UNIT 6

Building Resilience—Small Farm Planning and Operations

6.0

Introduction to Building Resilience—Small Farm Planning and Operations

Introduction to Building Resilience—Small Farm Planning & Operations

UNIT OVERVIEW

This unit is about integrated farm planning. The goal of this approach to planning is to integrate the crop plan, the marketing plan, the financial plan, and the time management plan in order to minimize risk and maximize return.

All businesses have to manage uncertainty, but farmers face significant risks that are beyond their control, including the vagaries of nature, the fiercely competitive global market, land access challenges, and increased demands from local markets for ever-improved food safety plans and marketing materials. The farmer does not know what will happen each year, but over the life of the farm all of these pressures (and more) will surely influence the farmer's success. While larger farmers selling into the undifferentiated commodity market can manage a great deal of production and marketing risk with crop insurance and marketing contracts, small-scale direct-market farmers have to manage their risks with their wits.

As with many things in farming, diversity—combined with planning—is the key. The lectures, exercises, and background scenario presented in Units 6.0–6.4 provide a framework for planning and operating a small direct-market farm to ensure resilience in an ever-changing world.

Unit 6.0 introduces the background scenario for a case study that will set the stage for further discussion throughout all parts of Unit 6. In presenting the case study, the instructor will use a series of questions to initiate discussion of issues related to farm business planning and resilience. In Unit 6.4, the instructor will review the case study as it relates to the material covered in the lectures. Unit 6.0 also includes a list of business planning and operations Resources and a Glossary of Terms.

MODES OF INSTRUCTION

> CASE STUDY SCENARIO (15-20 MINUTES)

The case study presents concepts that will be addressed in Unit 6, including farm business planning, social media, cash flow planning, bookkeeping, and taxes.

Background Scenario for Unit 6—Instructor's Guide: Case Study Introduction

The case scenario described below will be referred to throughout the lectures, as a means to understand how the concepts they are exploring are applied in a concrete situation. The Case Study Review at the end of the unit builds on this scenario to review all of Unit 6.

Read this scenario to students and discuss the questions below in preparation for covering Unit 6.

Bonnie and Clyde purchased a farm with a house, a barn, out buildings and a half-acre of productive blueberry bushes. Both plan to have off-farm jobs. They plan to use their off-farm income to plant more acres of blueberries over the years. They plan to convert the barn into a commercial kitchen to make blueberry jam. They will use the rest of the barn for community events, which will create more customers for the jam. Their friend JJ is going to work full time on the farm. She will plant the rest of the land to row-crops, establish a CSA, sell at the local farmers' market and develop wholesale accounts.

The three friends decide that Bonnie and Clyde will treat their house and land as 100% their personal asset. They will rent the land and barn to the farming partnership. JJ will be the main farmer in the farming partnership and will receive a salary or "guaranteed payment" before the net profit or loss from all farming activity is divided equally. JJ will also get to live rent-free in a beautiful 1957 Spartan Mobile Manor parked near the barn so she can keep an eye on the farm at all times.

They named their farm BeBopABlueBlop Farm and got to work.

Issues: Read the questions in bold below and listen for answers, then share the italicized responses.

1. **Before they get going, how will they know if they have enough money month to month to do what they plan to do?**

   Bonnie and Clyde know they will need to lend money to the farm partnership but they need to plan on how much cash to have available month to month.

   Creating a financial plan, including a cash flow budget, will help them know how much money they need and when they need it. They also need to plan to see if they have calculated to reach a break-even and then a profitable state; as well as when they expect to become profitable. This will be discussed (e.g., today at ___ am) in lectures from Units 6.1 and 6.2.

2. **Next, JJ needs to set up a basic farm bookkeeping system. What does she need to know to get started?**

   A bookkeeping system is a way of organizing financial information so that it is completely and accurately synthesized into timely and meaningful accounting reports. There is a basic structure and vocabulary to all bookkeeping systems; it includes just seven basic concepts. We will cover this (e.g., tomorrow afternoon) in Lecture 1 of Unit 6.3.

3. **Everyone is (or should be) concerned about accurately preparing annual income tax returns, which are required for all self-employed business people, including farmers. What income is taxable and what expenses are deductible? How will Bonnie and Clyde divide the purchase price of the farm between personal and business use? How will each of them take a fair share of profit from the farm and how will this amount be taxed to them individually?**

   A partnership is a separate tax entity and must file its own tax returns. The partnership will file a tax return showing the income and expense of farming and the amount of net profit (or loss) earned by each partner. Regardless of any profit earned, the partnership does not pay taxes; instead each of the partners will file an individual tax return and pay taxes due on their portion of the net income (or loss) from the partnership after it is added (or subtracted) to any other income they might have. We will discuss this, and several other critical foundational concepts of taxation (e.g., on Wednesday morning), in Lecture 2 of Unit 6.3.

4. **As they look to the future they plan to remodel the barn, plant new blueberry bushes and make blueberry jam. Is there anything different or special about these activities?**

   All of these activities are subject to special tax accounting rules. In Lecture 3 of Unit 6.3 (e.g., tomorrow at 11 am) we will give basic information about special activities that will most likely require professional assistance from a Certified Public Accountant.

5. **How will they account for the income and expense of the community events?**

   Community events may be more valuable as a form or advertising than as a source of additional income to the farm. Sometimes even if an event loses money it benefits the farm by creating goodwill with neighbors and generating new customers, or increasing the loyalty of existing customers. Of course, if things go badly, exactly the opposite can happen. We will discuss on-farm events (e.g., on Wednesday morning) in Units 6.1 and 6.3.

6. **What else should they be thinking about and what can they do to protect themselves against various worst-case scenarios to ensure their operation stays afloat?**

   After the lectures, we will have a chance to review what we have learned by looking at what happened to BeeBopABlueBlop after a few years in operation. We will explore what the partners could have done to plan for more resilience. See Unit 6.4, Case Study Discussion.

Resources & References

PRINT RESOURCES

DiGiacomo, Gigi, Robert King and Dale Nordquist. 2014. *Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses* (Fourth printing 2014). USDA SARE and the Sustainable Agriculture Network, 2003. *www.sare.org/Learning-Center/Books/Building-a-Sustainable-Business*

A thorough introduction to business planning for sustainable agriculture entrepreneurs. Provides sample worksheets for setting goals, researching processing alternatives, determining potential markets, and evaluating financing options. Blank worksheets help the reader develop a detailed, lender-ready business plan or map out strategies to take advantage of new opportunities. Includes many examples of actual business plans. A very user-friendly and value-based approach to business planning.

Fedie, Donald M. and Michael H. Prosser. 1997. *How to Farm for Profit: Practical Enterprise Analysis*. Iowa State Ames, IA: University Press.

