Farm Business Planning Workbook

Plan for Success

EMWOFA

Empowering Woman Farmers With Agricultural Business Management Training

RUTGERS

School of Environmental and Biological Sciences

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INTRODUCTION

This workbook is designed to help a farm business business owner write a business plan. It is divided into the major sections of a business plan, then each component of each section is discussed in detail with farm-specific examples. Throughout each section, you will find questions to ask yourself in a green box and spaces to take notes. At the end of each section is a blank page to begin outlining the section for your business plan.

For additional help and ideas, a sample business plan was created, covering each of the sections in this workbook called Mrs. Greenjeans Greenhouse. Portions of the sample plan are inserted into this workbook in the appropriate sections.

This workbook is by no means all-inclusive. It is highly recommended that each business owner research these topics, sometimes with the help of a professional. There are several websites dedicated to providing business-related information for farm businesses, which are listed in the Bibliography. Remember that the most important part is the research and careful consideration you put into writing the business plan, so don't rush. Take your time and really think about the decisions you are making.

BUSINESS PLANNING

It has been said that managers who fail to plan, plan to fail. A plan is necessary for management to be effective. An effective manager guides others in following that plan. Management is not just about getting from point A to point B. It is about combining your business resources and operating environment. The operating environment consists of things like the economy and federal, state, and county regulations as well as local ordinances. The results of the business plan determine how effectively its objectives were met and also forms the basis for the next planning stage. Managing a farm business is a continuing cycle of evaluating, planning and putting the plans into action.

Success in a farm business requires both technical and business management skills. Managers who are evaluating whether or not to adopt a new system, technology, or technique must evaluate not only the impact on the technical aspects (environmental controls, pest management, fertilization, etc.) but also the effects these have on the bottom line. Some businesses who had good *technical* managers have failed because of poor *business* management, and other businesses have failed because they had good *business* managers but did not have good *technical* managers. To survive in the long run, the manager must manage all aspects of the business well. Long-term survival of a business today also requires planning. The planning should reflect upon and analyze a range of issues relating to the owner, the industry, and the business itself *(Figure 1)*.

The owner	Personal motivations and priorities
	Skills and abilities
	Financial resources
The industry	Statistical data
	History, trends, and future directions
	Industry strengths, weaknesses, opportunities and threats
The business	Business description
	Business SWOT
	Business objectives
	Strategies
	Methods of operation

Considerations When Planning

Figure 1

What Is a Business Plan?

A business plan is a systematic evaluation of a venture's possibility for success. It is a written summary of the proposed business venture, its operational and financial details, marketing opportunities and strategy, as well as the skills and abilities of the manager and employees. A business plan is a reflection of its creator. **The real value is in the process of creating it.** It may help the creator to realize that a business *idea* alone just will not work. For the business idea to succeed, it must have a plan that will work. If a profitable plan cannot be developed for an idea, then it is unlikely that a profitable business will follow. While a business plan does not guarantee success, it does increase the chances of succeeding in business. It is a GPS for managing a business successfully.

Two Essential Functions of a Business Plan

1. It is the guide for the business. It charts its future course, defines the strategy for building it, and helps the business stay focused on its objectives.
2. It can be used to obtain capital from lenders and investors. It helps define the potential returns relative to the costs and risks.

What Should Be in a Business Plan?

A business plan should include a description and definition of who is involved, what consumer needs will be met, what the saleable product(s) or service(s) are, and the marketing environment in which the business operates. It should contain an analysis and plan for how the product(s) or service(s) will be produced and marketed. It is also important to create a a list of what resources are needed to achieve the plan, when they are needed, and a summary of anticipated results.

EXECUTIVE SUMMARY

The executive summary appears at the beginning of the business plan, but *it should be written last*. The focus of the executive summary depends on the purpose of the plan. If the business plan is being presented to lenders or investors, it should include highlights that will encourage them to consider financing the business. It should briefly describe what the manager plans to do, for example expansion plans, market opportunities, plus financial trends and projections. If the plan is primarily for internal management, then the executive summary should summarize the plan and communicate with family members (or board members if it is a corporation) and employees where the business is going. The executive summary should be no more than two pages and should summarize the big points from each of the following sections: Strategic Plan, Production and Operations Plan, Marketing Plan, Management and Personnel Plan, and Financial Plan. The plan should match the business's mission or vision. The executive summary is the *elevator pitch*. An elevator pitch is a short summary to briefly and simply describe a product and/or service and its value proposition (promise of a value to be delivered and the customer's belief that this value will be experienced). It should be clear, complete, and precise and convey that the manager believes in the future of the business. The goal of an executive summary is for anyone to be able to understand the entire business concept and the company's competitive advantage.

ASK YOURSELF

- What is the current status of the business?
- What products or services will it provide? Are they unique or different?
- How large is the market and who are the customers who will be buying the product or service?
- Why will they buy this particular product or service? What is its competitive advantage?
- Who is on the management team? Do they have experience, motivation, relevant intellectual capital, and a proven track record?
- What key assets are in place?
- What are the market share and financial projections for the next three to five years?
- What does the venture need to accomplish these projections?

<u>NOTES</u>:

Mrs. Greenjeans Greenhouse Executive Summary

Mrs. Greenjeans Greenhouse is a small greenhouse business located in a fairly rural area in Anywhere, USA. I, Mary Wilson, have a B.S. degree in horticulture and am the manager and owner of the greenhouse. This spring will be my first crop. My husband, John, has a degree in economics and earns enough money at his job as a financial advisor to keep the family going while I get the business up and running. He is helping with the business plans. Our two children, a daughter Linda, who is 14 and in 9th grade, and a son, Dan, who is 15 and in 10th grade, are helping out with the business a few hours after school each day.

The greenhouse facility is 25,000 square feet and is 30 years old. The business specializes in bedding plants and sells mostly to local retail garden centers. The previous owner of the business, Bill Smith, had reduced production to only bedding plants in the spring. I plan to produce bedding plants, but to also expand production to include poinsettias, hanging baskets, perennials, and garden mums so that I have crops almost year-round. This will improve cash flow, keep customers coming back for products all year, and help keep the same employees most of the year. I plan to produce my own plugs and rooted cuttings in the winter so that I can ensure the top quality demanded by the retail garden center market. I plan to sell extra flats of plugs and rooted cuttings to other producers. In addition to bedding plants, I will produce perennials for spring sales to garden centers. In the summer and fall, I will grow my own poinsettia stock plants, finished poinsettias, and florist mums. In addition to producing plants in the greenhouse, I will also produce garden mums for fall sales on about one quarter of an acre outdoors.

BUSINESS DESCRIPTION

The business description introduces the company and helps people who are unfamiliar with the business understand what the farm or company provides or produces, the size of the operation, and how the services or products are marketed. It should include the business type and size; the history, current status of the business, and plans for the future; the location; the facilities; and the ownership structure.

Business Type and Size

The *business type* defines the primary business of the company. Examples are ornamental plant production for sale to mass merchandisers or direct-to-customer sales of fresh produce. It is important to be specific.

ASK YOURSELF

- What crops or products will the business produce and sell?
- What is the size of the business in terms of the number of acres owned, acres rented, area in production, size of the greenhouse, and size of facilities?
- What services will be offered? Examples include post-sale services such as product delivery; online ordering; product information through Web sites, blogs, Facebook, Instagram, Twitter; and/or toll-free phone numbers.

Describe Your Business Type and Size:

History, Current Status, and Plans for the Future

This section of the business plan briefly describes when the business started, how it started, how long the current owner has owned or managed it, and important events and changes. If this is a business still in the planning stages, the business plan should describe the business the owner envisions.

ASK YOURSELF

- What is the uniqueness of the business and its products and services?
- Who are the owners and key personnel?
- What are the financial capabilities?
- Are there any special business relationships?
- What are the key strengths to build upon, and weaknesses to correct or overcome?
- Are there any plans for expansion or changes in size, sales, and profitability?
- What are the future plans, timetables, resources and personnel required, or technical gaps to be filled?
- What major challenges will the business face over the next five years?

Describe Your Business History, Current Status, and Plans for the Future:

Location and Facilities

The business description should include the *location* of the business and why that location was chosen. If there are multiple locations or sales outlets, they should be described here. It can include a legal description of the land, and if it is rented, it should list the parcels, the acres, and the landlords. It should also describe the size, type, and quality of the facilities and any retailing or other activities that require significant infrastructure details.

Ownership Structure

The legal organization chosen for a business has risk, finance, tax, and estate planning ramifications. Farm owners should consult an attorney and an accountant to select or change to a legal structure that best suits their needs. The description of ownership structure should explain who owns the business, what proportion each owns if there is more than one owner, and how the profits are shared. It should include the proposed business name and indicate if it is registered. The advantages and disadvantages of various legal business arrangements are described below in Figure 2.

SIX BUSINESS STRUCTURES
1. SOLE PROPRIETORSHIP
In a sole proprietorship, the business is owned and controlled by one person. The primary advantage of a sole proprietorship organization is that the owner is independent and free to make all business decisions without an obligation to partners or shareholders. The disadvantage of a sole proprietorship is that the owner is personally liable for any debt, taxes, or other financial and regulatory charges.
2. PARTNERSHIP
Partnerships may be formed between two or more family members or third parties. Each partner is liable for all partnership obligations. One of the primary advantages of a partnership may be the infusion of business capital and other assets by one or more partners. For example, one partner may be good at finances and marketing, and the other may be good at growing crops and managing the physical facility. Each partner pays taxes individually based on his or her share of income, capital gains, and losses. There are two types of partnership: general partnerships and limited partnerships. In a general partnership, one or more partners are jointly responsible or liable for the debts of the partnership.
3. CORPORATION
Corporations are owned by one or more shareholders and are managed by elected directors. A corporation must be established in compliance with statutory requirements of the state of incorporation. The corporation, not its shareholders, is responsible for corporate debts and other obligations. One disadvantage of corporate organization is that owners are considered employees of the business and are therefore subject to labor laws and taxes. For many corporations, the most important tax decision hinges on whether or not to elect to be treated under the provisions of subchapter S of the Internal Revenue Code. In general, S corporations do not pay any federal income taxes. Instead, the corporation's income or losses are divided among and passed through to its shareholders. The shareholders must then report the income or loss on their own individual income tax returns. This concept is called single taxation. If the corporation is taxed as a C corporation, it faces double taxation, meaning both the corporation's profits and the shareholders' dividends are taxed.
4. LIMITED LIABILITY COMPANY
This organizational form offers owners limited liability like a corporation—investors are liable only for their investment in the business—but it may be classified as a partnership for tax purposes. Two or more business partners may form an LLC.
5. LAND TRUST
A land trust is a legal entity that allows a land owner to transfer property to a trustee. While the trustee is the legal owner of the property, the beneficiaries are given possession and management of the land. This type of legal organization can be beneficial for estate planning purposes as it allows the beneficiaries to avoid probate upon death of the owner.
6. COOPERATIVE
A cooperative is a legally incorporated business entity capitalized by its member patrons or owners. Dividends are paid out to its patrons. A cooperative is taxed on income at corporate rates, but patronage refunds are often tax-deductible to the cooperative. Some producers use cooperative organization to acquire and provide machinery and equipment maintenance, as well as marketing and advisory services.

Adapted from Minnesota Institute for Sustainable Agriculture (MISA) (2010).

Figure 2

Mrs. Greenjeans Greenhouse Farm Business Description

Mrs. Greenjeans Greenhouse is a wholesale floricultural business specializing in selling unique, high-quality plants to retail garden centers. The production facility is a 25,000-square-foot glass greenhouse. I plan to produce bedding plants, poinsettias, hanging baskets, perennials, and garden mums so that I have crops almost year-round. This will improve cash flow, keep customers coming back for products all year, and help keep the same employees most of the year. I plan to produce my own plugs and rooted cuttings in the winter so that I can insure the top quality demanded by the retail garden center market. I plan to sell extra flats of plugs and rooted cuttings to other producers. I will also produce perennials for spring sales to garden centers. In the late summer and fall, I will grow my own poinsettia stock plants and finished poinsettias. I will also produce garden mums for fall sales on about one-quarter of an acre outdoors. The greenhouse sits on a 30-acre tract of land that also includes a small barn, not currently in use.

Mrs. Greenjeans Greenhouse is a new business just starting up with myself, Mary Wilson as owner/manager. The greenhouse facility is 30 years old and was purchased from Bill Smith, who retired. I have a B.S. degree in horticulture and will be the manager and owner of the greenhouse. This spring will be my first crop. My husband, John Wilson, has a degree in economics and earns enough money at his job as a financial advisor to keep the family going while I get the business up and running. He is helping with the business plans. Our two children, a daughter, Linda, who is 14 and in 9th grade, and a son, Dan, who is 15 and in 10th grade, will help out with the business a few hours after school each day.

Because of the growth of mass merchandisers who sell plants a low costs, I plan to produce high-quality plants and unique varieties that are not available in the mass market. I plan to sell my products to the retail garden center market, whose customers are serious gardens looking for quality, service, and uniqueness.

Mrs. Greenjeans Greenhouse is located in fairly rural area just outside of a small town, Anywhere, USA, on a major road. The area contains upscale, Victorian homes where beds of annuals and hanging baskets are prized.

Mrs. Greenjeans Greenhouse has a 25,000-square- foot glass greenhouse with a 2,000-square-foot head- house and loading dock. There is also a small barn that can be used for storage or possible retailing activities.

Mrs. Greenjeans Greenhouse is a partnership with Mary and John Wilson as owners. It has been registered with the state. I (Mary) utilized inherited assets to purchase the business, so I was able to provide 75 percent of the start-up capital. It is my intention not to make that inheritance a gift to my marriage, and accordingly have consulted a law firm to insure that in the event of divorce or my premature death, those assets will remain mine or protected in my estate. I am also the full-time manager. John and I are in agreement that, since I am providing 75 percent of the capital and John is providing 25 percent, the same percentages should apply to the proprietorship. This formula will apply to all other aspects of the business structure, such as taxes, profits, and liabilities (as well as unforeseen circumstances that might arise and resolve themselves as liability issues).

<u>Outline Your Business Description</u>:

STRATEGIC PLAN

BUSINESS AND INDUSTRY PROFILES

Strategic planning is a tool that looks at the big picture. Each business possesses a unique bundle of resources in terms of skills, capital, location, etc. Strategic planning helps determine how to use these resources to give the business a competitive advantage. It considers future competitive forces in the industry. It describes where the owner wants the business to go and how he or she plans to get there over the next 5 to 10 years. Typical components of a strategic plan include (1) mission statement, (2) goals and objectives of the business, (3) industry analysis (external opportunities and threats), (4) the business's competitive position (internal strengths and weaknesses), (5) business strategy, and (6) implementation plan.

Vision and Mission Statements

To set goals and standards, a business needs to create vision and mission statements. The **vision statement** looks at the future and asks *what kind of business do I want to own*? It is a source of inspiration and provides clear decision-making criteria.

ASK YOURSELF: Vision Statement

- What values do I hold that I will not compromise?
- What characteristics do I want to portray to people?
- What principles do I stand for?
- How do I want to be seen or thought of when I interact with people?
- What do I want in life?

Write Your Vision Statement:

Mrs. Greenjeans Greenhouse's Vision Statement

Mrs. Greenjeans Greenhouse strives to provide top-quality plants and flowers to serious gardners at a good value. All people are treated with dignity and respect.

A **mission statement** identifies the company's products, services, and customers. It should focus less on what activities happen on the farm and more on what the business will accomplish for its customers, employees, and owners. In a market-driven economy, a good mission statement describes *what consumer need will be filled*. The customer value proposition is how the business's products and services will do this better than the competition. This market-driven approach to business is different from the production-driven approach taken by many managers who focus more on their products than their customers' needs. In the past, when times were less competitive, managers could produce high quality products and then find a market for them. Now, firms must *first identify a market need* and then provide products or services that satisfy that need, at a price customers are willing to pay, while still returning a profit to the business. A well-written mission statement should not only explain what product or service the farm produces, but also why consumers would want to buy that product or service, i.e., the firm's value proposition.

