throughout this publication, we have pointed out some things that you may want to include in appendices. For example, one appendix might contain your financial statements, both actual and proforma, to which you refer in the Financial Management section. You may also want to include the formal job descriptions you have prepared. Use appendices as you feel appropriate. If you would like to include something that may not be relevant for the body of the manuscript to further describe your operation, then include it as an appendix. To differentiate them, give each new appendix a unique name such as, "Financial Statements" or "SWOT Analysis Results."

Conclusion

One of the most important things you can do to ensure success is to plan for the future. The planning process may take many hours to complete, especially if it is to provide a thorough representation of the firm. However, it will be a valuable asset as it forces a review of the firm and the industry, unites the collective labor force of the firm to work toward a set of common goals, and allows outsiders to gain a detailed understanding of the firm's past, present, and future.

Business planning is not applicable only to large firms. Smaller agricultural businesses, which are often family-owned, stand to benefit at least as much from planning as do larger firms. In agriculture, especially agricultural production, the small compete directly with the large. Business planning will help firms of all sizes to better understand their relative positions in the agricultural industry. It will also help the owner to set goals and devise strategies for reaching those goals.

Glossary

Asset Turnover Ratio

The percentage of total assets earned as gross income. A higher number is generally associated with higher profits. Mathematically, this equals gross income divided by average total productive assets.

Balance Sheet

A financial statement that shows total assets, total liabilities, and owners' equity at a specific point in time. The liabilities and owners' equity represent claims on the firm's assets.

Business Planning

The process of analyzing the firm's strengths, weaknesses, opportunities, and threats, using that information to develop organizational goals, and crafting strategies to reach those goals.

Competitive Advantages

Refers to particular strengths of the firm relative to those of other firms. Some examples are being the first firm in an area to provide custom heifer raising, having a manager with strong direct-marketing skills, or having superior land for growing crops.

Contingency Plans

These are strategies for dealing with potential outcomes that differ from those assumed in the initial planning process. These are most frequently associated with unfavorable outcomes.

Contract Production

Refers to any situation in which the farmer grows crops or livestock for a specific firm under terms negotiated in a contract.

Cooperative Extension

The system of offices located around individual states that provides information and education to farm managers and other individuals. In Pennsylvania, this is Penn State Cooperative Extension.

Current Ratio

Measures the ability of the firm to pay its current liabilities with its current assets. A ratio greater than one indicates that the firm is liquid and able to cover its current liabilities. Mathematically, this is equal to current assets divided by current liabilities. Current assets include cash and other assets that will be converted to cash or used up within one year. Current liabilities are those that are payable within one year.

Custom Business

Any firm offering to perform services for a farm that would replace those already provided by the farm's labor. Some examples include crop scouting services, custom planting and harvesting, or custom heifer growing.

Debt to Asset Ratio

Indicates the percentage of total assets owned by creditors. For example, a debt to asset ratio of 0.5 means creditors own 50 percent of the farm's assets. Mathematically, this is total debt divided by total assets.

Income Statement

Provides a review of revenues and expenses over a given period of time, often a year. This may also be referred to as a profit and loss statement, earnings statement, or an operating statement.

Leverage Ratio

This represents total farm debt as a percentage of equity. If this ratio is greater than one, for example, then the business is financed by debt more than by equity. Mathematically, this is total debt divided by equity.

Mission Statement

Provides a summary of why the business is in operation. This may include the firm's common values, an overview of products or services, target markets, or other information to provide a clear picture of the firm's purpose.

Net Income

Represents the difference between gross income and total expenses. Mathematically, this equals gross income minus total expenses. A positive number means that the business is making enough to cover expenses and either reinvest in the company, pay debt more quickly, or increase owner incomes.

Operating Expense Ratio

Represents the percentage of gross income used in operating expenses (those expenses on inputs used in the current period). Mathematically, subtract interest expenses from operating expenses and divide the result by gross income.

Organizational Chart

A graphical representation of the formal chain of command for a firm. It shows who the supervisors are and over whom these have authority.

Pro Forma

This indicates that the financial statement is a projection of the future. These should be based on the best possible estimates at the time they are put together.

Profit Margin

This shows the percentage of gross income resulting in profits for the firm. Mathematically, find the value of net income plus interest expense minus the value of operator and unpaid operator labor and divide that value by gross income. Interest expense is added back to net income because it represents a return to the debt-financed assets. Removing the value of operator and unpaid operator labor shows that returns must be enough to cover this value.

Rate of Return on Assets

This shows the return to all assets employed in the business as a percentage of the total assets employed. Mathematically, it is found by dividing the numerator of net income plus interest expense minus the value of operator and unpaid operator labor by the denominator of average total farm assets. Interest expense is added back to net income because it represents a return to the debt-financed assets. Removing the value of operator and unpaid operator labor shows that returns must be enough to cover this value.

Rate of Return on Equity

This shows the returns to equity assets employed in the business as a percentage of the equity assets. Mathematically, it is found by dividing the numerator of net income minus the value of operator and unpaid operator labor by the denominator of average total equity assets. Removing the value of operator and unpaid operator labor shows that returns must be enough to cover this value.

Revolving Line of Credit

A type of credit account in which the borrower has a given credit limit which can be borrowed at any time. A credit card or standing account with an equipment dealer are examples of revolving credit lines.

Risk Management

Refers to any attempt to avoid the possibility of unfavorable outcomes under uncertainty. Insurance and buying on futures and options markets to lock in input or output prices are good examples of tools used in risk management.

Sensitivity Analyses

Refers to using alternative assumptions to determine what the outcome of a financial analysis will be if different outcomes are realized. For example, if developing a proforma income statement, using a range of assumptions associated with output prices helps to show how projected net income will change if prices differ from the base assumption.

Standard Operating Procedures (SOPs):

These are written sequences of steps required to perform a specific task. Milking a cow, for example, requires many steps. A written SOP allows the milker to perform this task in the same way every time the cow is milked.

Statement of Cash Flows

This shows cash income and cash expenses over a specified period of time, often a year. These receipts and payments are typically broken into three categories associated with operations, investments, and financing.

SWOT Analysis

A systematic review of the firm's strengths, weaknesses, opportunities, and threats. This is used to draw focus on what the firm does well and what it may be able to do to take advantage of emerging market opportunities.

Vision Statement

Provides a summary of the firm's most important goals. Firms differ with respect to how specific they state these goals in their business plans. We recommend being as specific as you can comfortably be.

Working Capital to Value of Production Ratio

This represents working capital as a percentage of gross income. Working capital is equal to current assets minus current liabilities. Current assets include cash and other assets that will be converted to cash or used up within one year. Current liabilities are those that are payable within one year.

Additional Resources

See the Penn State Farm Management Web Site for other resources that may be useful as you develop your agribusiness plan. The URL is: <http://farmmanagement.aers.psu.edu>.

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The authors would like to thank Todd D. Davis, extension economist at Clemson University, and Richard Stup, senior extension associate with Penn State Dairy Alliance, for their helpful reviews of an earlier draft of this publication.

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Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone 814-865-6713.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. T. R. Alter, Director of Cooperative Extension, The Pennsylvania State University.

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CAT UA371 2M9/02acg4548

Produced by Information and Communication Technologies in the College of Agricultural Sciences