"This book introduces basic financial principles, procedures and the enterprise analysis that is widely accepted in other industries, including a discussion of standardized financial reporting and the information derived from this process, such as extent of profitability, sources and uses of cash, and changes in owner's equity for the reporting period. After laying out the procedures for financial reporting, the book presents a farming and ranching operation with five enterprises—cropping, cattle feeding, hog farrow-to-finish, dairy, and calf production, and shows how to analyze each enterprise in terms of income, expenses, and break-even costs."
—Missouri Alternatives Center Library

Fitzpatrick, Kathleen and Wallace W. Kravitz. 2010. *E-Z Bookkeeping*. Barron's Educational Series, Inc.

A simple guide to setting up an easy-to-use bookkeeping system and understanding accounting fundamentals.

Grudens Schuck, Nancy, Wayne Knoblauch, Judy Green and Mary Saylor. 1988. *Farming Alternatives—A Guide to Evaluating the Feasibility of New Farm-Based Enterprises*. Ithaca, NY: Cornell University.

A concise and easy-to-use resource for evaluating the feasibility of new agricultural enterprises. Includes self-assessment exercises used to identify and define personal values and goals and their compatibility with a career in agriculture. Also includes assessments of personal resources such as capital, skills, and equipment necessary to succeed in agricultural businesses. Available from www.cce.cornell.edu.

Hamilton, Neil. 2011. *The Legal Guide for Direct Farm Marketing. Second Edition* (online only). Des Moines, IA: Drake University. *directmarketersforum.org/the-legal-guide-for-direct-farm-marketing/*

The author is a successful farmer, attorney, and professor of agricultural law. This comprehensive guide is essential for anyone considering direct farm marketing. Hamilton covers liability, regulations, labor law, processed foods, and meat marketing issues in layman's terms. The contents are now available for free online.

Harris, Philip E. and Linda E. Curry (Eds). 2011. *Tax Guide for Owners and Operators of Small and Medium Sized Farms*. Produced by land grant university tax education foundation, inc. 2011. *ruraltax.org/files/uploads/TaxGuide%20Small%20to%20Midsized%20Farms%202011%2007%2014.pdf*

Hashley, Jennifer, Margiana Petersen-Rockney, Kate Cerretani, and Alissa Wasserman. 2014 (updated). *An Entrepreneur's Guide to Farming in Massachusetts: Fertile Resources, Harvestable Tips, and a Side-Dress of Regulatory Reality.* Lowell MA: New Entry Sustainable Farming Project. *www.bfnmass.org/sites/default/files/uploads/An_Entrepreneurs_Guide_to_Farming_MA.pdf*

This 107-page guide is an accumulation of fact sheets on a variety of topics, including finding a farm, looking for land, financing the farm operation, insurance, record keeping, business planning and taxes.

Kamoroff, Bernard. 2010. *Small Time Operator 2010 Edition: How to Start Your Own Business, Keep Your Books, Pay Your Taxes, and Stay Out of Trouble.*

Contains general information about starting and running a small business, including worksheets and resources.

Lewis, Hannah. 2012. *Basic Accounting: Guidance for Beginning Farmers,* National Center for Appropriate Technology.

This document was created to be easy to use by those with limited or no accounting background. It's goal is to help new farmers grow good bookkeeping habits along with their new farm.

Mullis, Darrell and Judith Handler. 2008. *The Accounting Game: Basic Accounting Fresh from the Lemonade Stand.* Orloff. Educational Discoveries Inc.

This book uses a lemonade stand to teach the basics of financial language and record keeping. Covers all the basics of accounting in a very accessible and entertaining way. Covers the basic language of business concepts such as cost of goods sold, expenses, bad debts, accrual vs. cash methods of accounting, capitalizing vs. expensing, depreciation, and the difference between cash and profit.

Northeast Beginning Farmers Project. 2014. *Goals, Skills and Resources Tutorial.* Ithaca, NY: Cornell University. *nebeginningfarmers.org/farmers/beginning/what-is-your-goal/*

This web-based tutorial provides those just starting a farm tools to think through their values and goals, as well as to identify their resources available for starting the farming venture.

Overview—Managing Legal and Regulatory Risk for Diversified Family Farms (Workbook 6). From Risk Management Training for Diversified Family Farmers. USDA Risk Management Agency, Farm Services Agency and Farm and Agriculture Collaborative Training Systems.

Based on a workshop, this document explores important considerations for choosing a business form, signing a contract, and setting up human resource structures Available online through CAFF: caff.org/wp-content/uploads/2010/07/Workbook_6.pdf

Pinson, Linda. 2007. *Keeping the Books: Basic Record Keeping and Accounting for the Successful Small Business.* Kaplan Publishing.

A simple guide to setting up an easy-to-use bookkeeping system and understanding accounting fundamentals.

Rosenzweig, Marcie A. 1999. *Market Farm Forms: Spreadsheet Templates for Planning and Tracking Information on Diversified Market Farms.*

Developed to help with planning, planting, and income diversification. The book explains how to enter your farm's information into the templates, and what the calculated data tell you. Cross-platform CD (included) works seamlessly with Excel. Computerless farmers can use the printed forms with a pencil and calculator.

Virginia Beginning Farmer and Rancher Coalition Program. 2014. *Introduction to Whole Farm Planning. Virginia Whole Farm Planning: An Educational Program for Startup and Development.* Virginia Cooperative Extension.

This is the first module in a 5-part curriculum for training beginning farmers. It is an excellent document for helping beginning farmers plan and implement their farm business in a holistic manner. There are several worksheets to help farmers think through their dreams, goals, resources, and how to implement their ideas. Many other resources are also identified.

Virginia Beginning Farmer and Rancher Coalition Program. Forthcoming, 2015. *Whole Farm Business Management and Planning. Virginia Whole Farm Planning: An Educational Program for Startup and Development.* Virginia Cooperative Extension.

As part of a larger curriculum from Virginia Cooperative Extension, this module is aimed at helping farmers identify and operationalize financial and other resource goals as part of their overall farm plan.

Wiswall, Richard. 2009. *The Organic Farmer's Business Handbook.* White River Junction, VT: Chelsea Green Publishing.

An excellent and accessible resource, this book gets at efficiencies of production in both the business and farming side of what a grower does. It approaches crop planning from a business perspective and provides enterprise budgets for crops (which can offer ideas for thinking about how much money can be made *from a certain plot of land). Concise—can be read in two days.*

White, Gerald B. and Wen-fei L. Uva. 2000. *Developing a Strategic Marketing Plan for Horticultural Firms*. Dept. Agricultural, Resources, and Managerial Economics, College of Agriculture and Life Sciences. Ithaca, NY: Cornell University. *www.nysl.nysed.gov/scandoclinks/ocm43610110.htm*

WEB-BASED RESOURCES

ATTRA – National Sustainable Agriculture Information Service

attra.ncat.org/publication.html#marketing

A service of the National Center for Appropriate Technology (NCAT), this site provides a large selection on resources for managing a farm business. Many documents are free, others have a minimal cost. Topics range from tax information, farm labor management, accounting, how to evaluate a farm enterprise, etc.