A mission statement should be short enough so people can easily remember it. The mission statement declares to everyone the company touches the answers to the following questions: "Why am I here?" "Where am I going?" and "How can we beat or avoid competition?" A mission statement can be used to unify the people involved in the business around a common direction and understanding of the purpose. It can be used as a guide for making decisions.

ASK YOURSELF: Mission Statement

- Why does the business exist?
- What is its purpose?
- What does the business do?
- Why does it do it?
- For whom does it do it?

Write your Mission Statement:

Mrs. Greenjeans Greenhouse's Mission Statement

Mrs. Greenjeans Greenhouse will produce and distribute unique high-quality greenhouse products to serious gardeners within a 200-mile radius around Anywhere, USA. We will pursue continued market penetration through a commitment to quality and value.

Goals and Objectives

Goals and objectives help define what the business will become. While goals can be broad or general in nature, objectives should be clear and concise. Goals should give the business a future target. Objectives should be SMART (Specific, Measurable, Attainable, Relevant, and Time-bound). Because the strategic plan should be frequently monitored and updated, goals may need to change to reflect a new and revised strategy.

Goals can be defined by discussing questions such as the following among family members and business partners.

ASK YOURSELF: Goals

- Why are we in business?
- Are we in business because we like being our own boss?
- What do we want to accomplish in our lives and business?
- What level of profits do we need?
- Are we purely profit motivated, or do we also make investments for community status or other reasons?
- How large should the business become?
- How will we provide employment and financial security for family members?
- How will we increase our family's wealth?
- Do we enjoy growing plants?
- Are we people oriented or technology oriented?

List your Goals:

Objectives are usually expressed in financial terms. Managers should try to think of objectives for each of the following functions: financial, marketing, profit, personnel, production, sales, customer and public relations, advertising, accounting, collection, purchasing and inventory control, legal, and security objectives. Many of these functions cannot be clearly separated from each other and will overlap. When developing objectives, managers should consider how they will impact the long-term profitability of the business.

Some examples of specific objectives that are measurable within a specific time period are as follows:

Examples of Objectives

- Increase return on investment 20 percent within the next three years.
- Increase sales by 50 percent over the next five years.
- Reduce labor costs by 20 percent over the next five years.
- Provide two weeks of paid vacation per year for all employees within five years.
- Increase production by 25 percent within two years.
- Grow the business to a size that will, in the long term, provide cash flow for three families at $40,000 per family.
- Reduce debt by $25,000 per year.
- Be in a position to transfer full ownership to my children when I retire within 10 years.

List SMART (Specific, Measurable, Attainable, Relevant, and Time-bound) Objectives:

Mrs. Greenjeans Greenhouse Goals and Objectives

The goal of Mrs. Greenjeans Greenhouse is to begin operating a 25,000-square-foot greenhouse and sell bedding plants to local retail garden centers next spring and continue with hanging baskets, garden mums, perennials, and poinsettias for year-round production.	The first objective is to write a business plan within the next three months. The second objective is to contact an attorney to review the business plan and draw up new wills for Bill and Mary in the next three to six months. The third objective is to have sales of $200,000 the first year.

SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats)

Businesses face external opportunities and threats that are beyond their control. Shifting economics, increased global competition, changing government regulations, and new technology are some of the reasons it is more difficult to make a profit in the agriculture industry today than in the past. Firms also have strengths and weaknesses that are internal to their businesses, such as location, skills of key employees, and cash flow position. Building a successful business requires magnifying strengths and overcoming weaknesses. Managers can identify competitive advantages by matching internal strengths of the business to external opportunities. They can try to overcome internal weakness and external threats by converting them into strengths or opportunities. An example of a conversion strategy is to find new markets. Many smaller growers who cannot compete on price with larger competitors have turned to direct marketing, where they can compete on non-price factors such as service. If the threats or weaknesses cannot be converted, successful managers try to minimize or avoid them.

Competitive Position: Internal Strengths and Weaknesses**.** Agricultural production is a very competitive business. Building a successful business plan requires magnifying strengths and overcoming weaknesses. For example, a manager who has skills in the technical aspects of the business but is weak in the business aspects may be able to hire someone to help evaluate the economic impact of his or her decisions. Likewise, a good business manager who does not know the technical aspects of the business may want to hire someone who has those missing skills.

To assess the company's competitive position, managers should consider strengths that can be utilized and weaknesses that must be overcome to compete in a global environment and/or with other businesses in their local area.

ASK YOURSELF

- What production levels do you have now or do you want to achieve?
- How much land do you own? Can you rent or purchase other land for expansion?
- What equipment and facilities do you have and the age and condition of each? Can they be better used? Should you sell off excess and unused equipment?
- What is your financial condition?
- What is the cash position of your business?
- What are the skills and limitations of the owner/manager?
- Does your strategic plan require greater competence or resources than the firm currently possesses?
- Does the proposed plan exploit marketing and production opportunities?
- Do your personal preferences or sense of social responsibility limit the alternatives? (For example, do you not want to work on Sundays, a possibly high volume day for direct marketing?)
- Can you form alliances or partnerships with other businesses that could complement yours?
- What marketing channels are possible?
- How many employees does your business have and what skills and talents do they possess?
- What family members will be involved in the business and what are their unique talents and interests?
- Who will be the next generation of management?
- How does the layout of the greenhouse operation impact production efficiency?
- Do you have an adequate, cost-effective water supply?

List Your Competitive Position: Internal Strengths and Weaknesses:

Mrs. Greenjeans Greenhouse Internal Strengths and Weaknesses

Mary Wilson is starting a wholesale greenhouse and plans to produce high-quality plants for garden centers. She is also considering some retail sales directly out of her greenhouse in the peak bedding plant and poinsettia season. She has evaluated the firm's competitive position by analyzing the strengths and weaknesses of her business.

Financial

Strength: The business does not have to support the family initially because of John's job.

Weakness: The net worth is tied up in the green- houses, which will rapidly depreciate.

Production

Strength: Greenhouses are surrounded by enough flat farm land that agri-entertainment options could be considered. The possibilities include pick-your-own pumpkins, Indian corn, haunted houses, corn mazes, and pick-your-own strawberries.

Weakness: Facilities are old and limit mechanization.

Sales

Strength: Mary took over an existing business, so there is a customer base from which to draw.

Weakness: The greenhouse is one-half acre, and the previous owner sold wholesale, and only during the bedding plant season. Therefore, unless new items are added to increase production to include other seasons, sales could be limited.

Facilities

Strength: A small barn is currently not in use, but has potential for a roadside stand. It is highly visible from a heavily traveled road, and lends itself to window boxes and other displays. The property has a functioning well that provides enough water for the greenhouse.

Weakness: Greenhouses are in fair condition at best and in need of modernization and repair.

Personal

Strength: The family is behind Mary's plan to start a greenhouse business.

Weakness: The new business will take time away from activities that the family did before.

Marketing

Strength: The business is located outside a city that boasts three supermarkets, which could be possible wholesale customers.

Weakness: If the greenhouse moves more into direct marketing, this would be a new venture with no customer base.

Profit

Strength: John's job provides money to live on, so the greenhouse has the luxury of building the business long-term.

Weakness: Initially the business will be wholesale, so sales are not high and profit potential is limited.

Personnel

Strength: The children can help out after school for now.

Weakness: Labor is the largest cost, and will become even higher in three to four years when the children go off to college and more labor will need to be hired.

Industry Analysis: External Opportunities and Threats. We truly live in a world economy today where the market is constantly changing. External factors drive these changes or trends. Many of these changes pose threats to farm businesses. When consumer confidence is shaken, demand for farm products can decline. Imports coming from countries with lower production costs make it difficult to compete. Oil prices are volatile and impact input costs such as heating and transportation. For many businesses, weather can be a bigger challenge than a weak economy. Rainy weekends keep buyers away, and product cannot move through the supply chain. Government regulations are increasing, pushing up costs and consuming management's time. On the other hand, external changes or trends also offer new market opportunities. The increase of two-income couples, for example, means these consumers may have little time for cooking but have disposable income to buy pre-made products. The buy local and green movements offer marketing possibilities to innovative producers. The explosion of web sites and social networking sites such as Facebook, Instagram, and Twitter gives businesses new ways to compete, but also takes time and effort. Business owners who adjust to the change early take the most risk, but often also reap the most benefits.

Producers should identify trends (driving forces) in the marketplace that will impact the agriculture industry. Areas to consider are technological innovations, legislation and political changes, government regulations, globalization, cultural and demographic trends, labor availability, or changes to input suppliers and markets. A basic part of strategic planning is to understand these trends. A successful manager will structure the business to take advantage of opportunities to meet the company's objectives and prepare for threats that might inhibit the company's ability to achieve its objectives.

Perhaps the biggest advantage of Northeastern farm businesses is that they are located near densely populated consumer markets of high-income consumers. Some state programs that can potentially benefit New Jersey farm owners include farmland assessment, right-to-farm protection, and farmland preservation.

Threats for Northeast farm businesses are high costs for land, labor, and other inputs. To overcome these economic weaknesses, businesses must find ways to reduce costs, focus on their strengths, or a combination of both.

ASK YOURSELF

- Can current or emerging market trends become business threats or missed opportunities if you don't include them in your strategy?
- Is technology changing such that you will not be able to compete with low cost producers who adopt the new technology unless you adopt it as well?
- Will government regulations force you to adopt new systems?
- How can you offer service, convenience, and value for today's busy and cost-conscious consumer?
- What is happening to your particular market channel locally, regionally, nationally, and internationally? What opportunity does this open up for your business? What threats or challenges does it create for your business?
- What changes are greenhouse businesses similar to yours making?
- Have others made positive changes that might work for your business or bad decisions that you know you want to avoid?

Prepare Your Industry Analysis: External Opportunities and Threats:

Mrs. Greenjeans Greenhouse External Threats and Opportunities

Cultural and Demographic Trends

Opportunity**:** The number of two-income families with high disposable income is growing. Consumers are becoming more sophisticated and want healthy and exciting foods.

Threat**:** There are a growing number of two-income families with little time to cook.

Market/Globalization Trends

Opportunity**:** Consumers are looking for a "shopping experience" that lends itself to having urban consumers buy right from the farm and see how the food is produced.

Threat**:** The increase in the number of superstores and warehouse stores, which sell produce from other states and countries with lower costs or more favorable exchange rates, is pushing prices down.

Input Costs

Opportunity**:** Low cost producers make purchasing standard-sized plants, like 6-inch poinsettias, cheaper, thus allowing small producers to buy these cheaply for resale so that they can concentrate on producing specialty plants that command a higher price.

Threat**:** Profits are declining as labor, heat, and other input costs increase.

Technology

Opportunity**:** Communications technology is improving and becoming less costly.

Threat**:** As a small producer, it is difficult to compete with large, low cost producers who are mechanized.

Regulations

Opportunity**:** Consumers may want to learn about biological pest control and buy fruits and vegetables produced using reduced pesticides.

Threat**:** Minor use pesticides that are used on farms are being removed from the market or are coming under pressure and becoming more costly as registration costs are passed along to the producers.

Government Programs, Legislation, Political Changes

Opportunity**:** Demand is increasing for native, organic, deer-resistant, drought-tolerant, and environmentally friendly plants.

Threat**:** Consumers are reluctant to buy landscape plants because deer will eat them, the political climate is resistant to increased hunting to reduce the deer population, and local municipalities may impose watering restrictions because of drought.

<u>Outline Your SWOT Analysis</u>:

Business Strategy

After gathering all of the information in the previous steps, managers are in the position to develop and evaluate alternative strategies that will attain the objectives of the business. To develop a business strategy, a manager can begin by answering questions like, "What do you want your business to be in the next 5, 10, and 20 years?" and "Will your strategy help you do the right things to succeed in the future of your industry?"

Develop Strategic Alternatives. An analysis of external opportunities and threats and internal strengths and weaknesses can help identify strategic niche markets that the business is best able to fill by capitalizing on strengths. This strategy is much more likely to be profitable than competing strictly on price with large businessess in the industry. However, in this highly competitive business climate, reducing costs is an important consideration no matter what type of strategy the business chooses. The key is to identify ways to give the business a competitive advantage.

Producers in a purely competitive market are price takers (i.e., they must "take" the market price). To increase profits, price takers are limited to competitive strategies that reduce costs or increase sales, since they do not have the ability to raise prices if they expect to remain in business. Producers selling to the mass market may be in this situation. They will want to evaluate alternatives that reduce costs, and therefore increase profits.

TEN STRATEGIES THAT PRICE TAKERS CAN CONSIDER
1. REDUCE COSTS
Businesses can increase profits by reducing the costs of inputs while holding the selling price constant. (But, they must be careful not to let product quality slip by doing things like growing plants on spacing that is too tight.) This strategy includes mechanizing to save labor, using more intensive production technologies, planning purchases to take advantage of volume discounts and prompt-payment discounts, and more intensively managing the entire operation so that fixed costs are spread over more output.
2. EXPAND THE OPERATION
This is usually done to increase sales, and assumes that there will be economies of scale or that fixed costs per unit will not increase. Expansion should be considered only after increasing the efficiencies of existing facilities. Expansion should also carefully fit into the business's mission and goals. Sometimes when farm owners expand to a larger operation, they find that they are not making much more money than when they were smaller, and they enjoy it a lot less. Bigger is not always better!
3. REPLICATE
This is another way of expanding. Add another location or retail outlet when land nearby is not available for expansion, or if a second location better serves the business mission.
4. SPECIALIZE
Focus on one or only a few products or activities. Successful producers have focused on growing only plugs, or herbs, or outdoor cut flowers, and so forth. This concentrated focus allows for production efficiency and lower costs of production.
5. DIVERSIFY
Add new enterprises or products (the opposite of specializing). Diversifying the crop mix spreads risks over more products, and adding new customers or markets spreads business risks over more markets.
6. INTEGRATE HORIZONTALLY
Add more crops or enterprises to more fully utilize fixed inputs, thus spreading the fixed costs over more units of output.
7. INTEGRATE VERTICALLY
By going higher or lower in the marketing chain. Options include value-added marketing or adding a retail sales area or an agri-entertainment component to reach the final consumer. Another option is to go toward the input part of the marketing chain. Options include producing inputs, such as plugs, or adding a dealership to sell inputs such as fertilizer.
8. PRICING STRATEGIES
Use pricing strategies to increase sales such as multi-unit pricing (giving discounts to customers who buy larger volumes to encourage larger purchases, that is, one garden mum to retail customers for $5, but five for $20).
9. NETWORK
Network with other farm owners to produce, purchase inputs, or market.
10. CHARGE A PRICE PREMIUM
Charge a *price premium* for high-quality products. Even the mass market is now looking for higher-quality products and is willing to pay a slightly higher price for a better-quality product.

Figure 3

Much of agriculture is not a completely competitive market; not every product has a clear market price. These markets provide an opportunity to differentiate the product. Strategies for product differentiation offer possibilities for higher profits than more competitive crops, or crops that have become *commodities*.

SIX STRATEGIES TO DIFFERENTIATE YOUR PRODUCT
1. GROW ALTERNATIVE CROPS
Grow *alternative crops* that are not so competitive.
2. NICHE MARKET
Find a *niche market* that competitors are not serving.
3. GRADE FOR QUALITY
Grade for quality and charge premium prices for premium products.
4. ADAPT TO CHANGES IN CONSUMER TASTES AND PREFERENCES
For example, offer new varieties, service, and low-maintenance or drought-resistant plants.
5. ADD SERVICE TO THE PRODUCT
This could include special containers and care tags for plants.
6. CHOSE AN IDEAL LOCATION
This is a must for retail growers, but having easy access to major transportation routes also helps wholesale growers compete more cost effectively. Some existing producers have found that the best strategy is to sell existing facilities and move to a new location where they can take advantage of building newer, more efficient facilities.

Figure 4

Before farm businesses begin to consider these options, they should focus on the current operation and look at cost-reducing options. If problems exist in the current operation, expanding will only make things worse. A better approach is to focus on the system and improve the profitability at the current level of production before considering getting bigger.

ASK YOURSELF

What management strategies do I need to consider?

- What is the time period over which changes to the business will be made?
- Will they be done in increments or all at one time?
- What is the expected impact on the profitability, production levels, required labor, and markets if the plan is implemented?

List Alternative Strategies:

Mrs. Greenjeans Greenhouse Alternative Strategies

ALTERNATIVE A: YEAR-ROUND PRODUCTION

Instead of producing only bedding plants, we will expand production to include poinsettias, hanging baskets, perennials, and garden mums so that I have crops almost year-round. These will be wholesaled to garden centers, which pay a higher price than the mass market. I would also produce my own plugs and rooted cuttings in the winter so that I can insure the top quality demanded by the retail garden center market. I would sell extra flats of plugs and rooted cuttings to other producers. In addition to bedding plants, I will produce perennials for spring sales to garden centers. In the summer and fall, I will grow my own poinsettia stock plants, finished poinsettias, and florist mums. In addition to producing plants in the green-house, I will also produce garden mums for fall sales on about one-quarter of an acre outdoors.

Pros: This will improve cash flow, keep customers coming back for products all year, and help keep the same employees most of the year.

Cons: The previous owner produced only bedding plants, so a market would have to be created for the other products. Nearly year-round production will take much more management capability than producing only in the spring, and will leave less free time for family and other activities.

ALTERNATIVE B: RETAIL FARM STAND

Mrs. Greenjeans Greenhouse has a small barn that can be used for retailing activities. Bedding plants can be retailed directly out of the greenhouse, and garden supplies can be sold out of the retail stand. Easter and Mother's Day plants can be sold directly to the public. In the fall, mums, corn stalks, bales of hay, and so forth can be sold.

Pros: This alternative complements the production activity and creates a market that will command a higher price selling to garden centers compared with the wholesale market. Very little additional overhead costs will be required.

Cons: This will require more employees, more man- agement, a focus on sales rather than production, and a parking lot.

ALTERNATIVE C: AGRI-ENTERTAINMENT

We could use the land surrounding the greenhouses to start an agri-entertainment business. We could sell admis- sion for children to find their way through a corn maze. We could also sell pick-your-own pumpkins and Christmas trees. This will help draw in more customers to boost our garden mum sales.

Pros: We would be getting more money for less labor. We would have income from new crops and products such as cider, apples, pumpkins, squash, gourds, corn stalks, and bails of hay. This is a ready market for people celebrating the fall and Halloween and Thanksgiving holidays. This extends the cash flow season past the usual harvest when garden mum sales would die off. Combined with limited tree farming, it extends the sale into the Hanukkah/Christmas season. Christmas tree farming gives us a source to make door and

Christmas wreaths. **Cons:** More overhead would be required because agri-entertainment requires more	supervision. Any time people are trekking over your property, there are more liability issues.

Select a Basic Strategy. Once alternative strategies have been selected, they need to be evaluated. This is the stage when managers should do financial analysis. They will want to follow three basic investment criteria: (1) Larger benefits are preferred to smaller ones. (2) Early benefits are preferred to later ones. This takes into account the time value of money, that is, a dollar today is worth more than a dollar tomorrow. (3) Safety is preferred to risk.

In addition to financial analysis, managers will also want to analyze how these alternatives address the business's other objectives.

ASK YOURSELF

Which alternatives clarify other objectives for my greenhouse business?

- Which alternative will best enable the business to reach its desired objectives?
- Which alternative offers the greatest financial returns?
- Which alternative best matches the business' skills and resources (financial, technical, personnel, etc.)
- Which alternative best meets the owner's personal preferences or sense of social responsibility?
- Which alternative minimizes the creation of new problems?

List Pros and Cons of Alternative Strategies:

At this step, the manager and other members of the management team need to determine if the alternative strategies are consistent with the business's mission and objectives. If they are not, they may want to develop a new mission statement or objectives and follow the steps in the strategic planning process again. Or they may want to eliminate or modify that alternative so that it is consistent with the business's mission and objectives.

It is important to include the employees in the planning and evaluation process. Employees are often closer to problems than owners or managers. They often can contribute to recommendations and solutions to problems. Knowing that their opinions are valued can improve their job satisfaction and productivity as well.

After evaluating various strategies, the management team should select a basic strategy that is consistent with the business's objectives. The basic strategy should include marketing, production, financial, and personnel plans. The *production plan* tells if the system is technically feasible. The *financial plan* tells if the system is profitable. The *personnel plan* tells if the right people can be found to make the system work. A *marketing plan* is the centerpiece of the business plan and is the engine that drives the entire business. The marketing plan is the complete assessment of all the factors surrounding the consumer needs that the business will fill.

Selecting the final strategy may involve trade-offs among various objectives. One alternative may offer the greatest financial returns, but it may be inconsistent with other objectives. At this point, the manager must make a decision as to which objectives are most important. The final strategy may be a combination of more than one alternative strategy.

Mrs. Greenjeans Greenhouse Business Strategy

ALTERNATIVE A: YEAR-ROUND PRODUCTION
We purchased an existing business that was producing only bedding plants. For now, we want to focus on that core, and add year-round crops that are produced in the greenhouse. In the future, we will again consider alternatives B and C, but this seems like too much of a leap at the present. We fear if we diversify too much, we will lose our core strengths.

Implement the Plan

Once a strategy has been selected, the next step is to implement it. The strategy describes "Where do I want to be?" The next step is "How do I get there?" The business needs to identify who is going to do what by when for whom and for how much.

If the chosen strategy requires making major changes in the business, the implementation plan should describe what will happen during the transition period. If it involves expanding or changing the business, the plan may include a description of new facilities or land, a timeline for construction or purchases, a list of permits required and how to obtain them, a general overview of how the changes will be financed, and the impact on production levels during and after the changes. Many expansions do not meet their timelines, which results in increased financing needs. The implementation plan can include a timeline and a contingency plan for the possiblity that deadlines may not be met.

PRODUCTION AND OPERATIONS PLAN

The production and operations plan includes a description of what crops the business will produce, how it will produce them, and what technology and equipment will be used. Other business activities that may be related to the farm should be enumerated. These may include activities such as growing other crops like outdoor cut flowers or bio-fuels; selling production inputs to other producers; opening a roadside stand, farm stand, or CSA (community supported agriculture); or starting agri-entertainment ventures such as open houses, haunted houses, corn mazes, and pick-your-own.

ASK YOURSELF
What farm activities will your business perform?

Describe your Production and Operations Plan:

Farm Record-Keeping

Farm operations require a great deal of record-keeping to be successful and able to duplicate successes year after year. Before growing a crop, one should decide which records to keep. One set will be financial, including costs of items such as plants, seed, fertilizers, containers, root substrate, labor, and utilities. Additionally, the manager should keep cultural and production records.

Cultural Records. Cultural records are maintained for the purposes of (1) providing a plan for duplicating successful crops and (2) determining cause of errors in the culture of an unsuccessful crop so they can be corrected in the next crop.

Long before a crop is planted, a cultural schedule should be written, listing dates and labor budgets for operations such as root substrate preparation, planting, syringing, fertilization, pesticide application, pinching, pruning, chemical growth regulation, disbudding, harvesting, and cleaning up. This cultural schedule should be maintained in the general manager's office. The cultural schedule record sheet serves as a daily reminder to the production manager as to the various operations that must be performed. When each operation is performed, the name of the performing employee and the date are entered on the cultural schedule record sheet in the greenhouse. Should an unscheduled operation or an alteration in a scheduled operation be necessary, a description of the operation is entered in the record. At the end of each day, the entries are verified and initialed by the manager overseeing the operations.

Production Records. An additional set of production records is needed. These records are gathered throughout the growth period of the crop. The grower should assess the condition of each crop and weather conditions weekly and enter this assessment into the production record. Visual observations also should be recorded, including such factors as species composition, height, maturity, and any disease conditions.

These types of information allow for comparison of the present crop with previous crops. By looking at a poor crop in retrospect, the grower can identify the stage of growth when trouble first occurred. The production record should also include the yield harvested, the date, and the quality. These records are needed for cost accounting and are used in the same manner as the cultural records described earlier.

ASK YOURSELF
What records will I need to keep?

List the kinds of records you will need to keep:

Mrs. Greenjeans Greenhouse Record-Keeping Plan

I will keep cultural and production records for each crop. This will include cultural schedule, listing dates and labor hours for each production operation such as root substrate preparation, planting, syringing, fertilization, pesticide application, pinching, pruning, chemical growth regulation, disbudding, harvesting, and cleaning up. This cultural schedule will be recorded in the greenhouse and maintained in the general manager's office. Daily, the grower will assess the condition of each crop and record weather conditions

Gantt Charts: Planning and Scheduling for Labor Needs

Gantt charts can help managers work out the order in which tasks need to be carried out and identify the resources needed to grow and sell a crop, along with the times when these resources will be needed. When production is under way, Gantt charts help managers monitor whether or not the crop is on schedule. If it is not, they help pinpoint the remedial action necessary to put it back on schedule. The Gantt chart in Figure 5 depicts a portion of the production schedule for poinsettias showing the tasks required the personnel in charge, and the dates for each task. Templates for Gantt charts can be found online at www.ganttchart.com.

To use a Gantt chart, follow these steps:

List all of the tasks that need to be completed to produce and/or sell a crop. For each task, show the earliest start date, how long the task will take, and who is responsible for each task.

1. Make a chart for the year and schedule the labor activities. Plot each task on a yearly calendar, showing it starting on the earliest possible date.
2. Make a chart for each of your other crops and other farm activities for the year and schedule the activities. Pay particular attention to which crops look the most profitable and also what crops or activities can extend into slack months.
3. Make a master Gantt chart. You may want to start by writing down how many employees you think are needed, then how many weeks, and, finally, how many hours of that labor will you have. Next, list what crops you intend to grow. Make a budget and a Gantt chart for each one.
4. Make a budget for each activity or crop you intend to grow to match the hours of labor you expect to have. This will allow you to look at the big picture to see how much labor you anticipate needing in each month. Can you modify work schedules or crops and other activities to utilize available labor in slack months?

Mrs. Greenjeans Greenhouse Gantt Chart for Poinsettias

Task	Personnel	Start	End	Duration	August																			
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Order Cuttings	Production Mgr.	1/15	1/20	5 days																				
2. Order Supplies-elle pots, trays, fungicide, growth regulator, 6" pots	Production Mgr.	4/15	4/20	5 days																				
3. Hire Labor or reassign labor	Production Mgr.	6/1	6/15	2 wks																				
4. Check mist lines & disinfect benches	Labor	7/1	7/6	5 days																				
5. Stick Cuttings	Labor	7/18	7/23	5 days																				
6. Pot to Final Container	Labor	8/1	8/8	1 wk																				
7. Drench for Pythium	Grower	8/8	8/15	1 wk																				
8. Pinch 2 weeks after planting	Labor	8/15	8/20	5 days																				
9. Apply Pesticides	Grower	8/15	8/20	5 days																				
10. Apply Growth regulator	Grower	9/5	9/12	1 wk																				
11. Natural Short Days	Grower	9/21	9/26	5 days																				
12. Order Sleeves	Production Mgr.	9/21	9/28	1 wk																				
13. Sleeve	Labor	11/15	12/21	5 wks																				
14. Put on Racks	Labor	11/15	12/21	5 wks																				
15. Arrange in trucks	Marketing Mgr.	11/15	12/21	5 wks																				
16. Delivery	Driver	11/15	12/21	5 wks																				
17. Use Cost Accounting to Evaluate Results and plan for next year's crop	Production Mgr.	1/2	1/15	2 wks																				

The chart shows the tasks required the personnel in charge, the start date, the end date, and the duration of the task. The entire chart would show the calendar for the entire year and a line would be drawn through the date for each operation to be executed.

Figure 5

Production Plan for Mrs. Greenjeans Greenhouse

Mrs. Greenjeans Greenhouse is a small nursery located in Anywhere, USA. We purchased the business last year. The previous owner produced only bedding plants. We want to develop year-round production and sell primarily to retail garden centers. We hope to increase production and sales over the next five years by using the existing space more efficiently. The existing headhouse is the plant staging area for planting and preparing plants for delivery. It also has storage capacity for containers, chemicals, fertilizers, and bags of growing media.

The following table gives our production and price projections of each crop for the next five years. We plan to work closely with our county agent and use integrated pest management as much as possible.

Five Year Production and Price Projections for Mrs. Greenjeans Greenhouse

		Number of Units Produced				
Items	Price ($)	Year 1	Year 2	Year 3	Year 4	Year 5
Bedding plants	6.65	8,000	9,000	10,000	11,500	15,000
Hanging baskets	7.00	2,500	3,000	3,000	3,000	3,000
Perennials	10.00	1,000	1,000	1,000	1,000	1,000
Poinsettias						
4-inch	2.00	1,000	1,000	1,000	1,000	1,000
6-inch	4.00	2,100	2,100	2,100	2,100	2,100
7-inch	7.50	1,000	1,000	1,000	1,000	1,000
8-inch	12.00	400	400	400	400	400
10-inch	18.00	300	300	300	300	300
Hanging baskets	25.00	75	75	75	75	75

Risk Management Plan

Farm production comes with many risks. In this economy, farm owners are looking for ways to reduce both business and personal risks. They are reviewing their life, disability, health, crop, fire, wind, hail, and liability insurance. Crop insurance has steadily increased over the past few years. A minimum level of crop insurance, catastrophic (CAT) insurance, is available to producers of many crops, regardless of size, at a very low cost to the producer because CAT premiums are subsidized by the federal government. Higher levels of crop insurance (buy-up protection) are also federally subsidized, with growers paying only 33 to 45 percent of the actual cost of the insurance. Contact a crop insurance agent or visit: http://salem.njaes.rutgers.edu/cropinsurance for more information on specific crops. The Farm Service Agency also provides a similar program for many crops not covered by traditional crop insurance.

Farm businesses should implement financial management practices that can cut costs and improve the profitability at the current size before getting bigger. Managers can consider ways to eliminate debt or restructure it. They should evaluate cash flow and line of credit. Managers should also review their estate plans. Many do not plan to retire, but they do want to plan for an income stream in their later years. Rutgers Cooperative Extension's Later Life Farming Web site (http://laterlifefarming.rutgers.edu) helps producers deal with producing income in retirement or in later years as they cut back on some activities and turn the business over to others.

With the focus on sustainability, farms need to have pesticide management plans, consider integrated pest management (IPM), and look for more sustainable systems. Natural disasters can strike at any time; it is important to be familiar with the types of disasters that your area commonly experiences. Once you have this information, it is essential to plan for the worst and be prepared.

ASK YOURSELF

How will I develop my risk management plan?

- Do we have fire, wind, crop, and liability insurance coverage?
- Do we have crop insurance and, if so, what is the level of coverage?
- Do we have sales contracts for our crops? Explain the general contract terms and indicate whom the production contracts are with.
- Do we have production alliances or networking arrangements with other producers, cooperatives, suppliers, or companies?
- Are there other on-site issues? How do we manage pesticide and fertilizer storage and mixing; fuel storage; and concerns from neighbors?
- How are we addressing environmental issues?
- Do we have health, disability, and life insurance on ourselves and auto insurance on farm vehicles?
- What will happen if me or my partner were to pass away unexpectedly?
- What is the plan if power goes out and we are left without water? What is the plan for a heavy snowfall?

Describe Your Risk Management Plan:

Mrs. Greenjeans Greenhouse Risk Management Plan

GENERAL
Mrs. Greenjeans Greenhouse grows all of our crops, except for garden mums, in the greenhouse; thus, most weather risks are controlled. However, weather can negatively impact our products. If spring rains occur, our garden center customers cannot sell plants and ask us not to ship them. Then the plants stretch and are dumped or sold for a lower price than normal. If the weather is cloudy, the crop gets behind and stretches. Other major risks are power failure, snowstorms, hurricanes, boiler failure, water pump failure, and ice storms. A big concern is the high cost of fuel. We will prepay for fuel in the summer when the prices tend to be lower.