The Carrot Project

thecarrotproject.org/farmer_resources

This site provides useful resources on financing, business and financial planning, and legal documents.

Drake University Agricultural Law Center

www.law.drake.edu/academics/agLaw/

Farm Commons (Wisconsin)

farmcommons.org

This organization provides legal resources for farmers, such as guides, checklists, and model documents on topics such taxes, insurance, sales, contracts, land use, safety and workers.

Farm Risk Plans

farm-risk-plans.rma.usda.gov/

This website, run by the Risk Management Agency at the USDA, is a clearinghouse site for materials on managing risk on farms, and other business management issues. They have a library with documents and tools for financial planning, business development, and taxes from a myriad of sources. Other items include crop insurance options for vegetable growers, risk management tools, and calculators for decision-making.

Lafayette County Extension & Agriculture - Access to researched-based information and education

extension.missouri.edu/lafayette/agriculture.aspx

This site includes several excel spreadsheet forms. The Farm Record Book Veggie 2.1 can be used for tracking income and expenses for specialty crop farmers.

Nolo Press

www.nolo.com

Dedicated to helping people handle their own everyday legal matters or make more informed legal decisions, Nolo Press publishes reliable, plain-English books, software, forms, and up-to-date legal information covering almost any legal topic. Includes an extensive list of publications and online articles on the types of legal ownership structures that are available and do-it-yourself manuals on forming sole proprietorships; partnerships; limited partnerships; limited liability companies (LLC); nonprofit corporations; and nonprofit cooperatives. Includes links to other helpful web sites.

Rural Tax Education

ruraltax.org

This site includes sample tax returns for different types of small farms/ranches and ag and rural enterprises. Much of the information is geared to professional tax preparers who may be familiar with tax law generally but unfamiliar with some of the specifics of farm and ranch accounting or value-added production for farmers and ranchers.

Start 2 Farm

www.start2farm.gov/

This is a comprehensive website, created by the Beginning Farmer and Rancher Development Program at the USDA, that acts as a clearinghouse for information for new and beginning farmers. There are sections on successful planning, farm management, and growing your farm. This is an important place to go to find new materials.

Trainers' Resource Guide—Financial Topics

farmbiztrainer.com/

This is an excellent website put together by a group of teachers who do financial and business planning for farmers. The materials are useful both for trainers and the farmers' themselves. There is an extensive list of curricula and other resources related to mentoring, identifying trainees, valuation, and funding. The resources are searchable by resource topic, knowledge level of the trainee, target audience, farm type and resource format.

The Veggie Compass

www.veggiecompass.com/

This is a project at the University of Wisconsin Madison, which includes tools for managing farm profit, made specifically for diversified organic fresh market vegetable growers. It's goal is to provide information on which crops and market channels are most profitable, to improve decision making and financial planning.

6.1

Building Resilience into Your Small Farm Marketing Plan, and Building Community with Social Media and On-Farm Events

Introduction to Building Resilience into Your Small Farm Marketing Plan

UNIT OVERVIEW

Planning for resilience starts with the farm plan. Lecture 1of this unit offers practical advice on how to approach business planning in the start-up phase of a small farm. The main goal is to encourage students to see holistic business planning as a necessary and integral part of farming. Beginning farmers develop a farm plan suitable to specific soils and climates; this lecture is about how to assess specific marketing opportunities suitable to a particular piece of land the farmer can access and given the individual farmer's specific set of personal assets and resource limitations. People, knowledge, time, cash, and credit are all the precious and limited resources that work with seed, soil, sun, and water to make a profitable farm.

The objectives of the lecture and accompanying group exercise are: 1) to have each student understand the integrated elements of a farm business plan; 2) to have advanced students actually start to write a business plan; and 3) to introduce the concepts of phases of a new farm and the appropriate planning steps to take at each phase.

Another component of resilience is building community support. Many small direct-market farms will be located near their neighbors, possibly in an area that is no longer primarily rural and agricultural. The goodwill of neighbors and the community will be a valuable asset for growing a customer base and for avoiding conflicts. Alternatively, poor relations with neighbors can lead to an endless series of problems, particularly if neighbors are willing to study local zoning ordinances and report every minor violation you may make. Lecture 2 reviews how to build community through both on-line connection—e.g., websites, social media, bar codes—and in-person contacts, such as during deliveries and at farmers' markets. Every interaction is an opportunity to build your market.

Lecture 2 also addresses the issue of on-farm events. If you do a good job of engaging your community through social media and when you are out and about, then it's likely your community will be interested in seeing your farm and learning about what you do. You might find that visitors drop by for an impromptu farm tour. This can be difficult to manage, especially if there are very few workers on your farm. Hosting an on-farm event is a popular way of sharing all that is beautiful and interesting about your farm while creating a sense of community amongst all the different people who may be interested in coming out to learn more about how their food is grown.

On-farm events can be a lot of fun, and regardless of whether they make money, they may generate good will in the community. But as discussed in Lecture 2, it's important to be aware of the potential downside: events take a great deal of time and effort, aren't always profitable, and you can open yourself up to new liabilities when you open your farm to the public.

MODES OF INSTRUCTION

> LECTURES (2 LECTURES, 1 HOUR EACH)

> GROUP EXERCISE (.5 HOUR)

LEARNING OBJECTIVES—LECTURE 1

CONCEPTS

- The rationale behind integrated business planning is to create a resilient farm that is protected from uncertainty by a multi-pronged approach to managing liability and risk
- An integrated plan aligns time management planning and cash flow budgeting with farm, post-harvest, and market planning
- There are different essential components of business planning for start-up, developing, and mature farming enterprises

SKILLS

- Ability to develop a basic 5-part business plan for a start-up farming enterprise including: values and goals assessment, resource analysis, market analysis, market plan, time management plan, farming plan, and financial analysis
- Ability to develop a basic 2-year cash flow budget for a small farm enterprise and assess the economic viability of the operation

LEARNING OBJECTIVES—LECTURE 2

CONCEPTS

- Social media requires actual engagement; it is a two-way conversation, not a one-way dissemination of information
- Customers are increasingly interested in transparency. One way they seek it is on-line, another is by getting to know the farmer. For many, visiting the farm is an important aspect of buying from that farm.
- On-farm events can create community, but they can also damage relations with neighbors
- On-farm events are not always profitable, but they may benefit the farm in other ways

SKILLS

- Ability to understand the pros and cons of a social media strategy
- Ability to think analytically about risk management planning for an on-farm event
- Ability to think about how to evaluate an on-farm event