LIFE INSURANCE
Mary and John will each purchase a $250,000 policy to provide security for the family as well as the business.

DISABILITY INSURANCE
Mary and John will each have a disability insurance policy because this is a bigger threat than death at our ages.

HEALTH INSURANCE
John has heath insurance through his employer for the entire family.

WILL
We each have a will to protect the other from the risk of loss of cash flow and equity in the event of the death of the other.

HUMAN RESOURCES
We will retain employees hired by the previous owner. I will hold monthly meetings to emphasize the strategic plan and business goals and have an open door policy to listen to employees. I will provide employee training for pesticide applications, worker safety, etc.

FIRE, WIND, AND HAIL
We have insurance on the greenhouse structure and other buildings.

SNOW
In the event of a snowstorm, we will open the curtains and set the thermostat to 75°F to save the crops.

IRRIGATION
We have four wells. If a pump on one well fails, we have a backup.

LIABILITY INSURANCE
We will provide coverage for personal injury to visitors or others on the property.

WORKERS' COMPENSATION
We pay workers' compensation to provide benefits to workers injured on the job.

POWER OUTAGE
We have two backup generators in case of a power failure.

CROP INSURANCE
We have catastrophic crop insurance (CAT) and fire insurance. Thus, we are underinsured, but we feel the chances of a total loss are very low. We are considering adjusted gross revenue (AGR) crop insurance to preserve income in the event of market failure or weather-related losses.

INPUT PRICES
We will take advantage of volume and quick paying discounts. We use double-layer polyethylene-covered greenhouses to control heating costs.

ENVIRONMENTAL
We focus on integrated pest management and other ways of reducing pesticide use. We have installed screening to prevent entry of insects into the greenhouse.

<u>Outline Your Production and Operations Planning Section:</u>

MARKET ANALYSIS

MARKETING PLAN

Without clients and customers, the business does not exist. A marketing strategy or plan is about defining the customer or target market and tailoring the product, pricing, distribution, and promotion strategies to satisfy that target market. Farm businesses that are **product-oriented** instead of customer oriented—those that try to sell what they produce without first looking at customers' needs—risk growing crops that are unwanted or will not sell at a price that will produce a profit. Instead, most successful farm businesses are **customer-oriented**—they design marketing strategies around the needs of their customers.

A marketing plan is the engine that drives the business. A marketing plan describes what the business will market and how it is unique (product); how and when the business will market the product (distribution and packaging); what distribution channel will be used (place); to whom (target customers), and for how much (price) the business will sell its products; and how and what the business will communicate to the customers (promotion). This includes what has been called the four Ps of marketing: *product*, *price*, *place* (distribution), and *promotion*. Businesses which are service-oriented must begin to think of their services as a "product" when developing a marketing plan.

Markets: Who are the Target Customers and What Do They Value?

To define the target market and corresponding marketing strategy, the business will need to identify the target market segment (who the customers are and what they value) and sales potential (how much customers are willing to buy). Target markets are most commonly characterized as either individual households (**direct marketing**) or businesses (**wholesale marketing**). Direct marketing tends to be more profitable than wholesale marketing because of value-added opportunities and the lack of middlemen. Developing *customer profiles* or segmenting the market can help determine if a market segment is large enough to be profitable. By identifying and targeting specific market segments, a business can also develop more effective packaging, price, and promotional strategies.

Market Segments

Markets can be segmented in a variety of ways. The most common form of segmentation is by demographics (age, gender, income, race, ethnicity, disabilities, mobility [in terms of travel time to work or number of vehicles available], education, home ownership, and employment status). A market can also be segmented geographically, for example, domestic and international subgroups, various neighborhoods, or locations of different stores owned by wholesale buyers. Another common way of segmenting markets is by psychographic characteristics (attributes relating to personality, values, attitudes, interests, hobbies, or lifestyles). Another important question to ask is, "What are the customers' needs?" This applies whether the product is going directly to the final consumer or to an intermediary. Do they need convenience? A particular size? Customizable service packages? More availability? Sunday delivery? Unique products? High-value products? Large volumes?

One important way to segment the market is by age. Especially when considering promotional strategies, it is important to realize that different generations communicate differently. The younger generations can (and sometimes prefer to) be reached on the Internet- through social media, email, even ads on websites. Other generations may be more receptive to mailings, phone calls, and ads in newspapers or magazines. Consider the values and priorities of each generation that you are trying to reach, and adjust your marketing plan to appeal to each one. These guidelines can be followed for differentiating other market segments. There is no "one-size fits all" marketing plan that will appeal to each of your possible customers.

Size of the Market

To begin a business, producers need to ask, "How many potential customers are there? How often and how much will they buy? What is the total size of the market? Is the market emerging, growing, or shrinking? Will this market yield a high enough volume of sales?"

Analyzing USDA statistics, visiting potential buyers, and attending industry and university educational meetings to learn and network are good places to start answering these questions, no matter which market channel is selected. Wholesale deliveries are usually kept to a distance that a truck can deliver and return in one day, or about 200 miles. New producers will want to visit potential customers (usually another business) to find out how much product they would be willing to buy. When approaching wholesale buyers, you should be knowledgeable about the market, have a price sheet or website prepared, project a professional image, work out the details of the sale with the buyer, and keep in touch with the buyer.

It has been said that 75 percent of direct market customers of a business will live within 20 miles of the business. Using this rule of thumb, a simple way to project direct market sales potential is to locate the business on a county map and draw 25- and 50-mile radius circles around it. The manager can count how many towns or cities fall within the circles and add up the number of potential households in the nearby cities. These households represent the core potential customers. Then, with a feel for the number of potential customers, the manager can estimate the potential value of sales per household. This is the **sales potential**. The next step is to estimate the number of customers in each segment and project their weekly, monthly, or annual purchases. These sales estimates can come from household or county purchasing records (available at the public library), from the firm's own surveys of potential customers, from in-person interviews, or from secondary sources, such as New Strategist Publications' *Household Spending: Who Spends How Much on What*. Many businesses find it useful to hire a marketing consultant to develop surveys, lead focus groups, or conduct telephone interviews. The local Extension service or state Department of Agriculture may be able to assist in locating qualitative and quantitative information for a customer profile. They may have already done some studies that could be helpful. The Small Business Administration may also provide assistance. The Sustainable Agriculture Research and Education (SARE) program has a competitive grant program for farmers and may be willing to fund some market research for sustainable production (http://www.sare.org/).

Product: What Product Will Be Offered and How Is It Unique?

The products and services that the business will offer should be described in terms of the value they will bring to the customers. What is it that customers are actually buying? What exactly does the product or service do for the consumer? What is the life cycle of the product? How will consumers use this product? Will special knowledge or service be required?

ASK YOURSELF

What makes my product truly unique?

- What are the unique benefits the customer will receive from using this product?
- What is the real value versus perceived value to the consumer?
- Why would customers prefer this product or service to one produced or offered by the competition? How does it compare in terms of quality, value, appearance, performance, price, versatility, durability, post-harvest life, speed of installation, consistency, ease of use, ease of maintenance, knowledge required, and so forth?
- Why would customers prefer this product or service to some other way to spend their money such as wine, dining, or entertainment?
- Can it appeal to the environmentally conscious?
- Are there opportunities to add value through processing, packaging, and customer service?
- How might the product line or service package change over time?

Describe your product or service and what makes it unique:

SIX RECOMMENDATIONG FOR APPROACHING BUYERS
1. BECOME KNOWLEDGEABLE ABOUT THE MARKET
Talk with other growers selling in that market. Try to find out individual buyers' expectations of volumes and prices to see if they match your situation before approaching the buyer.
2. PREPARE AN AVAILABILITY SHEET OR A WEB SITE LISTING PRODUCTS AND PRICES
Make sure that enough product is available to meet possible demand.
3. SEND THE AVAILABILITY SHEET TO BUYERS
Select buyers whose expectations best match what you have to offer. Buyers often prefer to see this sheet before they talk to a producer.
4. PROJECT A PROFESSIONAL IMAGE
Be well informed about production, supply, and quality, and be confident in the business's ability to meet the buyer's needs.
5. WORK OUT THE DETAILS OF THE SALE WITH THE BUYER
This could include volume, size, price, delivery dates, and labeling requirements. Some buyers have a set of written requirements for growers.
6. KEEP IN TOUCH WITH THE BUYER
Growers need to keep the buyer informed about potential problems so that buyers can look elsewhere for a product if there is a supply problem.

Competitors: Who Are the Competitors and How Will Your Business Position Itself?

Nearly every business or product has competition of some kind. It is important to know how you can differentiate your business from others. Finding out what your competitors are offering and how they offer it can help you to find your niche in the market.

A trip to the grocery store, farm stands, garden center, farmers' market, or even a bit of time on the Internet to research what the competition is offering may help to answer these questions. The idea is to find out everything possible about the competitors' business or their buyers. One option is talk to current and potential competitors and their customers.

ASK YOURSELF

Who are my competitors?

- Who are the competitors and what do they offer customers?
- Where are they located?
- What is their market share?
- Who are the key “minor players”?

Describe Your Competition:

ASK YOURSELF

What share of the market can my product or service realistically capture?

- What share of the market can the new product realistically capture?
- Where does your product have an advantage over the competition? What are the strengths in terms of size, price, quality, speed, location, and service?
- Can the new product be produced with a new twist?
- Does your business have access to markets that competitors cannot reach?
- Is your business better at working with people—at attracting and keeping customers/clients?
- Does your business have better business skills?
- What competitors' weaknesses can be capitalized on? In other words, is there a niche?
- How much market share will your product take away from competitors? How will competitors respond to your product? Will they respond by changing price? Will they change their product?

Describe the Market Share of Your Product or Service:

Distribution and Packaging

Distribution refers to how and when to move the product from the farm to the customer's home, store display, or wholesaler. Distribution strategies typically describe scope, market channel, packaging, and scheduling/handling. The *scope* defines how widely the product will be distributed. **Intensive** product distribution typically involves widespread placement of the product at low prices. The aim is to saturate the entire market with the product. This strategy can be expensive and very competitive. Large-scale producers who market nationally or internationally often employ this method. **Selective** product distribution involves selecting a small number of intermediaries, usually retailers, to handle the product. If the product is large, for example, premium quality poinsettia plants, the business owner may want to be selective about the stores that stock it and choose only upscale only upscale garden centers or florists, or retail directly off of the farm. Selective distribution offers the advantages of lower marketing costs and the ability to establish better working relationships with customers and intermediaries. **Exclusive** distribution is an extreme version of selective distribution. In this case, the producer agrees not to sell to another buyer. In exchange, the buyer may agree to buy that product only from the producer. The producer works closely with a retailer to set market prices, develop promotion strategies, and establish delivery schedules. Exclusive distribution carries promotional advantages, such as the creation of a prestigious image for your product, and often involves reduced marketing costs. On the other hand, exclusive distribution may mean sacrificing some market share for the product.

Because farm products are perishable, *delivery schedules* will be critical. Moreover, for producers marketing through an intermediary, the ability to meet delivery commitments may determine their continued business. Retail buyers rely on delivery at the promised time so they know how much product they will have on hand to meet demand and so they can schedule workers to handle delivery and display. Since most farms are seasonal businesses, delivery schedules will vary and will be most crucial for both producers and buyers during peak production periods.

Product packaging can be both functional and promotional—serving to preserve the product for shipment and to advertise and differentiate the product. Wholesale buyers may require certain packaging as well as bar codes. Direct market producers will have more flexibility in packaging and point-of-purchase advertising materials. This can be a daunting yet exciting task. Producers should begin their research by visiting retail outlets where competing products are sold. They should make note of how products similar to theirs are packaged and labeled. Producers should think about what the customers will see, hear, and smell when visiting the farm or retail outlet or communicating with the owner and staff. Customer needs, such as convenience, and intermediary requirements are important.

Values and goals, as well as target market preferences, will also the affect the farm owner's packaging choices. For instance, more and more biodegradable containers are available. By potting in biodegradable pots, or establishing a program to recycle plastic pot, producers will be able to satisfy an environmental concern for themselves and their customers—namely, to minimize their impact on the land through reuseable or biodegradable packaging.

Pricing: How Is Product Price Determined?

Prices charged will always have an important effect on sales programs. The pricing strategy depends on the market channel. In some markets (especially wholesale markets), producers will be price takers. In other words, the market, rather than the seller, sets the price. In other markets, producers can set their own prices. Even price takers can still do things to obtain a higher price. To have more control over pricing, producers will need to differentiate their product.

In general, prices are set by determining how much it costs to produce the product or provide the service and adding a fair price for the benefits that the customer will enjoy. The cost of production/operation becomes the *price floor*, that is, the lowest price. The *price ceiling* is the value consumers place on the product, that is, how much they are reasonably willing to pay for the product. Most customers will be willing to pay a price somewhere between the price floor and the price ceiling. To stay in business for the long run, the price has to cover costs. A place to begin developing a pricing strategy is to calculate the cost to produce the product or provide the service. The costs include all the fixed and variable costs—including production, marketing, and promotion—as well as a return for the owner's time and investment. Examining what others are charging for similar products will give an indication of the price customers are willing to pay. Another source of crop prices is a summary published annnually by USDA.

With prevailing market prices and costs of production in hand, managers are ready to begin developing a pricing strategy. Common pricing strategies for differentiated products are discussed below. Each has advantages and disadvantages. Depending on the business goals, vision, target market, and product strategy, the business may want to consider more than one pricing strategy. While pricing will be determined in part by the competitor's price, a small or mid-sized producer selling in a local market should not place too much emphasis on price competition. Competing on price can be intense, and larger businesses will probably have lower costs. Instead, it may be easier to find ways to differentiate the product from the competition and compete on quality, value, and service. Still, price is an important consideration. In choosing a pricing strategy, managers should think through their rationale. Are they trying to undermine the competition by offering a lower price? Do they want to set a high price that reflects an image of quality? Are they simply looking to cover costs and reduce volatility?

EIGHT PRODUCT PRICING STRATEGIES
1. COMPETITIVE PRICING
Competitive pricing strategies are common among large companies and are aimed at undermining competition. Predatory pricing, where a company sets its price below cost to force its competitors out of the market, is a typical competitive pricing strategy. Although these strategies may work well for large commercial companies, they are not recommended for small-scale, independent businesses. Price wars are not easily won.
2. COST-ORIENTED PRICING
The cost-oriented pricing strategy is probably the most straightforward. Based on production costs, the manager makes a subjective decision about whether to price the product at 10 percent, 50 percent, or 100 percent above current costs. Of course, marketing research should be done to determine whether or not customers are willing to pay the "cost plus price" that is established.
3. FLEXIBLE OR VARIABLE PRICING
Flexible pricing strategies involve setting a range of prices for the product. Flexible pricing is common when individual bargaining takes place. Prices may vary according to the individual buyer, time of year, or time of day. For instance, growers who sell at farmers' markets often establish one price for their products in early morning and by day-end are willing to lower their prices to move any excess product.
4. PENETRATION OR PROMOTIONAL PRICING
A penetration pricing strategy involves initially setting the product price below the intended long-term price to help secure the market. The advantage of penetration pricing is that it will not attract competition. Before pursuing a penetration pricing strategy, producers should thoroughly research prevailing market prices and calculate their costs to determine just how long they can sustain a below-cost, penetration price.
5. PRODUCTION LINE PRICING
A line of products may be marketed within a limited range of prices for all of the products in that line. For instance, a line of products may be promoted and priced as "affordable" while another line may be a premium line with higher prices.
6. RELATIVE PRICING
Relative pricing strategies involve setting the price above, below, or at the prevailing market price.
7. PRICE SKIMMING
The price skimming strategy is based on setting a high market-entry price to recover costs quickly (to skim the cream off the top) before lowering the price to the long-term price. This pricing strategy is possible only when there are few or no competitors. The primary disadvantage of the skimming strategy is that it attracts competition if prices remain too high for too long. Once competitors enter the market, producers may be forced to match their lower prices.
8. CONTRACT PRICING
Contracts are arrangements between the buyer and the seller in advance and usually include the price, payment conditions, grower responsibilities, storage, and shipping arrangements. The advantage of pricing on contract is that the producer knows in advance what price will be paid for the product.