Lecture 1: A Resilient & Integrated Farm Plan

A. Why Plan?

1. Time and money are scarce resources
   a) Good business planning allows you to analyze the potential financial viability of the proposed farming business and help you to make more informed and strategic decisions that may increase the chances of success and reduce the risk of financial losses
   b) Business planning might also change your mind about entering farming, result in delaying the start of your business until additional resources are secured, or might radically alter your business concept and help you redirect your business plans toward options with greater likelihood of financial success
2. Business planning is just a term for methodical thinking about all aspects of building a new business, including:
   a) Determining the compatibility of farming professionally with personal values and goals
   b) Analyzing personal resources (e.g., skills, funding, available hours, and support network)
   c) Doing basic market research to determine what you can sell, where, for what price, and in what quantity (see also Unit 5: Marketing Basics)
   d) Budgeting time and money to reflect the physical cycle of your farm plan and your proposed marketing plan
   e) Developing ideas about how to communicate the value of your products and your farm and then developing the physical, visual and written resources to brand your products and deliver them to your target customer
   f) Evaluating your ability to understand and comply with all applicable government regulations, and the necessary steps and costs to comply (e.g., zoning restrictions related to your farm, restrictions on who can sell what at the farmers market, or county health permit requirements for on-farm dinners)
   g) Evaluating your ability to comply with the terms of any third party certification you may wish to use—such as the ability to use the USDA Organic label or the ability to participate in a local "Buy Fresh! Buy Local!" campaign
   h) Simultaneously revising your farming/production plan to match your marketing strategy and your time and money budget

      It may take many revisions before all three parts of the plan are in sync. As difficult as it is to sync up your plan on paper; imagine how much more difficult to try to adjust once you get going and then realize that the products you are growing are not popular in your area and you do not have enough hours in the week to harvest and pack and make it to all the markets you need to be at to make enough money to cover rent.
3. How "fancy" does the business plan have to be?
   a) Many "off the shelf" business planning programs are designed to prepare formal documents to be presented to potential investors, lenders, or shareholders
   b) Content matters more than form; save your money on the software, and just get to work

B. Critical Elements of a Business Plan for the Start–up Phase of a Small Farm Enterprise

(see Appendix 1, Sample Business Plan, and Appendix 2, Business Plan Template)

1. Vision, values, and goals
   a) Personal: Determine your personal values and quality of life goals and their compatibility with farming as a profession/occupation. This is a very important exercise (see DiGiacomo et al. 2014, Northeast Beginning Farm Project 2014 and Virginia Beginning Farmer and Rancher Coalition Program 2014 in Unit 6.0, Resources).

b) Business: The specific vision, values, and goals for the business. These must support your personal vision, values, and goals, but they are different. Your personal goal may be to be happy and work outdoors. The goal of your farm business would be to grow and sell food at a profit in a "happy" work environment.

2. Resource analysis and risk assessment

   This assessment is an evaluation of the total personal, financial, and natural resources available to apply toward the development and maintenance of the farming business and an honest look at what could go wrong, which resources are at risk, and how you can protect against foreseeable risks

   a) **Personal resources:** Do you have health insurance, and sufficient savings to cover a few months' living expenses? If not, you have nothing to protect you or your farm if you get sick or are injured.

   b) **Skills assessment:** Identify the skills you have that will benefit the business (e.g., farming skills, marketing connections, etc.) and be sure to make a plan that plays to your strengths. Identify skills you need to develop, such as a basic understanding of bookkeeping, and identify how you will develop the skill, for example through a community college class, by working with a local Small Business Development Center, or by convincing your cousin the accountant to come spend a weekend tutoring you.

   c) **Mentors and advisors:** They do not need to be experts; they just need to know you well or care about your success. Your friends, family members, and—if you are lucky—your neighbor the seasoned farmer, are all people who can help you to set and meet realistic goals. They can help you to make good business decisions and kindly point out when you are not making good sense or are straying from your stated goals and values. (Don't worry; it happens to everyone; that is why friends and mentors are so important.)

   d) **Liability:** If you borrow money, you are personally liable. If your products make someone sick, you are liable. If one of your workers gets in an accident while driving a farm vehicle, you are liable. If someone gets hurt on your farm, you are liable. If one of your animals gets off your farm and does damage to someone else's property, you are liable. If you are married, your spouse is also liable for your debt. If you are in a business partnership, you are personally liable for the debts of that partnership, as is your spouse—even for something like a car accident caused by your partner.

      i. Incorporating your business as a Limited Partnership, or a Limited Liability Corporation, or an S Corporation are all ways to separate business liability from personal liability, to protect yourself and your spouse. Each of these legal structures offers a different level of protection and also has implications for preparing tax returns and paying taxes (see Unit 6.3, Basics of Bookkeeping and Farm Taxes). Remember though—you cannot count on the separate legal structure to protect you from the consequences of truly bad decisions such as driving under the influence or deciding to sell an unsafe product.

      ii. Different kinds of insurance:

         - Health insurance – In particular be sure you are covered for major injuries to digits and limbs
         - General liability insurance – For events such as on-farm visitors, or farm animals that get loose
         - Product liability insurance – In case someone gets sick or dies as a result of consuming your product
         - Crop insurance may be available for some crops to protect you against crop failures due to natural causes, including weather and disease

The Risk Management Agency (RMA) of the United States Department of Agriculture (USDA) works with private insurance companies to insure many different crops. More information is available from their web site.

Many crops grown on diversified direct-market farms are not covered by RMA programs. Those crops may be eligible for the **Noninsured Crop Disaster Assistance Program (NAP)** administered by the Farm Service Agency (FSA) of the USDA.

Beginning farmers should visit the FSA website to learn more about the program. Be sure to look at **USDA Limited Resource Farmer and Rancher Online Self Determination Tool.** If your household income is at or below the national poverty level for a family of four, or less than 50 percent of county median household for both of the previous two years you will likely qualify.

3. Integrate time budgeting into your farm and market and cash flow plan

   Time is a major constraint and needs to be budgeted as carefully as money. Actually, since you can't borrow time, you need to budget time even more carefully than money (see Appendix 3, Time Management Worksheet).

4. Market analysis (see also Unit 5, Marketing Basics)
   a) Assess what is currently taking place in the market. Questions to investigate include:
      i. Where are the established markets where you might sell?