Figure 6

FIVE COMMON PRICING MISTAKES
1. ***Pricing too high relative to customers' existing value perceptions.*** If customers think the plant is worth $5 and the price is $6, they simply will not buy it. Producers must be aware of the value consumers place on the product.
2. ***Failing to adjust prices from one area to another based upon fluctuating costs and the customer's willingness and ability to pay from one market to another.*** Some growers have successfully marketed to more than one market by offering different products and price structures. For example, they may grow plants in larger pots with more cuttings per pot for their retail greenhouse, and sell plants in smaller pots with fewer cuttings to the mass market.
3. ***Attempting to compete on price alone.*** This results in a highly competitive market, and buyers will switch suppliers for someone selling only a few cents cheaper. Even in a price-competitive market, it pays to build relationships with the customers.
4. ***Setting prices too low with the intention of raising the prices later.*** Businesses with this strategy will struggle from the outset just to cover costs. It positions the company as lower in quality versus most of the competitors (whether or not it is true), and makes it difficult to raise prices later.
5. ***Discounting prices.*** This communicates that price is overinflated. It is much better to couple any price discounts with an equal reduction in services or product offered, in quantity purchased, or in payment terms. For example, reduce the price, but make all sales final (remove the 100 percent guarantee on the discounted product). Or producers can offer volume discounts, or discounts for early payment. This way, they have shown flexibility in meeting the needs of their buyer, yet have maintained their pricing integrity.

Figure 7

Promotion: How and What Will We Communicate to Our Buyers or Customers?

Promotion is necessary to gain product recognition among customers. Promotional strategies should be built around a message or the business's unique product value proposition. The image the business wants to send to buyers should be incorporated into everything the business does. This image should be clear on business cards, invoices, landscaping, building design, signage, brochures, web sites, social media contacts, and vehicles.

A business may use a *brand* or logo to identify the products of the business and to distinguish them from those of competitors. Although the establishment of a brand can be expensive, particularly for small businesses, many direct market farm businesses are concentrating their promotional efforts on image advertising—promoting the concept of *locally produced*, *eco-friendly*, or *quality* products.

The best approach to advertising is to think of it in terms of *media* and which media will be most effective in reaching the target market. Then an advertising budget can be allocated to each medium. The advertising budget should include not only the cost of the advertising but also projections about how much business the advertising will bring in. Advertising media options include the Internet—web sites, blogs, Facebook, YouTube, Instagram, and Twitter; television; radio; newspapers; magazines; telephone books/directories; billboards; bench/bus/subway ads; direct mail; newsletters; and cooperative advertising with wholesalers, retailers, or other businesses. Some low cost product promotion alternatives are point-of-purchase displays, demonstrations, coupons, rebates, frequent-buyer clubs, publicity, and samples. Every business should also include some marketing material such as business cards, brochures, and pamphlets. Another avenue for promotion is free publicity, such as press releases, product launches, and special events. Trade shows can be an effective promotion and sales opportunity—if a business attends the show that attracts its target customers, and the promotion plan is in place.

Promotional activities are limited only by the imagination. Teaching a course, sponsoring a community event, or conducting an e-mail campaign can all fit into an advertising and promotion plan. Sporadic, unconnected attempts to promote the product or service are bound to fail; the goal is to plan and carry out a sequence of focused promotion activities that will communicate the unique product value proposition to potential customers. No business is too small to have a marketing plan. After all, no business is too small for customers. And a business that has customers needs to communicate to those customers about its products and/or services.

Marketing Strategy

Most producers have more than one market for their products, whether it is a direct market right out of their farm, garden centers, big box stores, or customers at a farmers market. Price takers have very little control of the market price. Price takers can reduce business risk through product diversification and by adding new customers or markets, and they can use pricing strategies to increase sales, such as multi-unit pricing. To differentiate their products and receive a higher price, producers can (1) find a market niche that local competitors are not serving, (2) grade according to quality and offer higher-quality products for premium prices, (3) adapt to changes in consumer tastes and preferences, (4) add service to the product, or (5) if it is possible, choose an ideal location.

Marketing Plan for Mrs. Greenjeans Greenhouse

Mary Wilson is the Owner and Marketing Manager for Mrs. Greenjeans Greenhouse. We offer high-quality products to garden centers within a 4-hour radius (200 miles) of our greenhouse. We encourage local garden center customers to pick up the product from our greenhouse. Our high-quality differentiated products are not offered at the big discount stores. The final consumers are homeowners and renters who are a little more educated with a higher income than customers who purchase from other market channels. We will constantly look for ways to add a little extra value (such as making sure our pots are clean and won't soil the final consumer's car). Mary will visit all of the garden centers within the marketing area to establish a relationship with them and develop flyers to mail to customers. She will establish written contracts with them so that we can plan our production schedule around the marketing plan. We will offer discounts for contracts that are made before the beginning of the production season. We will develop a website plus Facebook, Instagram and Twitter accounts. We grow high-quality, unique blooming plants and bedding plants and select varieties that will perform well in the landscapes and home. We look for disease, insect, and deer-resistant plants, unique colors, and unusual varieties to perform well for our customers and stand out from the competition. We will sell second grade products to local greenhouses who sell to the mass market to protect our primary market by keeping the quality and prices high. US expenditures for floriculture and environmental horticulture were $15.9 billion in 2009. The green industry includes cut flowers, flowering potted plants, foliage plants, bedding plants, sod, ground covers, nursery crops, and bulbs. It does not include food crops produced in greenhouses. It represented 5.6 percent of agricultural cash receipts in 2009 and was ranked the 6th largest commodity group, behind beef, corn, soybeans, dairy, and broilers. Environmental horticulture is the top commodity in Florida, New Jersey, and Oregon. From 1986 to 1990, the growth in grower cash receipts for the green industry was a phenomenal 10% per year. From 1991 to 1995, this growth rate slowed to 3.4% per year. The industry is now a mature market. U.S. wholesale value was down 6% in 2009 to $3.69 billion for the 15 states surveyed Opportunity for growth still exists in the green industry with per capita sales of only $13.65. While sales for most crop categories were down in 2009, the wholesale value for annual bedding plants increased by 1% in spite of the recession. The trend is back to gardening; 71% of U.S. households participate in some type of gardening activity and 30% participate in flower gardening. Two million more households participated in gardening activities in 2010 compared to 2009, but, they spent less money on gardening activities. The average annual amount spent on gardening activities decreased by $81, from $444 to $363. Unlike other agricultural commodities, which are limited by the size of a person's stomach, the growth potential for the green industry is almost unlimited. We want to tap into the reasons people garden: to improve or maintain the appearance of their property, to save money by gardening themselves rather than hiring services for it, because they enjoy gardening, to grow fresh and nutritious food, for exercise, to make their outdoor space more livable, and to be more self-reliant.

ASK YOURSELF

How will you develop your marketing plan for products and/or services?

- **Markets:** Who are the target customers and what do they value?
- **Product:** What product will be offered and how is it unique?
- **Place:** Where do buyers look for your product or service? Your farn? Online? How can you access the right distribution channels? Do you need to use a sales force? Or attend trade fairs? What do your competitors do, and how can you learn from that and/or differentiate?
- **Competition:** Who are your competitors and how will you position yourself to compete? Are there threats from new entrants?
- **Prices:** How will you price your product or service? What is the perceived value of your product or service to the consumer? Is your price in line with the market's perceived value?
- **Promotion:** How and what will you communicate with buyers or customers? Do you have a marketing strategy with appropriate promotional, advertising, and branding strategies in place?
- **Distribution:** How and when will you move your product to market? What market channel will you use?
- **Packaging:** How will you present the product to the customer?

Outline Your Marketing Strategy:

MANAGEMENT AND PERSONNEL PLAN

Most farm businesses start small with the founder making all of the key decisions, and most communication is done by one-on-one conversations. This centralized control is particularly useful for a new business as it enables the founder to control growth and development. As the business grows, the owner must delegate more and more responsibilities to others. This is often a difficult transition because the founder of a business often feels that no one else can run the business as well as he or she can. While this may be true, if the business is to grow, the manager will have to learn to divide the responsibilities of running the business into various tasks and delegate these tasks to others. As the business grows, an organizational structure can allocate responsibilities for different functions to different individuals, departments, teams, or divisions.

Management Team

The size of the management team can range from one person in a small business to hundreds or thousands of managers in multinational companies. In large businesses, the board of directors develops the company objectives and the chief executive officer (CEO) manages the business's resources to meet those objectives. Some business analysts and lenders consider the quality and experience of the managers when evaluating a company's worth.

Labor Management

The verb *manage* comes from the Latin *manu agere*, "to lead by the hand." Skilled managers can accomplish much more through leading others than they can through their own single efforts. This means that labor is one of the most valuable resources in the business, and that hiring and motivating employees is a critical management function.

Management functions are not limited to managers and supervisors. Every member of the business has some management and reporting responsibilities. Successful managers listen to employee feedback and incorporate it into their plans. Leading producers know that a satisfied employee needs to feel that he or she is part of the team. The strongest investment a company can make is in its employees. This is especially important since labor is one of the largest costs of production, accounting for about 33 percent of sales. Listening to employees and implementing their ideas shows how much they are valued; reduces turnover, absenteeism, and sick days; lowers labor costs; and can lead to innovation and competitive advantages for the business.

To set goals and standard organization needs, employees need to know the company's vision, which tells them what kind of business you want to be, and the company's mission, which tells them why the company exists (the purpose).

SEVEN ESSENTIAL STEPS TO ENCOURAGE TOP EMPLOYEE PERFORMANCE
1. ***Set clear standards and goals.*** Establish desired behaviors and set goals to be rewarded.
2. ***Expect the best.*** If standards and expectations are high, yet achievable, people will strive to meet them. If they are low, people will meet that level of performance too.
3. ***Pay attention.*** Catch people doing things right and reward them—immediately. People want attention and like being told exactly what they are doing well. Managers who pay attention and reward behavior will get more good performance.
4. ***Personalize recognition and rewards.*** Different things are important to different people. Make your rewards meaningful to the person receiving it. If you don't know—ask!
5. ***Tell the story of success.*** Turn good examples into stories. Share the stories with other employees and off-farm individuals. Many people like hearing stories about themselves.
6. ***Celebrate.*** Recognize and reward people publicly. Host pizza parties or lunch or dinner. Invite industry people in to hear you boast about employees. Even small team successes or goals accomplished can be celebrated in some way.
7. ***Set the example.*** Walk the talk. Make recognition part of your job. Don't delegate recognition! Don't assume people know their efforts are appreciated. If you are positive and upbeat and appreciative, others will be too.

Figure 8

Four Key Leadership Traits

1. *Vision*: Leaders have a sense of what is important.
2. *Energy*: Leaders are exciting and enjoyable to be around.
3. *Power Source*: This can come from their position, the task, personal power, relationship power, or from knowledge and how to use it.
4. *Direction*: Leaders have a plan. A vision without a plan is just a dream.

ASK YOURSELF

What is your governing philosopy?

- What do you want people to say about you when you are gone?
- What values do you hold that you will not compromise?
- What characteristics do you want to portray to people?
- What principles do you stand for?
- How do you want to be seen or thought of when you interact with people?
- What do you want in life?

Describe your Governing Philosophy:

Managers need to convey a sense of shared vision. A vision is a force in peoples' hearts, a force of impressive power. A shared vision answers the question, "What do we want to create?" It emerges from personal visions: the business will not have a vision until individuals have visions. Personal visions derive power from caring for the vision; shared visions derive power from the common caring. Truly shared visions take time to emerge. Managers must create a culture where each individual can create his or her own vision.

Figure 9 depicts the steps in performance management of employees. It begins with the company's governing ideas, which come from the company's vision and mission. Then goals help the company achieve its mission. To meet these goals, managers develop performance expectations. They provide coaching and feedback to help employees meet these expectations. They evaluate employees' performance, and adjust the performance expectations if necessary.

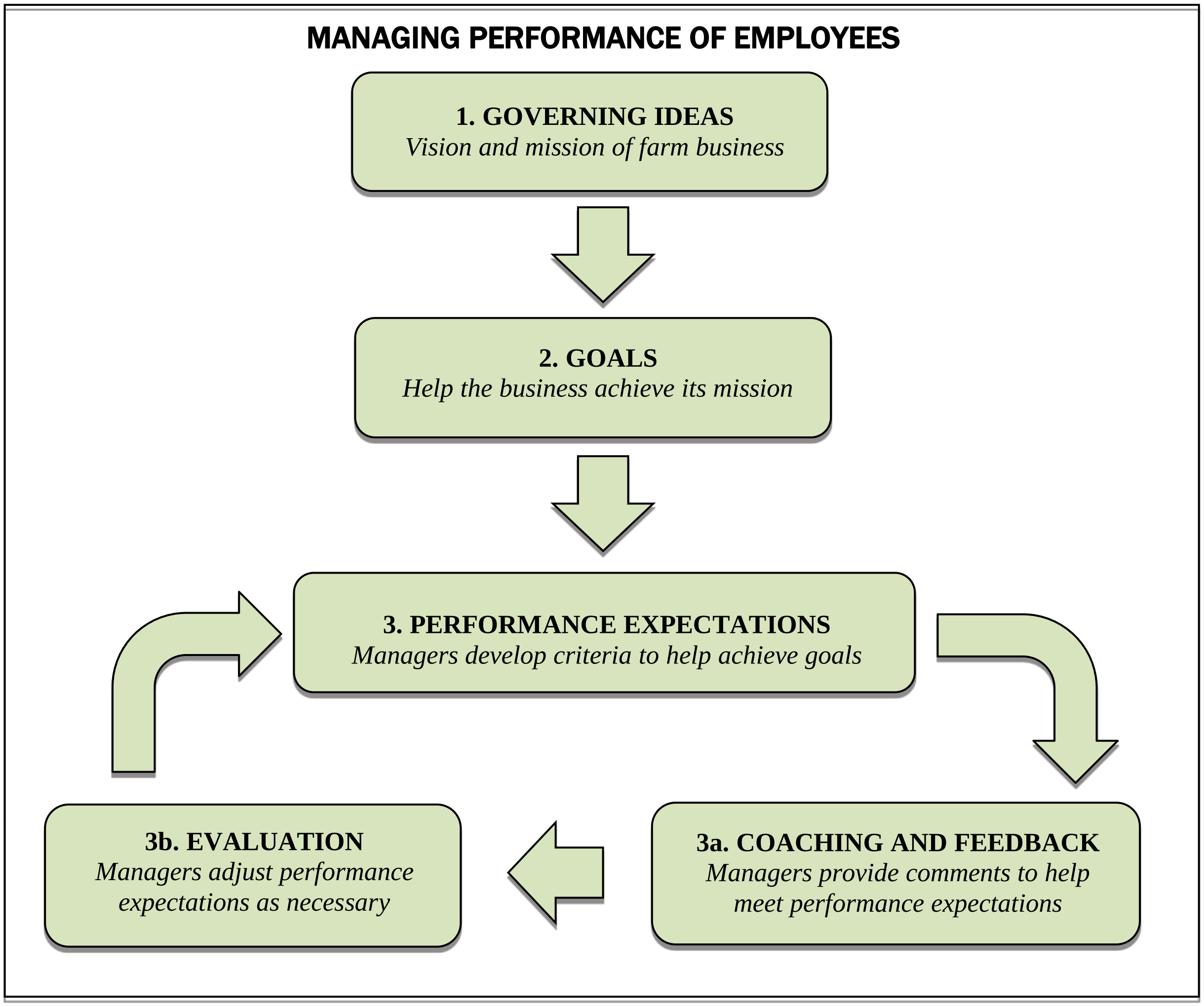
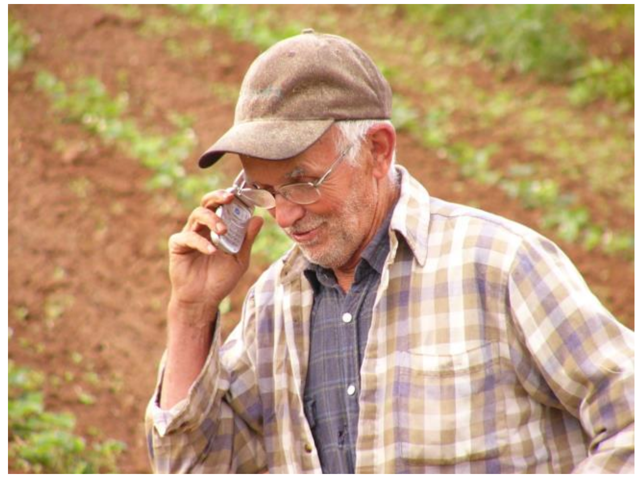


Figure 9

Performance expectations are defined as conditions of satisfactory work. They should be discussed with employees and agreed upon before the work begins. They should be consistent with the mission, objectives, and goals of the organization. Performance expectations should be attainable and measurable, have available resources and be done when they are expected.