         Can you get in? Are there requirements for selling there such as being certified organic or having a certified food safety plan?
      ii. Where are the markets that you will have to compete with for customers? What is being sold currently? At what prices?
      iii. How does the quality, price, and availability of what you plan to sell compare with what is currently being sold in the marketplace? How is it being represented to the customer? Is it certified organic? Does it have some other third party certification such as Animal Welfare Approved or Wildlife Friendly?
      iv. How will you differentiate your product in the market? Will you have a label? Will you be certified organic? Will you seek some other third party certification?
      v. Can you identify any unmet demand?
   b) Where should you focus first?
      i. You may know that you ultimately want to have a market base that is 1/3 farmers' market, 1/3 wholesale, and 1/3 CSA, but you might not be able to develop those three market channels simultaneously in your first year
      ii. Which one is the best starting place and how will you use it to start to build the second and third channels? Some farms begin selling at farmers' markets in order to introduce their products into a community and develop a customer following. If you choose a farmers' market as a first step do you know what your second step will be? Are you trying to develop a customer base to start a CSA? Are you trying to cultivate relationships with restaurants?
   c) Is there a marketing niche you can occupy?

      If you do something very specific you might not have a lot of competition—on the other hand there might not be a lot of demand
   d) Identify the regions and channels where you might market your products:
      i. A region is a contiguous geographical area
         - E.g., Central Coast of California; San Francisco Bay Area, Greater Sacramento, etc.
      ii. A channel is a specific marketing outlet
         - E.g., a farmer's market, a CSA, direct to retail, direct to a restaurant or processor, or to a wholesale broker

C. Marketing Plan (see also Unit 5: Marketing Basics, and Part 2, Market Analysis/Marketing Plan of Appendix 1, Sample Business Plan, and Appendix 2, Business Plan Template in this unit)

1. Your marketing plan will be based on what you learned by doing a market analysis. Your market plan answers questions like: How am I going to build my market(s) in my chosen region(s) and channel(s)?
2. You need to consider the specific customers you want to attract, and develop branding messages and materials that speak to them. Moms are not the same as chefs.
   a) What is your one-sentence pitch to a mom?
   b) What is your one-sentence pitch to a chef?
   c) Consider your visual presentation and your marketing and packaging materials.
   Do you have a logo? Does it represent you and your farm? Have you considered if the quality of your packaging materials matches the expectations of your customers?
   d) Are there any regulations restricting what you can put on your labels?
   For produce, you need to be aware of the difference between making statements only you can verify ("It's the best!" or "No pesticides ever") and using a third party certifier to assure your customers that you do indeed speak the truth. If you claim that your product is certified anything (organic, humane, animal welfare approved, kosher, halal, GAP 5-Step, etc.) without actually obtaining the third party certification you are committing fraud against your customers and your fellow farmers and you may be sued or fined.
   Research each and every claim you want to make on your label. Some farmers have spent years in court for making health claims that, while supported by science were not acceptable to the Food and Drug Administration.
   For meat, eggs and dairy, and any manufactured food products such as cheese or jam, check with your state Department of Agriculture. If your product may move across state lines, you should also check with the USDA. All claims such as "cage-free" or "antibiotic free" or "hormone free" must be truthful and not misleading. If you use a term that is regulated or inspected at the state or federal level then you must participate in the state or federal program. For additional assistance with regulations related to labeling, contact your County Extension Agent, or the Niche Meat Processor Assistance Network *(www.nichemeatprocessing.org/)*.
3. Play to your strengths, and acknowledge and address your weaknesses
   a) If you don't like talking to the public, you may prefer to sell wholesale. If your business depends on direct marketing, you need a strategy for selling at a farmers' market.
   b) Alternatively, maybe you can hire an extroverted person to help you with sales. Whatever you do, don't just show up hoping no one will try to talk to you or that you will suddenly overcome shyness.
   c) Practice some customer pick-up lines and think about good props. A photo album of pictures from the farm can be a good way to keep a conversation going or to politely answer questions without having to talk a lot.
4. You may not want to drive an extra two hours to get to the more lucrative farmers' market, but doing so may be the only realistic way to get the restaurants in that area to consider buying directly from you. How will that affect your farming plan? Did you budget for the extra gas?
5. Diversity creates resiliency. How can you diversify your market base so you can survive if one (or two) or your major customers leave? Are all of your customers basically the same? Are they equally likely to leave for the same reasons? If so, maybe consider trying to get a very different sort of customer.

D. Financial Analysis

1. You don't want to spend all your cash and then go looking for credit. Plan which cash you spend and which you borrow. Generally it is easier to get credit to buy equipment than seed. You need to plan accordingly.
2. You need to plan to be ready to borrow. Lenders want to see a business plan with strategies, demonstrated experience, projections of future earnings, solid financial skills, past financial performance, passion, creativity and vision.
3. Start-up cash flow analysis – Define accurately when will you have to purchase supplies and equipment. This should correspond exactly to your farm plan. Price supplies from different sources.
4. Phase-one cash flow analysis – Define when you will start to generate revenue, and what your selling costs and ongoing operational costs will be during the first few years of farming.
5. Revenue estimates will depend on your preliminary marketing plan as well as your estimates of yields and prices. Selling costs include transportation, selling supplies such as bags and boxes, and possibly sales help.

E. Farming Plan and Post-Harvest Handling/Packing

1. **The farming plan, or crop plan,** defines what crops will be grown in what quantities on which fields at what times of year and using what inputs. It must also address food safety risks such as the risk of domestic or wild animals coming into your fields, or the risk of contaminated water ruining your crop. Timelines are essential—and they have to line up with your availability, the availability of labor, your cash needs for each phase of the plan, and your marketing plan.
2. **The post-harvest handling/packing plan** addresses packing, cooling, and storage—all of which are time-sensitive, and all of which have important food-safety implications, and therefore food safety plan components
3. **The farming and post-harvest handling/packing plan** must serve the marketing plan, which is based on the market analysis, and it also has to work within the constraints of climate, soil, water, equipment, labor, hours in the day, and cash in the bank
4. The farming plan is constrained by the financial plan. If you are not in a financial position to establish an orchard, it doesn't matter if there is a great market for apples. (And a great market for apples today does not guarantee that market will still be there in 3-4 years when your new trees come into production.)
5. Consider how you can adapt the farm plan to provide steady income to smooth seasonal cash flow problems
   a) Example: If you can grow vegetable starts inside and sell them early in the spring, it will help generate cash to buy other necessary supplies needed at a time when you might not have other farm income
6. Consider the hours it takes to accomplish each of your farming tasks, and then add time for marketing and administrative tasks, such as ordering the seed and paying the seed bill (see Appendix 3 for a Time Management Worksheet)
   a) Example: It simply cannot take three days to make your planting beds perfect, because the only way to accomplish everything you need to do that week is to get the beds done in 12 hours
   b) Example: If your farm plan says that you are going to use your tractor in February, you need to make sure that you have time to buy the tractor in January or before. If you plan to start selling at the farmers' market in April, you have to get your booth and supplies together in March, as well as ensuring you will have products to sell.