The keys to being a good manager are:

- Like what you do.
- Be self-motivated.
- Look ahead to what needs to be done.
- Prioritize.
- Get along with people.



To motivate people to perform:

- Develop a standard operating procedure (SOP) and encourage suggestions for improvement.
- Provide regular, constructive feedback on employee performance with regard to the SOP.
- Minimize employee turnover.
- Encourage employees to be part of the team.

Five Stages of Team Building and Reducing Turnover

1. Recruit and hire the right people.
2. Give the proper orientation and training starting from day one.
3. Provide appropriate ongoing training.
4. Develop individuals to successfully take on higher and higher levels of responsibility.
5. Motivate employees and yourself to continue in spite of occasional setbacks.

Once the right people are in place, take the following steps to get them to perform:

1. Tell them what to do.
2. Show them what to do.
3. Let them try.
4. Observe performance.
5. Praise progress or redirect.

To increase efficiency, make sure the right people are in place who are willing to learn new skills, work as part of a team, and perform to his or her ability. Managers need to make sure that employees have the right tools and are doing the right jobs. Managers need to match the employee’s stage of learning with a particular leadership style (Figure 10).

Stage of Employee Growth	Employee Skill Level	Leadership Style Needed	Manager's Role
Beginning	Are excited and enthused. The job seems easier than it really is.	**Directive**	Tell what, when, where, and how to do it.
Some Experience	Have little knowledge or skill. Have not mastered the task. Need to know *why*.	**Coaching**	Give direction and support.
More proficient	Have technical capabilities to perform at a high level. Lack confidence.	**Supportive**	Encourage, but give little direction. Say "You have what it takes to get the job done."
Proficient and Self-confident	Have mastered the knowledge or skill. Have confidence to perform consistently and proficiently.	**Delegating**	Turn responsibility over to the employee.

Stages of Learning and Leadership Styles to Use with Employees at Each Stage

Figure 10

An increasingly popular tool for business managers is an employee handbook. This handbook provides direction for managers to be fair and balanced in their dealings with employees.

Tips on Developing an Employee Handbook

Some company policies need to be in writing—for example, policies on sexual harassment and discipline—so that employees know what is expected of them. The following can form the basis of an employee handbook**.**

1. The manager should draft the employee handbook with input from others in the business.
2. The employee handbook should be reviewed and fine-tuned by a lawyer.
3. The employee handbook should include a disclaimer stating clearly that the manual is in no way a legal contract.
4. The Small Business Administration's Web site, at http://www.sba.gov (search for "employee handbook"), has a template of what to include in a handbook as well as several relevant articles on creating an effective employee handbook and human resources management program.
5. Every employee should receive a copy of the handbook and sign a statement saying that he or she has read it.
6. Management should review it every six months or so and update it as needed.

List key employment policies and other information for employee hiring, training, and/or inclusion in an employee handbook:

Working Conditions

Working conditions are as important as the manager–employee relationship for encouraging good performance. Consider your own feelings when walking along a street in a town with no trees or plantings and with noisy traffic passing a few feet away versus walking along a pedestrian mall landscaped with lawns and planters and overhung by trees. Without realizing it, many farms develop into a harsh, repelling environment that brings about negative feelings in the employees. How much stimulation is there to plant seedlings neatly and at the precise depth when all around are weeds, trash, and unrepaired structures?

Facilities. The offices, sheds, fields, and surroundings should be orderly and clean. This is an important part of insect and disease control. It is also important to proper management. A harmonious environment suggests a state of finesse, which can be achieved with a little encouragement by the manager. A job is not finished until it is cleaned up. Tools, empty cartons, and so forth should always be in their proper places. All facilities and areas around the farm should be clear. A swept floor goes a long way in presentation. Aside from the negative messages that messes impart, they also present hazards and a physical barrier to efficient operation.

A program of preventive maintenance should be in place for all equipment to ensure that jobs will always be done on schedule. A little paint on a tank before it rusts, grease on a bearing before it freezes, or a tune-up on a rototiller before it stops will prevent breakdowns that could snowball into stoppage of many other operations.

Work facilities should be respectable. Human dignity dictates that bathroom facilities be provided. If the very being of an individual does not command respect, why should his or her productivity be any different? A pleasant area for eating and taking breaks should also be provided. A brief repose at mid-morning, noon, and mid-afternoon benefits the business as well as the employee. A tired employee is not productive. Each human has an internal rhythm. When the pace of his or her work is geared to this rhythm, efforts are minimized and productivity is maximized. Disruptions in the form of ambiguous orders, undue changes in orders, and equipment breakdown break the work momentum. This is fatiguing and depressing to the employee.

Many other aspects of the physical facilities warrant attention. Worthwhile improvements are those that prevent needless fatigue and facilitate work efficiency. Rubber mats on the floor and, under some circumstances, chairs are an asset to progress. Convenient centralization of tools and supplies also increases efficiency. The farm layout as a whole should be formulated with efficiency in mind.

Product Quality. The demand for low-quality products is small. The profitability of such production is low at best. Aside from market price, product quality is important to personnel management. It affects the same principle of the employee relating to the business. When a person knows that he or she is part of a quality production scheme, the incentive exists to try to meet these standards in his or her own work.

Education. Most people take pleasure in learning. It is flattering to an employee when the business thinks enough of him or her to provide an education along with the job. Actually, there is a mutual advantage, since employees who understand the why and what of their tasks have the potential to be better workers. They are in a position to reason out better ways of doing the job and solving a problem when something goes wrong.

Education on a small farm need not consist of anything more than the manager talking with employees as they work. They should be given an appreciation of the various cultural procedures involved in a crop and how they interrelate. Employees should be aware of the quality standards required by the market. They should know the problems that can arise from mistakes such as insect or disease establishment, excessively high or low temperatures, incorrect planting depth, nutritional disorders, and overwatering. Worthwhile employees welcome such knowledge and use it to better themselves within the firm and to assist the manager in meeting his or her responsibilities.

Larger farms, in addition to the procedure just discussed, sometimes use training sessions for their employees. These may be held on the premises of the farm and be conducted by management within the business or by instructors hired from outside. Outside services are available for topics such as management and marketing. Visits from university personnel, allied-trade representatives, or competitive farm operators can be a valuable source of information. If possible, the general manager should arrange an opportunity for key personnel to meet with such individuals.

Numerous educational meetings are sponsored each year by state and national grower associations, national ag marketing associations, state universities, and local county extension services. These meetings are an excellent educational opportunity for the owner and his or her key employees.

Most of these organizations publish newsletters containing current agricultural news items as well as articles on technical subjects. Growers should definitely get on the mailing list of the local Cooperative Extension Office and the horticulture department at their local state university. They should join their local and national growers' associations to expand their sources of information and ideas. Subscribe to relevant publications and leave them in an accessible location for employees to read at lunchtime or after work. Offer to loan books, DVDs, or other educational materials to interested employees. A worker who educates him or herself is quite an asset.

List some things you can do to improve employee performance and ways you can educate employees and customers. Also describe your management style and how you can use it to improve your business:

Management Plan

Many people go into the farming business because they like growing plants. They often prefer to focus on the labor tasks of growing plants rather than the management tasks that lead to a profitable business. The owner of a small farm often finds it necessary to be a laborer as well as a manager. Indeed, working alongside employees and performing some of the labor tasks can be a valuable tool to build good will. It can motivate employees to pull together in pursuit of the common purpose of accomplishing the firm's goals effectively and efficiently. However, greenhouse managers should never lose sight of the need to manage and must guard against spending too much time performing labor tasks rather than managing.

To develop the management plan, a business needs to do the following:

1. Define the business operational areas by function. Figure 11 shows an organizational chart depicting the different business operations or managers required to manage a generic business and their functions. In smaller businesses, one person will perform the duties in more than one of these business operations.
2. Determine what skills, education, and experience are necessary for each key position on the management team.
3. Describe the experience, skills, education, goals, interests, and wages or salary of each person currently in the workforce.
4. Identify key persons for each management position and briefly describe their management role and their qualifications.
5. Identify areas where skills are lacking and those that depend on one person. Identify people in the business who could be trained as the primary person or as a backup.
6. If additional part-time and/or full-time employees are needed, determine how these personnel will be recruited, hired, compensated, motivated, and retained.
7. Give job descriptions for managers and employees, compensation plans, incentive plans, information on employee handbooks, and training procedures.
8. List expertise that is not available among the owners or the current employees. The business may want to hire a consultant for specific tasks, such as a business consultant to help develop the business plan, an accountant to prepare income tax teturns, or a lawyer to prepare releases, wills, and documents to esblish a partnership or corporation. It may also contract specific tasks such as pesticide application.
9. Describe any changes in the labor situation expected in the near future either because someone is leaving or because changes in the operation will require more people or different skills.
10. Describe any long-term transition plans that may be required for transferring management responsibilities to the next generation, a partner, or an employee.

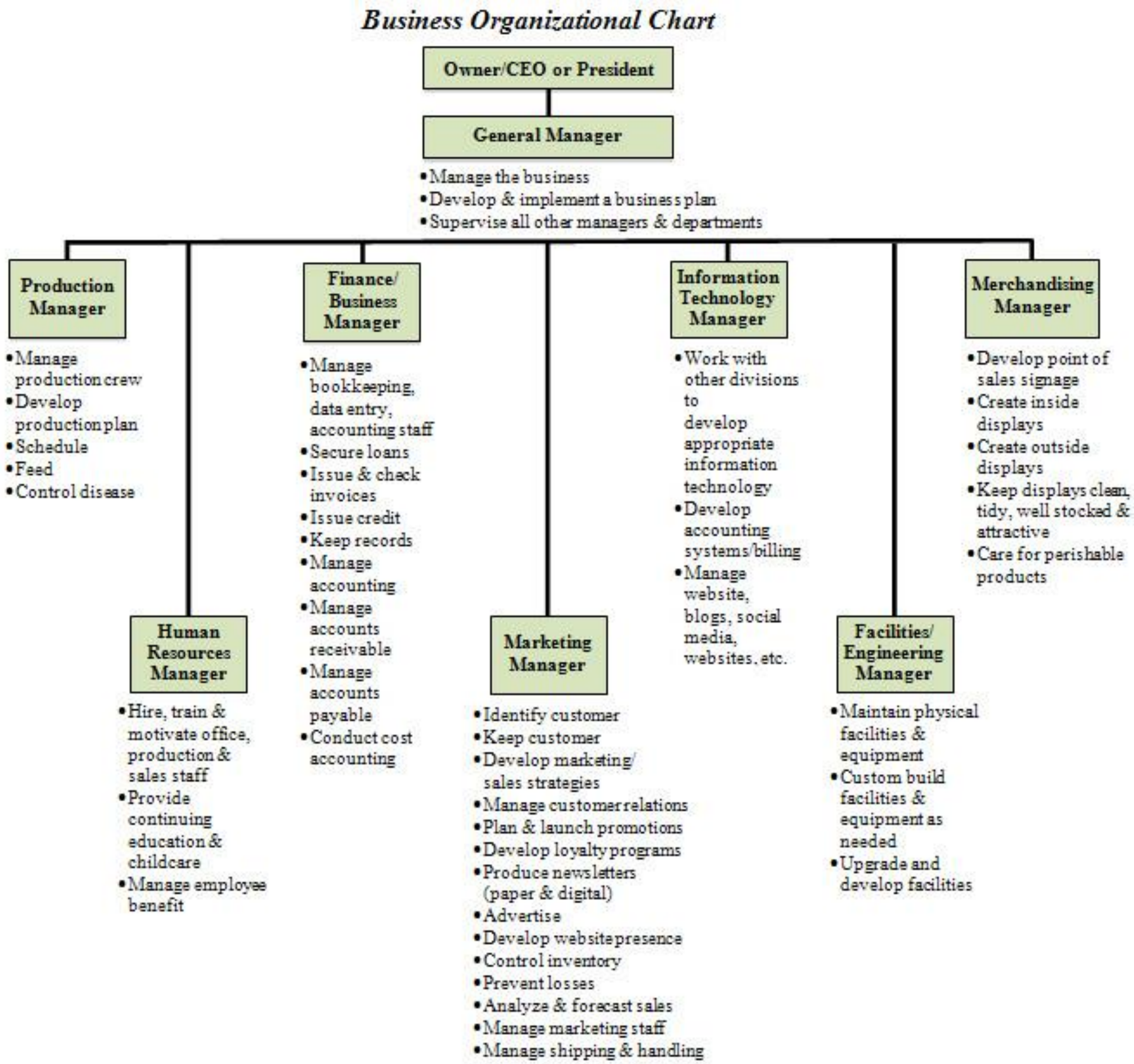

Business Organizational Chart
Owner/CEO or President
General Manager
•Manage the business
•Develop & implement a business plan
•Supervise all other managers & departments
Production Manager
•Manage production crew
•Develop production plan
•Schedule
•Feed
•Control disease
Finance/ Business Manager
•Manage bookkeeping, data entry, accounting staff
•Secure loans
•Issue & check invoices
•Issue credit
•Keep records
•Manage accounting
•Manage accounts receivable
•Manage accounts payable
•Conduct cost accounting
Information Technology Manager
•Work with other divisions to develop appropriate information technology
•Develop accounting systems/billing
•Manage website, blogs, social media, websites, etc.
Merchandising Manager
•Develop point of sales signage
•Create inside displays
•Create outside displays
•Keep displays clean, tidy, well stocked & attractive
•Care for perishable products
Human Resources Manager
•Hire, train & motivate office, production & sales staff
•Provide continuing education & childcare
•Manage employee benefit
Marketing Manager
•Identify customer
•Keep customer
•Develop marketing/ sales strategies
•Manage customer relations
•Plan & launch promotions
•Develop loyalty programs
•Produce newsletters (paper & digital)
•Advertise
•Develop website presence
•Control inventory
•Prevent losses
•Analyze & forecast sales
•Manage marketing staff
•Manage shipping & handling
Facilities/ Engineering Manager
•Maintain physical facilities & equipment
•Custom build facilities & equipment as needed
•Upgrade and develop facilities

Figure 11

Mrs. Greenjeans Greenhouse Management Plan

The general manager is Mary Wilson. Mary is responsible for general business management, production management, labor management, marketing management, and capital purchases. The assistant manager is John Wilson, who will make decisions in absence of the general manager and will be in charge of financial management and accounting. The production staff are Mary and John's children, Linda and Dan Wilson. Linda will monitor for insects, monitor for weeds, and perform other tasks as required. Dan will check watering needs after school, water as needed, and perform other tasks as required. Part-time production staff will be hired seasonally to (1) fill flats and pots with media, (2) seed plug flats, (3) transplant bedding plant flats, (4) move flats to the production area, (5) move finished flats to sales area, clean flats, and load marketing trucks, and (6) perform other tasks as required.

We will develop position descriptions. The positions will start at minimum wage, and increase with good work per- formance. The positions will be advertised at the local high school and placed in the local newspaper. Mrs. Greenjeans Greenhouse will hire a management consultant to help develop an employee handbook to cover benefits, working hours, leave policy, and wage concerns.

Mrs. Greenjeans Greenhouse will use the following service providers for business and professional needs: accountant Tim Jones and attorney Robert Smith.

<u>Outline Your Management and Personnel Planning Section</u>:

FINANCIAL PLAN

Financial analysis and planning is an important part of describing the business to someone else. Financial projections give some indication of where the business is headed in the next few years and describe the financial ramifications of changes that are implemented in the future. It helps the business evaluate alternative business investments. The financial section should also describe the assumptions used in making financial projections. These assumptions might include projected prices that will be received in the future, input costs, or production levels. These projections should be kept and compared against actual business performance. When developing and analyzing financial documents, it is important to work with an accountant who is familiar with the farming industry.

Financial Projections

- The **income statement** documents profitability over a set period of time and compares budgeted versus actual income and expenses.
- The **balance sheet** presents the company's financial position including assets, liabilities, and net worth.
- The **cash flow statement** indicates how much to borrow and when.
- **Cost accounting** and the **enterprise budget** provide the framework for determining what profit the business can expect to obtain and the expected fixed and variable expenses at the projected level of sales.
- **Breakeven analysis** and **financial ratio analysis** compare the projections with industry norms and establish return-on-investment requirements.
- **Benchmarks** are used to monitor and evaluate progress in meeting established goals.

Projected Profitability: Income Statement

An *income statement* (also called profit and loss statement, P&L statement, or operating statement) documents the firm's profitability. Profitability is the measure of how much income the business is making in relation to the resources used to produce that income. Net income is one measure used to quantify profitability and us calculated as revenue minus expenses, including depreciation. Profitability should usually be the major factor considered when making most financial decisions. Over time, profits generally drive the solvency and liquidity of a business.

The costs incurred in the farm business can be grouped into two categories: variable costs and overhead costs. *Variable costs* are costs that vary with the level of production. Examples of variable costs are the costs of seeds and fertilizer; both relate specifically to the level of production. *Overhead* or *fixed costs* are those costs that are incurred regardless of the level of production and are common to all crops. These costs include depreciation of the farm structures, equipment, and other facilities and costs such as interest, repairs, insurance, taxes, and salaries of overhead personnel (i.e., the manager, salespeople, growers, secretaries, bookkeepers, etc.). The total cost of production is the sum of variable and overhead costs.

Some tips for income statements:

- Do not assume that you will sell 100% of the crops produced.
- Don’t forget to pay yourself. This is frequently overlooked when starting out because money is tight. However, the first few years of being in business often are not profitable, and the owner needs some source of income. It is recommended to pay yourself based on what you could make if you were paying someone else to operate this business.
- Don’t forget to budget for retirement. At some point, the owner will no longer want to or be able to continue to operate the business. As with any other retirement plan, start saving as early as possible.
- Owners also need health insurance, and should consider disability insurance in case an injury prevents you from working, as well as life insurance if others are depending on your income.
- If you lack skills in certain areas, budget to hire consultants so that all jobs are done right. Examples include accountants, lawyers, bookkeepers, marketing specialists, and horticulturalists. Look for professionals who have had experience with the farming industry.

Projected Income Statement for Mrs. Greenjeans Greenhouse

	Year 1 ($)	Year 2 ($)	Year 3 ($)	Year 4 ($)	Year 5 ($)
Income					
Sales	240,750	258,900	270,350	289,650	312,925
Expenses					
Labor	85,000	98,000	104,000	118,000	130,000
Heating	10,000	11,000	12,000	13,000	14,000
Materials	76,300	77,000	78,000	79,000	80,000
Rent and depreciation	16,000	16,500	17,000	17,500	18,000
General maintenance	3,000	3,500	4,000	4,500	5,000
Insurance	2,000	2,100	2,200	2,300	2,400
Office expenses	1,000	1,100	1,200	1,300	1,400
Auto and truck expense	1,000	1,000	1,100	1,200	1,300
Interest	5,000	5,100	5,200	5,300	5,400
Advertising	74,255	85,764	99,058	114,412	132,146
Freight and trucking	5,000	5,000	5,000	5,000	5,000
Bad debt	69,255	80,764	94,058	109,412	127,146
Taxes	17,314	20,191	23,514	27,353	31,786
Meetings/conventions	1,000	1,100	1,200	1,300	1,400
Professional fees	800	900	1,000	1,100	1,200
Dues and subscriptions	200	250	300	350	400
Total expenses	$222,900	$239,750	$250,600	$268,950	$285,300
Net Income	**$17,850**	**$19,150**	**$19,750**	**$20,700**	**$27,625**

Balance Sheet

A balance sheet indicates the amount of equity the owner has in the business and the structure of assets and liabilities. It shows how funds are invested in the business (assets) and the financing methods used (liabilities and owner's equity). Unlike the income statement, which represents a period of time, the balance sheet represents a single moment in time. It is used to help understand the business's financial situation, especially solvency or net worth.

Net worth indicates the equity position of the business (assets minus liabilities). Net worth is important in evaluating the risk position of the business and in considering future borrowing capacity. Net worth growth is usually one of the major goals of a business.

A balance sheet is included in the business plan if the plan is being developed to be shown to lenders, potential investors, or partners. A balance sheet will probably not be included in the plan if it is being developed to communicate the direction of the business to those employees to whom the owner wishes not to disclose the entire financial situation.

Mrs Greenjeans Greenhouse Balance Sheet

Assets	
Current Assets	
Cash on hand	$10,000
Accounts receivable	-
Plant inventory	$50,000
Supply inventory	$20,00
Total Current Assets	$80,000
Long-Term Assets	
Machinery/equipment	$75,000
Buildings/fixtures	$200,000
Land	$100,000
Total Long-Term Assets	$375,000
Total Assets	$455,000
Liabilities	
Current Liabilities	
Accounts payable	$10,000
Short-term notes	$7,000
Taxes	$2,800
Total Current Liabilities	$19,000
Long-Term Liabilities	
Mortgage	$175,000
Long-Term Notes	$25,000
Total Long-Term Liabilities	$200,000
Total Liabilities	$219,000
Net Worth	$235,200

Cost Accounting

Profit for any business can be calculated by the simple formula: *Profit = Sales – Costs*. Farm managers know the profitability of their entire business from their income tax records at the end of the year. However, because most farms produce many crops, they often do not know which crops are making money, which ones are losing money, and which crops are making the most money. The profit formula for determining the profitability for each crop becomes:

Profit per crop = (Number of units sold) x (Sales price per unit - Total costs per unit)

The process of assigning production costs to each crop and subsequently calculating the profit of each crop is called cost accounting. Cost accounting can be used by managers to analyze various production, financial, and marketing strategies. For example, once managers know the costs of producing each crop, they can (1) look at ways to increase sales of the profitable crops, (2) find ways to cut costs on the less profitable crops, (3) decide whether or not to drop unprofitable crops, and (4) consider producing new crops.

Farm businesses are caught in a cost-price squeeze: Prices are going down because of a weak economy and oversupply, while the costs of labor, pesticides, fuel, and other inputs are going up. Going back to the profit equation above, farms have two basic ways to increase their profit margin: (1) increase sales or (2) decrease costs. They can increase sales by, for example, increasing the number of units sold, increasing prices, increasing inventory turnover, changing the production schedule, changing the product mix, reducing the age of accounts receivable, and integrating horizontally or vertically. They can decrease costs by, for example, mechanizing, decreasing overhead, reducing shrink, and increasing volume to spread overhead over more units.

Costs vary from grower to grower due to size of operation, location, managerial practices, time of year, availability of labor, product mix, market channel, and volume of production. The bottom line is that every business's costs are different, so every farm business needs to have its financial team calculate the costs for the business. In spite of the very competitive market, many farm business owners still do not calculate their costs. Most of them are farmers at heart, and would rather grow plants than calculate costs. Some are afraid of what they may discover: their favorite crop is not profitable. Others think that it takes too much time or they are content with the status quo. But cost accounting is the only way to make accurate product mix and pricing decisions.

The tools needed for cost accounting are an income statement, production data, pencil and paper or a spreadsheet like the *Rutgers Cost Accounting for Indoor and Outdoor Plants*, and a desire to determine the most profitable crops. Cost accounting begins with cost information typically found on income statements. Table 2 shows an income statement based on typical costs from a survey of greenhouses in the northeast.

The next step is to gather production information for each crop (Table 1). Information needed is the number of units started, the space devoted to each unit, number of weeks each crop is in the field, the percent sold, and the sales price per unit—items that most managers know for each crop. Once this information is gathered, managers allocate as many costs as possible to individual crops. A business owner or manager may not know the various costs of producing a specific crop. For example, the total cost of seeds is usually known. However, the cost of petunia seeds may be unknown. If the cost of petunia seeds is known, it can be allocated as a variable cost to petunias; if it is not known, it is left as an unallocated overhead cost. Variable costs that cannot be assigned to a particular crop can be treated the same way as unallocated overhead costs. If the same crop is sold at more than one price, then that crop may be treated as two or more crops. For example, perhaps 20 percent of petunia flats are sold at $6.00 per flat to customers who buy more than 100 flats, and 80 percent are sold at $6.50 per flat to customers who buy fewer than 100 flats. Petunias can be treated as two different crops: petunia flats at $6.00 and petunia flats at $6.50. Total costs can be allocated on an 80 percent/20 percent basis. Another option is to enter the average price for petunias.

The figures in Table 2 are actual results of surveys of northeast growers. Table 1 shows a hypothetical production schedule constructed to match the actual income from the 2003 surveys. The table shows the number of units started, the number of square feet used for each crop, the number of weeks it takes to produce a crop, the percent of the crop that is sold, and the sales price for each crop for a hypothetical greenhouse producing petunias, marigolds, and geraniums in flats; geraniums in 4-inch pots; poinsettias in 6-inch pots; and an acre of outdoor cut flowers.

Once as many costs as possible are assigned to a particular crop, the remaining unallocated costs will be added and assigned as overhead costs to each crop on a per-square-foot-week basis (Table 2).

This overhead cost along with the assigned variable costs are used to calculate the profit or loss for each crop and per unit (flat or pot) (Table 3). The costs per unit include the costs for labor, seeds or plant, container, root media, fertilizer, chemicals, tags, other direct costs, total direct costs, overhead costs, loss of unsold plants, total costs, sales price, and profit or loss.

In the example, all crops are profitable (Table 3). Marigold flats are the most profitable crop per unit, and petunia flats are the second most profitable. In the unallocated costs column of Table 2, the overhead cost per square-foot-week is $0.096.

Differences in profit pictures exist between cost per square-foot-week and cost per unit in Table 3. Marigold flats are the most profitable crop per unit, but geraniums in 4-inch pots are the most profitable crop per square-foot-week. Geraniums in 4-inch pots have a lower profit per pot, because they are sold at the lower price per unit than the marigold flats. However, geraniums in

4-inch pots are the most profitable crop per square-foot-week because of more efficient use of space. Returns per square-foot-week of bench space may be the most informative way of comparing profitability among crops because of differences in use of space.

Table 3 shows **enterprise budgets** for all of the crops. An enterprise budget is basically the costs and returns for that enterprise. All crops are profitable in the 2003 example (Table 3). But when the energy costs are increased to the 2008 level, geranium flats and poinsettias become unprofitable. If the fuel costs remain high and the prices increase by 5 percent, the net return becomes positive (Table 4), but poinsettias are slightly unprofitable, losing $0.01 per square-foot-week.

As shown in this hypothetical example, knowledge of the profitability of each crop helps managers make production and marketing decisions to improve their businesses. With rising fuel costs and competitive markets, managers need to pay close attention to the bottom line and how changes in costs impact it. Cost accounting allows managers to do what-if planning on paper instead of making bigger, real mistakes in the fields.

Table 1. Cost Accounting Information for a Hypothetical Greenhouse Using 2003 Northeast Data

Item	Petunia Flats	Marigold Flats	Geranium Flats	Geraniums 4-Inch Pots	Poinsettias 6-Inch Pots	Outdoor Cut Flowers: Bunches
Number of units started	50,000	50,000	50,000	100,000	126,000	26,136
Square feet per unit	1.64	1.64	1.64	0.11	1	1 acre
Weeks to grow	8	6	13	6	15	15
Percent sold	0.98	0.98	0.95	0.95	0.95	0.95
Sales price	$ 7.93	$ 7.00	$ 11.73	$ 1.20	$ 5.00	$ 4.00
Labor	$ 3.37	$ 3.37	$ 3.37	$ 0.82	$ 1.00	$14,994
Seeds or plants	$ 0.55	$ 0.35	$ 3.75	$ 0.14	$ 1.54	$50,000
Containers	$ 0.73	$ 0.73	$ 0.73	$ 0.09	$ 0.18	$ 6,915
Growing media	$ 0.20	$ 0.20	$ 0.20	$ 0.02	$ 0.04	$ 0.00
Fertilizer and chemicals	$ 0.10	$ 0.10	$ 0.15	$ 0.09	$ 0.11	$393.00
Tags	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.00
Other direct costs	$ 0.00	$ 0.00	$ 0.00	$ 0.05	$ 0.20	$ 3,873

Table 2. Income Statement Showing Costs from the Greenhouse Portion of the Original Income Statement, Those Costs as a Percentage of Sales, Values that Have Been Allocated to Individual Costs, and the Remaining Unallocated Costs That Have Been Allocated to Each Crop on a Cost-Per-Square-Foot-Week Basis

Item	Values from Income Statement ($)	Greenhouse Income Statement Costs as a Percentage of Sales	Values from Cost Sheet ($)	Unallocated Costs ($)
Sales	2,120,243			
Direct Costs				
Seeds, cuttings, or plants	440,735	20.79	440,540.00	195.00
Pots or containers	140,984	6.65	141,180.00	(196.00)
Marketing containers	31,198	1.47	30,200.00	998.00
Growing media	4,689	0.22	37,340.00	(32,651.00)
Fertilizer and chemicals	42,571	2.01	40,360.00	2,211.00
Tags	0	0.00	60,160.00	(60,160.00)
Sales commissions	0	0.00	0.00	0.00
Other	36,470	1.72	0.00	36,470.00
Salaries				
Overhead salaries	0	0.00		0.00
FICA	0	0.00		0.00
Unemployment insurance	0	0.00		0.00
Workers' compensation	0	0.00		0.00
Wages				
General wages	714,162	33.68	713,500.00	662.00
FICA	0	0.00		0.00
Unemployment insurance	0	0.00		0.00
Workers' compensation	0	0.00		0.00
Utilities				
Heating fuel/machinery fuel	77,566	3.66	60,160.00	17,406.00
Electricity	40,352	1.90		40,352.00
Telephone	5,394	0.25		5,394.00
Water	164	0.01		164.00
Overhead				
Depreciation	92,542	4.36		92,542.00
Interest	7,930	0.37		7,930.00
Repairs	43,779	2.06		43,779.00
Taxes	25,681	1.21		25,681.00
Insurance	36,946	1.74		36,946.00
Advertising	11,077	0.52		11,077.00
Dues and subscriptions	0	0.00		0.00
Travel and entertainment	7,331	0.35		7,331.00
Office expense	9,389	0.44		9,389.00
Professional fees	19,244	0.91		19,244.00
Equipment rental	46,904	2.21		46,904.00
Land rental	1,792	0.08		1,792.00
Contributions	0	0.00		0.00
Bad debts	0	0.00		0.00
Miscellaneous	87,681	4.14		87,681.00
Total Unallocated Costs				401,141.00