7. A time needs and availability analysis for the first two years of operations is necessary, because the workload on a farm is not spread out evenly. The time analysis must match the cash flow worksheet and the farm plan.
   a) You can borrow money to cover a cash shortfall, but you cannot borrow time. You will either have to hire help or scale back your plans. (Not sleeping is not a realistic or safe option!)
   b) Develop a visual planner/calendar. Get a big calendar and list the major tasks in the weeks that need to be accomplished, with an estimate of how long they will take.
   c) Schedule time for administration and marketing every week. Administration includes depositing checks, writing checks, and recording all your farm income and expenses. Marketing includes calling customers to see what they want this week and to ask if there were any problems with their purchases last week.
   d) Schedule driving time to deliver orders and purchase supplies
   e) Schedule time to accomplish production activities—cultivation, harvest and packing tasks, moving chicken coops, washing and packing eggs, etc.
   f) Do not schedule consecutive 105-hour work weeks. You believe in sustainability and health—remember?

F. How Does Your Business Plan Change Over Time?

1. What will your infrastructure needs be in a few years? If you know you will need to purchase major new equipment or build a packing shed or buy a new cooler, you need to plan now to establish good credit so you can finance those purchases when the time comes.
2. As your business grows, it becomes more important to have efficient systems for recordkeeping, internal communication, managing human resources, etc. Usually these systems are developed in the first few years, and then improved as needs dictate. (It is better to be proactive—even if written procedures seem overly formal at first, rather than to not have a plan and be reactive when a problem arises.)
3. Recordkeeping systems: Any system you develop to get you through the first few years will need to be reviewed for efficiency and accuracy; then updated and expanded as the business grows
4. Internal communication and decision-making processes: As more people are added, this need will make itself known. Again, it is better to take some time to think through the best possible scenarios and set procedures/systems in place to support them.
5. Recruiting, training, and retaining assistance: When employees become a valuable resource, it makes sense to invest in them through salary increases, benefits, housing, and supplemental training
6. Exit strategy: An exit strategy is a formal plan for transitioning out of the business. It might include selling the business, placing a conservation easement on the land, or converting fields to orchards. It is particularly difficult for farmers to transition out of farming and generate retirement income without selling the house and land, and moving off the farm. You start over again, identifying personal goals and values and charting your course towards the next phase of your life.
7. As a beginning farmer, can you identify someone currently working on an exit plan from their farm business, and see about synchronizing your plans to start a farm with their plans to exit? Is there an organization in your region that can facilitate an introduction? Examples include Farmlink in California and Pennsylvania, Landlink in Montana, etc.

Group Discussion Exercise: Kitchen Table Business Planning

DISCUSSION QUESTIONS

Part 1: Business Vision, Goal, Preliminary Resources and Market Analysis

1. **What are examples of business visions and goals?**

   Listen for:

   - Values, profitability, long term sustainability

2. **What are examples of resources they bring to the venture, and skills they need to develop soon, in order to advance?**

   Listen for:

   - Network
   - Community engagement such as volunteer work
   - Mentors
   - Continuing education in business skills

3. **What are examples of potential market channels and regions?**

   Listen for:

   - Specific market channels (wholesale, retail, etc.)
   - Specific places or regions

4. **What are some strategies for getting into the markets identified above?**

   Listen for:

   - Specific marketing message about what makes their farm and product unique
   - Understanding of specifically who their customers are—moms, chefs, retailers, etc.

Part 2: Market Analysis / Marketing Plan

5. **How will you research and define each region, and how will you think about prioritizing which market channel(s) to pursue?**

   Listen for:

   - Ability to identify questions that need more research, such as learning prevailing prices
   - Ideas about how to get those questions answered
   - Ability to identify what they need to research before they can prioritize:
     - How hard or easy is it to get into a particular farmers' market?
     - How many restaurants buy at that farmers' market?
     - Is the farmers' market on the way to or from any other sale?
     - What other CSAs are in a particular community?
     - What do they charge?
     - What do they typically sell?
     - What else do they offer (farm tours, dinners, etc.)?
     - How much product will be needed to supply a particular account?
   - Are there key dates or seasonal considerations for a particular market or product?

6. **How will you match your strengths and weaknesses, and your production capacities and limitations, to the potential marketing plan you are starting to develop?**

   Listen for:

   - Sales skills/challenges
   - Visual presentation skills/challenges
   - Capacity to provide a promised quantity/quality on a promised date
   - Contingency plans—how will you manage the relationship if you cannot make a promised sale?

7. **What other concrete actions can you take to further develop your marketing plans?**

   Listen for:

   - Sample price sheets to support cash flow revenue projections
   - Develop different scenarios for price and product mix

Part 3: Time Management

8. **What are some of the goals of a time management system?**

Listen for:

- Be able to schedule the appropriate tasks and hours so that things get done in the right sequence and on time
- Avoid crisis management and surprises
- Avoid pulling all-nighters and driving while exhausted
- Use my time and my staff's time efficiently
- Don't drive other people crazy with bad scheduling decisions
- Values! If you value health then there has to be time for sleep and exercise
- Values! If you want to have great customer service you can't be late and sleepy when you deliver

9. **What are some time management tools and techniques?**

Listen for:

- What works? A big twelve-month, eraser-board calendar on the wall.
- Project management software
- Probably not setting a bunch of alarms on your smart phone

10. **What do you need to do to build time management into your plan?**

Listen for:

- A time needs and availability analysis for the first two years of operations
- Check that all of your assumptions match the cash flow worksheet and the farm/handling/marketing plans

Part 4: Farm/Crop/Harvest and Post-harvest Handling Plan

11. **What are you going to go back and change in your farm plan, and what information in your farm plan are you going to bring into other parts of your business plan?**

Listen for:

- Address food safety
- Budget time
- Match when I need to buy things with when I need money
- Match when I have product to harvest with labor availability and marketing supplies availability and marketing plan
- Match when I expect to have product ready to when I show income in my cash flow budget

Part 5: Ongoing Management

12. **Ask the students when they think they will begin to address the following infrastructure development needs:**

a. Ongoing budgeting and cash flow management procedures

Listen for: By end of first year

b. Set up accounting system and develop daily/weekly/monthly bookkeeping procedures

Listen for: By end of first year

c. Find a CPA, decide on entity type, plan for income taxes and future credit needs

Listen for: Before starting and annually thereafter

d. Ongoing review and update of marketing plan

Listen for: Annual review

e. Budget for necessary technology and training

Listen for: Annual review

f. Budget for long term infrastructure needs

Listen for: Annual review

g. Plan for retirement

Listen for: As soon as possible but within five years

Lecture 2: Building Community with Social Media & On Farm Events

A. Social Media

Social media is interactive media that allows people to connect with each other as much as with you

1. Web 1.0 and Web 2.0
   a) Social media corresponds to what some people call "Web 2.0"
   b) Web 1.0 refers to websites that do not have many interactive features. They are like a high tech ad in the old fashioned Yellow Pages—customers can come and get information, but they cannot interact with you or with others.
   c) Web 2.0 is the social web, characterized by sites such as Facebook where many people can talk to each other
2. Easy social media tools for farms
   a) Most CSA customers expect to find their farm or farmer on Facebook
      i. If you value your private friendships on Facebook set up a Facebook page for your farm so you don't have to become Facebook friends with all of your customers
   b) If you are already writing a letter to go in your CSA box consider posting it on a blog site such as Wordpress or Blogger
      i. Allows you to link to other websites and blogs so your customers can see the other farms you work with or the sorts of things you like to read, or learn about some of the political issues you are interested in
      ii. Allows your customers to comment on your letter and to discuss your letter with each other
      iii. Allows you to moderate comments if they are offensive or inappropriate. But remember: you must be responsive; if you shut down reasonable questions or criticism you may do yourself as much harm as good.
   c) If you would rather shoot a quick video than write a letter you are in good company. Video is becoming the most prevalent way to communicate on the web.
      i. Post videos of daily farm scenes on YouTube
      ii. Link to the videos on your website or Facebook page
      iii. Post pictures on Instagram or Tumblr
   d) Twitter, Tumblr, Instagram: Think of them as a way to broadcast your headlines and bring people to your website, Facebook page or blog
      i. If you don't have followers no one sees you. It takes a fairly significant upfront investment to get followers.
      ii. The best way to get followers is to find some accounts for people like you and follow all the people who are following those accounts
      iii. When people follow you, be sure to follow back—but check first to make sure they are not a porn site or something else that would be highly offensive to you or your customer
      iv. Don't stand in the middle of the room talking to yourself! Engage with other people.
      v. When you see something you like, comment
      vi. Respond to questions and articles others post
      vii. Participate in moderated discussions such as AgChat and FoodChat

viii. People use the # or hashtag symbol to categorize conversations. Type the word "farm" into the search function and see what you get back. Then try it with #farm. Try it with "water" and then with #water. Try again with #agwater. Now you can follow some of the people using those hashtags and follow the people following them. Use the hashtag yourself to join the conversation.

3. What social media does well
   a) Social media allows you to connect directly with customers
   b) Social media allows your customers to connect with each other
   c) For farmers who sell through wholesale or to restaurants or caterers this is an opportunity that would not otherwise exist
   d) CSA farmers and farmers' market farmers are already connecting directly with their customers, but social media allows them to extend the connection past the letter in the box or the brief interaction at the farmers' market
   e) It creates transparency—but that cuts both ways:
      i. Nice when your customers sing your praises on your Facebook page
      ii. Not as much fun if they start affirming each other's complaints there
      iii. You can control what you allow to stay on your Facebook page or in the comments section of your blog—but if people notice you pulling down any negative comments they will probably trust you less than if you address the comments directly
   f) To use social media effectively you need to make a real investment of time. If you set up a Facebook page or a Twitter account and do not spend several hours each week you can create the impression of being un-responsive and end up with less customer connection than you had before.
4. What it does not do well
   a) Social media is a strategy, it is not in and of itself a plan
   b) Unless social media is used as a part of an overall marketing strategy it will not in and of itself bring in new customers or open the door to whole new markets
   c) Save you time

B. Bar Codes and Web Sites

1. Mobile technology already allows consumers to use their smart phones to scan QR codes at the grocery store and get information about the product they are thinking about buying
   a) Dole banana has a web site that allows you to enter the barcode number from your banana and go to videos about the specific banana cooperative where that banana came from
2. The Produce Traceability Initiative and other efforts from the produce industry are driving brokers to require barcodes at the case level; soon the requirement will be at the item level. The price of barcode systems will come down, but it will still be time-consuming to implement.
   a) If you have to implement a bar-code system to stay in wholesale markets you may be able to offset some of the cost by increasing the value of your product. How?
      i. By already having a loyal following of customers who will ask for you by name
      ii. By already having content on your website that shoppers can connect to with their smartphones

C. On-Farm Events

1. Why consider holding on-farm events?
   a) Connection: Your customers pay more for "food with a face." Your face. They want to know more about their food, and that means that at some point many of them will want to visit the farm. At the very least they want to think they are invited to visit the farm, since transparency is likely one of the things they are looking for when they choose your products over others.
   b) Profit? Some on-farm events make money, but many do not. Often it takes several years for an on-farm event to become profitable.
   c) Marketing: Even if the event itself loses money, it may create value by increasing your customer base and increasing your customer loyalty. An occasional farmers' market shopper may become a CSA member. A CSA member may bring a friend who becomes a regular farmers' market shopper.
2. Why not?
   a) Liability: Someone could get hurt. Health inspectors and other public officials may come for a visit. Are all of your buildings up to code? Are all of your employees in standard housing and earning minimum wage?
   b) Opportunity cost: It will take a lot of hours. What else could you be doing?
   c) Actual cost: You will have to put out a lot of extra money for advertising, porta-potties, entertainment and food preparation. You may or may not cover those costs with admissions, or extra on-farm sales.

D. Best Practices for On-Farm Events

1. Budget: Even though you may plan to lose money, you can still limit the amount of money you lose by developing a careful budget and sticking to it
2. Plan: People go over budget because they forget to put everything they need into their budget. Think through the whole event carefully, imagining every detail and accounting for every expense in your budget.
   a) Plan early and think about alternative dates. If your event is on a weekend that is popular for weddings you may be competing for rental tables. Could you get a better deal if you moved your event to another weekend? Ask your vendors as you plan your event.
3. Insure: Consider the following questions to help prepare for an event
   a) What if it rains? What if there is a fire on your road? What are the exact terms under which you can cancel on your equipment rental? Plan for these contingencies.
   b) Have you complied with all of the local ordinances about events? Are you prepared for the county health inspector to show up? Do you need a liquor license? Understand what you must know regarding these issues.
   c) What if someone gets hurt on your farm? Talk to your insurance agent about a special "event rider" and your general liability policy.
   d) Do you have people helping on the day of the event who are trained in first aid?
   e) Have you identified particular hazards on your farm (barbed-wire fences, old machines with sharp edges, animals that don't like children, climbable trees, poisonous snakes and spiders)? Take precautionary measures to remove the danger or caution people.
   f) Do you have a plan for what to do if a child is lost?
   g) What is the absolute worst thing you can imagine happening? Could you live with yourself if it happened? What do you need to do to ensure it doesn't happen?