Greenhouse	From Income Statement	From Greenhouse Page	
Greenhouse area (in square feet)	138,759		
Greenhouse space used for prod. (%)	82%		
Weeks in operation (52 if full year)	40		
Square feet weeks of utilized greenhouse growing space	4,551,295	4,170,000	
Unallocated cost/square foot of utilized growing space/week			0.096
Net Return	$195,662	9.23%	

Table 3. Enterprise Budget: The Results of Cost Accounting Per Unit, Per Crop, and Per Square-Foot Week

Item	**Petunia Flats ($)**	**Marigold Flats ($)**	**Geranium Flats ($)**	**Geraniums 4-Inch Pots ($)**	**Poinsettias 6-Inch Pots ($)**	**Outdoor Cut Flowers: Bunches ($)**
Costs per Unit						
Total direct costs	5.11	4.91	8.36	1.37	3.23	2.91
Overhead costs	1.26	0.95	2.05	0.06	1.44	0.17
Loss of unsold plants	0.13	0.12	0.21	0.08	0.25	0.16
Total costs	6.50	5.98	10.62	1.51	4.92	3.24
Sales price	7.93	7.00	11.73	1.20	5.00	4.00
Costs per Unit						
Square feet	82,000	82,000	82,000	11,000	126,000	43,560
Square feet-weeks	656,000	492,000	1,066,000	66,000	1,890,000	653,400
Overhead/ square foot-week	0.10	0.10	0.10	0.10	0.10	0.01
Sales	388,570	343,000	574,770	157,700	653,562	99,317
Direct costs	255,502	245,502	418,005	137,300	406,982	76,175
Total costs	318,607	292,830	520,551	143,649	588,794	80,524
Profit (loss) per crop	69,963	50,170	54,219	14,051	64,768	18,793
Profit (loss) per unit	1.43	1.02	1.11	0.15	0.59	0.76
Profit (loss) per square-foot-week	0.11	0.10	0.05	0.21	0.03	0.03

Table 4. Greenhouse Cost Accounting Program Information Per Unit and Per Crop Using 2003 Northeast Costs

Item	Petunia Flats ($)	Marigold Flats ($)	Geranium Flats ($)	Geraniums 4-Inch Pots ($)	Poinsettias 6-Inch Pots ($)	Outdoor Cut Flowers: Bunches ($)
2003 Fuel Prices						
Sales	388,570	343,000	574,770	157,700	653,562	99,317
Profit (loss) per crop	69,844	50,170	54,219	14,051	64,768	18,793
Profit (loss) per unit	1.43	1.02	1.10	0.15	0.59	0.76
Profit (loss) per sq. ft-wk	0.11	0.10	0.05	0.21	0.03	0.03
Everything Held Constant, but Energy Adjusted to 2008 Fuel Prices						
Sales	388,570	343,000	574,770	157,700	653,562	99,317
Profit (loss) per crop	30,682	20,709	(9,612)	10,098	(48,405)	19,188
Profit (loss) per unit	0.63	1.42	(0.20)	(0.40)	0.11	0.77
Profit (loss) per sq. ft-wk	0.05	0.04	(0.01)	0.15	(0.03)	0.03
Everything Held Constant, but Energy Adjusted to 2008 Fuel Prices and Sales Prices Increased 5 Percent						
Sales	407,999	360,150	603,508	165,585	686,240	104,283
Profit (loss) per crop	50,111	37,859	19,126	17,983	(15,726)	24,154
Profit (loss) per unit	1.02	0.77	0.39	0.19	(0.13)	0.97
Profit (loss) per sq. ft-wk	0.08	0.08	0.02	0.27	(0.01)	0.04
Price	$8.33	$7.35	$12.32	$1.74	$5.73	$4.20

Cash Flow

Financial liquidity is usually evaluated using a cash flow plan. Cash flow planning is a projection of all sources and uses of cash during a specified planning period. Cash flow plans are an important tool for evaluating the liquidity of a farm business, the annual operating loan needs, and the ability of the business to repay loans. A cash flow projection should also indicate potential financial problems and alert the manager and lenders to possible changes that might be made. Profitable businesses can still fail because of cash flow problems. It is important to know when the major inputs and outputs of cash will take place and be prepared for them. Lenders usually want to evaluate the projected cash flow when making loan decisions, and owners will want to have a line of credit or operating loan to cover shortfalls.

Pro Forma Cash Flow Statement for Mrs. Greenjeans Greenhouse

	Total inflows	Surplus outlays	Beginning deficit	Total cash balance	Cash available	Total Cash to borrow
January ($)	0	58,317	−58,317	10,000	−48,317	−48,317
February ($)	70,000	10,817	59,183	−48,317	10,866	0
March ($)	51,000	20,817	30,183	10,866	41,049	0
April ($)	2,075	19,117	−17,042	41,049	24,007	0
May ($)	20,000	19,617	383	24,007	24,390	0
June ($)	39,825	11,813	28,012	24,390	52,402	0
July ($)	17,000	2,817	14,183	52,402	66,585	0
August ($)	3,000	22,817	−19,817	66,585	46,768	0
September ($)	2,000	7,817	−5,817	46,768	40,951	0
October ($)	5,875	10,317	−4,442	40,951	36,509	0
November ($)	4,975	11,617	−6,642	36,509	29,867	0
December ($)	25,000	11,817	13,183	29,867	43,050	0
Total ($)	240,750	207,700				−48,317

Financial Ratios

One method of assessing the financial health of a business is using financial ratios. Ratios are calculated using numbers from the balance sheet and income statement. The ratios fall into four categories: profitability, financial efficiency, liquidity, and solvency.

4 RATIO ANALYSES
1. PROFITABILITY RATIOS
Profitability ratios measure the ability of the business to earn a good profit and generate a satisfactory return on investment. These ratios are typically a good indicator of management's overall effectiveness. The **net profit margin** is the most common. It is a measure of the operating efficiency of the business. It measures how effectively the business is controlling expenses relative to its value of output. A high profit margin indicates good cost control. The net profit margin is the profit per dollar of sales after paying the owner's salary and accounting for opportunity cost of capital invested. Common problems with profit margin are the wrong pricing system, prices that have not been increased as costs have increased, costs that are too high relative to size of business, not enough sales for the resources allocated, high overhead costs, wasteful spending on inputs, and poor production. It is important to keep in mind that every dollar saved by cost control equals a dollar of *profit*. The **return on assets** (ROA) ratio measures the profit-generating capacity of total assets of the business. It measures the business's effectiveness in using all of the available total capital—both debt and equity. Return on assests shows how well the business is using its assets to generate a profit.
2. EFFICIENCY RATIOS
Efficiency ratios help explain why the business is making or losing money. While financial efficiency is related to profitability, it is quite different. The profit margin shows the return or loss for a given year. Financial efficiency seeks to understand the components of sales and determine if an operation is spending excessive amounts on operating expenses, interest, depreciation, and so forth. Therefore, it is important not only to understand the components that come together to determine profitability but also to understand why a business is or is not profitable. Financial efficiency ratios tell you how well the business employs its assets.
3. LIQUIDITY RATIOS
Liquidity ratios measure the capacity of the business to meet its short-term liabilities, either by using cash or by converting current assets into cash. Creditors and other lenders favor liquidity ratios that tend to reveal financial strength or weakness. The **current ratio** has long been the primary test for creditworthiness. It measures the ability to satisfy current debts with current assets. The higher the ratio, the greater the protection for short-term creditors. A ratio of less than 1 or a declining trend can signal problems in liquidity.
4. SOLVENCY RATIOS
Solvency ratios measure the extent to which a business is financed by debt and the business's ability to meet loan payments. Lenders of long-term funds and equity investors have an interest in solvency ratios. The **debt-to-asset ratio** is a way of evaluating the degree of asset financing creditors provide. It measures the percentage of the business's total assets to which creditors have claims. A higher ratio indicates greater financial risk and lower borrowing capacity. A ratio of less than 30 percent is considered strong.

Figure 12

17 Key Financial Ratios and What They Mean				
	Measure	**Recommendation**	**Formula**	**Explanation**
Profitability: The Ability to Earn a Good Profit and Generate Satisfactory Return on Investment				
1	Net income (profit)	>$50,000 per family	Sales – Total costs	What remains after subtracting all the costs (including depreciation, interest, salaries, and taxes) from your sales. Also called bottom line, net earnings, net profit.
2	Gross margin	30–40%	(Sales – Total direct costs) / Sales	The amount of contribution to the business enterprise, after paying direct costs.
3	Profit margin	10–15%	Net income / Sales	Profit per dollar of sales after paying the owner's salary and accounting for opportunity cost of capital invested.
4	Return on equity	>10%	Net income / Net worth	Measures how effectively you are using your reserves to produce income.
5	Return on assets	>10%	Net income / Total assets	Measures how you employ your assets to obtain sales revenue.
Financial Efficiency: How Well You Employ Your Assets				
6	Financial efficiency ratio	<65%	(Total expenses – interest – depreciation) / Sales	Measures how you employ your assets to obtain sales revenue.
7	Asset turnover ratio	>25–30%	Sales / Total assets	How you are in utilizing your assets in generation of sales revenue. Higher is better. If low, it indicates the current level of investment needs to be used more efficiently or maybe some capital can be sold without adversely affecting operating efficiency.
8	Operating expense ratio	<65%	(Operating expense – Depreciation) / Sales	For every dollar you took in, how much did you need to spend?
9	Depreciation expense ratio	< 15%	Depreciation expense / Sales	Provides a measure of the capital costs incurred by the business.
10	Interest expense ratio	< 15%	Interest expense / Sales	Shows percent of your income needed to pay interest.

	Measure	Recommendation	Formula	Explanation
Liquidity: The Ability of the Business to Meet Its Current Obligations Without Disrupting Normal Business Operations				
11	Current ratio	>1.5	Total current assets / Current liability	Measures the ability to satisfy current debts with current assets.
12	Working capital	Positive, stable	Total current assets – Total current liabilities	Approximates the amount of funds available from within the business to purchase crop inputs and equipment necessary to produce products. In general, a lot of working capital = more success since you can expand and improve operations.
Solvency: The Ability to Meet Loan Payments				
13	Debt/asset ratio	<30%	Total liabilities / Total assets	Measures the percentage of the total assets to which creditors have claims. Measures financial risk with debt financing. If 0, the business is out of debt.
14	Equity/asset ratio	<60%	Total equity / Total assets	What portion of the business *you* own.
15	Debt/equity ratio	<150%	Total liabilities / Net worth	What portion of the business *your lenders* own.
16	Working capital ratio	>50%	(Current assets – Current liabilities) / Total expenses	Measures the return on your assets without regard to how the business is financed.
17	Leverage factor	5	Total assets / Net worth	A measure of the business's riskiness. It is the ratio of your assets to your net worth.

Seventeen Key Ratios, the Formula for Each, an Explanation of Each, and a Recommended Level for Each Ratio

Figure 13

Key Projected Ratios for Mrs. Greenjeans Greenhouse

Profit Margin = Profit>Sales	7.41%
Asset Turnover = Sales>Total Assets	0.53
Return on Assets = Profit Margin * Asset Turnover	3.92%
Financial Leverage = Total Assets>Net Worth	1.93
Return on Equity = Return of Assets * Financial Ratio	7.59%
Debt to Asset Ratio = Total Liabilities>Total Assets	0.48
Current Ratio = Current Assets>Current Liabilities	4.04

When working with ratios, the following rules are important:

1. Ratio trends calculated consistently over time will provide better information.
2. Differing accounting policies, overall business size, and maturity of the business impact ratios.
3. Ratios supplement but do not replace sound business judgment. Ratios can be very useful in identifying areas of strengths and weaknesses, but because they are summary level in nature, many facts can remain buried if you don’t take the analysis further.
4. Individual business ratios can be compared to industry statistics and trends.

Benchmarks

Managers can learn about the strengths and weaknesses of their business by benchmarking them against similar farm businesses in their region and across the country. Benchmarking means comparing the business's financial and production performance measures against averages for the industry. One challenge with benchmarking is determining what the critical success factors are. Which measures will really make a difference to the business's profitability? The second challenge is finding industry data to benchmark against. Places to look are cooperative extension publications, web sites, and industry groups. If there is no industry data, you can benchmark against your own business's average numbers. In fact, your own data are your best benchmarks.

Benchmarks for Mrs. Greenjeans Greenhouse

Expense Item	All Greenhouses (%)	Mrs. Greenjeans Greenhouse (%)
Labor	33.8	35.3
Heating	3.9	4.2
Materials	35.3	31.7
Rent and depreciation	5.5	6.6
General maintenance	2.5	1.2
Insurance	1.6	0.8
Office/administration	0.9	0.4
Other utilities	1.6	1.7
Auto/truck	1.7	0.4
Interest	1.7	2.1
Advertising	1.0	0.8
Other items	5.1	7.3
Total expenses	94.6	92.6
Profit (sales less expenses)	5.4	7.4

Capital Required

The most common reason for developing a business plan is to be able to present the business's ideas for a new or expanded business to investors or lenders. After investors or lenders see the plan, they will want to know how much money is needed and how the money will be used.

Managers should think about what financial resources are needed for the following list:

1. Equipment and facilities
2. Lease versus purchase
3. Suppliers: delivery schedules, beginning inventories, economic order quantities, cost of storage, and lead times for delivery
4. Start-up costs: overhead components, incidental costs, initial advertising and promotions, utilities installation costs, renovations, working capital start-up, timing and source of investment, insurance, licensing, and accounting fees
5. Typical annual and monthly estimates
6. Desired mix of financing: equity, long-term loans, short-term or working capital loans, equipment or facilities loans, leases or rentals

Managers should describe how they will acquire and manage capital assets. Do they purchase, lease, or custom-hire to meet equipment needs? If they plan to rent land or buildings, they should describe the lease arrangements. They may want to include a summary of retirement or savings investments. If major changes are planned, they must describe how these assets will be managed.

Capital Required for Mrs. Greenjeans Greenhouse

Operating Line of Credit	$100,000
Long-Term Credit	
Emergency generator	$5,000
Seeder	$20,000
Total long-term capital to borrow	$25,000

***Outline Your Financial Planning Section*:**

OTHER CONSIDERATIONS

Supporting Documentation

An appendix to the business plan should include other supporting documentation. Resumes of key people could be included. If the business was purchased from someone else, it should include any financial data that he or she has provided as well as a history of the business.

Reviewing Business Plans

A well-prepared plan is the road map to the future of the business. Business owners need to make the document work for them. They should skip sections that are not relevant, and add others if their business requires them. A business plan must pass three tests (Marshall, 2004):

1. The *reality test* proves that a market really exists for the products or services, and the business can actually build it for the costs estimated in the plan.
2. The *competitive test* evaluates the business's position relative to its key competitors and management's ability to create a business that will gain an edge over its rivals.
3. The *value test* proves investors or lenders will receive an attractive rate of return or a high probability of repayment.

A periodic review is imperative for the business plan to measure the business's progress toward meeting its financial, marketing, and other goals. Business managers tend to be overly optimistic, underestimating costs and overestimating returns. A review of the plan will help identify deviations from the plan early before they become serious problems. Early reviews will allow for modifications if needed. Several tools are available to determine the profitability of alternative strategies. However, profits may not be the only objective of the business. Other questions to ask are as follows: Is our current strategy consistent with the business and strategic plan? If it is not, should it be rejected, or should the plan be reevaluated?

After a business has decided who its customers are, what consumer needs it will fill, how other business forces will affect the industry, and how the business's individual strengths and weaknesses will be used and improved for business success, it has to implement the strategy. Having a strategic plan will help the business to be proactive and to anticipate and take advantage of business trends. The business will also want to continue to stay informed about its customers' needs and desires. The management team should keep focus on the strategic plan and share the mission and objectives with employees and customers. It is also a good idea to periodically review the business's mission, goals, and objectives and change or modify them as external and internal situations change. However, management should also be sure that the direction in which the business is moving is consistent with the current mission and strategic vision of the business.

Additional Resources

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