4. Evaluate
   a) Did you make a profit? See Unit 6.3, Basics of Bookkeeping and Farm Taxes. You can set the event up as a special "job" or "class" in QuickBooks and run detailed reports showing how you did relative to your budget.
   b) If you did not make a profit, was the event still worth it for its market-building or community relations value?
   c) How can you measure marketing value? Here are some ways to know.
      i. Your e-mail list grows
      ii. You signed up new customers
      iii. Your farm was mentioned or highlighted on the radio or in the newspaper
   d) How can you measure the value of the event to the community?
      i. Do your neighbors love you more? Or less?
      ii. Did you hire anyone from the community?
      iii. Did you involve community groups and allow them to give information or take a portion of net proceeds in exchange for helping out?
      iv. Did you create a traffic jam?
      v. Did anyone call the cops? Were there any sirens?

Appendix 1: Sample Business Plan

PART 1: BUSINESS VISION, GOAL, PRELIMINARY RESOURCE AND MARKET ANALYSIS

A. Business Vision:

To produce high quality organic products in an environment conducive to my own health, as well as the health of the environment, others who work or play on the farm, and those who consume farm products.

B. Business Goal:

Within 7 years, to net an average of $50,000/year from a total of 1,470 hours in the field, 490 hours marketing, 245 hours spent in research and education, and 245 hours spent administering the business, leaving three weeks for vacation and illness. This schedule is comparable to other successful small business owners, and assumes 49 50-hour work weeks per year.

C. Resources:

1. Skills and Experience:
   a. *Worked in produce purchasing*
   b. *Degree in soil science*
   c. *Equipment/labor utilization process (learned during internship)*
   d. *Field work and classes in bio-controls*
2. Personal Reputation:
   a. *Local recognition*
   b. *Good relationship with local market and local restaurants*
   c. *Used to be on the board of local organization(s)*
   d. *Invited to talk to kids at local school*
3. Circle of Advisors:
   To Do ASAP: Draw up a short list of advisors, have them over for dinner, show them first draft of the business plan, and ask them to be advisors. (Also, get a gift for each.)

D. Potential Market(s):

1. Channels: Examples
   a. Farmers' Markets
   b. Community Supported Agriculture
   c. Direct to restaurants
   d. Specialty caterers – weddings, flowers, special jams for wedding favors
   e. Value-added (e.g., personal label jams, edible flower bouquets, and winter "gift gourds")
2. Regions: Examples
   a. Santa Cruz
   b. Half Moon Bay
   c. Monterey Peninsula
   d. San Francisco

E. Constraints:

1. Capital
2. Time (and distance)
3. Competition from other small farms

4. Downward pressure on all agricultural producers
5. Matching height of production to market demand

F. Strategies for Meeting Goals:

1. Market Analysis/ Marketing Plan: Summarizing the strategic value/key components of Market Analysis and a Marketing Plan
   a. Develop marketing plans by channel and region and implement strategically over time. Motto: "Find a market niche and diversify."
   b. Pursue highest dollar value per effort opportunities first—this means considering where the highest price can be charged (and/or most product sold) and where it is most costly to do business, and weighing the costs and benefits of pursuing new opportunities
   c. Evaluate skills and focus on offering products and services in a way that will maximize revenue in the short run and build the business and secure revenues in the long run
   d. Establish strategic pricing strategies to maximize short- and long-term revenues, smooth cash flow, and create long-term relationships
   e. Establish a "feedback loop" to evaluate how goods and services are received (solicit comments on quality and diversity and service)
   f. Never stop evaluating and adapting
2. Time Management: Summarizing the strategic value/key components of a Time Management Plan
   a. Establish time management / project management procedures to –
      i. Ensure professional and timely delivery of goods and services to clients
      ii. Maximize opportunities to build on good relationships with clients
      iii. Minimize errors and misunderstandings with employees and clients
      iv. Reduce the stress of a hectic work schedule
3. Financial Management: Summarizing the strategic value/key components of a Financial Management Plan (see more at Units 6.2 and 6.3)
   a. Establish budgeting, cash flow management, and bookkeeping procedures (and follow them!)
   b. Include short-term, mid-term, and long-term needs in marketing plan, and budget for necessary technology and training
   c. Update business plan, budgets, and cash flow projections often
4. Farm/Crop Plan:
   a. Serves the marketing plan
   b. Follows the financial plan

PART 2: MARKET ANALYSIS/MARKETING PLAN: SAMPLE

A. Research and define each channel and region and rank according to priority. (Assign task and set due date for completion.)

** Note: "Future potential" means "Will this help me grow my business in the future?" The best example of this would be going to a farmers' market for a year in order to develop a client base to start a CSA in the future.*

CHANNEL	**EASE OF MARKETING** HARD =1 EASY = 10	**AVAILABLE $$$** LITTLE =1 LOTS = 10	**COST OF DOING BUSINESS** EXPENSIVE =1 CHEAP = 10	***FUTURE POTENTIAL** NONE =1 LOTS = 10	**SCORE**	**RANK BY HIGHEST SCORE**
Farmers' Markets						
CSA						
Restaurants						
Specialty caterers – weddings						
Value-added						

REGION	**EASE OF MARKETING** HARD =1 EASY = 10	**AVAILABLE $$$** LITTLE =1 LOTS = 10	**COST OF DOING BUSINESS** EXPENSIVE =1 CHEAP = 10	***FUTURE POTENTIAL** NONE =1 LOTS = 10	**SCORE**	**RANK BY HIGHEST SCORE**
Santa Cruz						
Half Moon Bay						
Monterey Peninsula						
San Francisco						

B. Analyze skill set, products, resources, constraints, and goals; match to each market channel/region. (Do this with advisors, assign task and set due date.)

SKILL	MARKETING ADVANTAGE	MARKETING DISADVANTAGE
Perform well at Farmers' Markets	I sell well	But I have not been at that market long
	People see what they get	Prices are low, lots of competition
	Easy for me to go there	Never know what I am really going to sell

KEY: Establish a presence, get loyal customers, find out what they like

PRODUCT	MARKETING ADVANTAGE	MARKETING DISADVANTAGE
Flowers	Beautiful	Unnecessary
	Bring shoppers to my stand	Labor intensive

KEY: Get them to buy the food that goes with the flowers

RESOURCE	MARKETING ADVANTAGE	MARKETING DISADVANTAGE
Farm lease	I can afford	Long drive, hill, cannot have groups of visitors
	Nice barn	

KEY: Maintain relationship and keep an eye on alternatives

CONSTRAINT	MARKETING ADVANTAGE	MARKETING DISADVANTAGE
Lack of equipment	NONE	I spend too much time in the field and not enough time selling

KEY: Get financing and buy the equipment I need

C. Develop plan for market channels:

1. Develop a plan for the top two or three channels and regions. Tailor your message and offerings to that channel/region. (Assign task and set due date.)

EXAMPLE CHANNEL #1 IN REGION:

Farmers' Market in San Francisco

Example Message:

"Everything you need for the week is available right here at the farmers' market, and most of it at my booth. All week long you can remember this beautiful day, and the story I am going to tell you about how hot it was when we picked these melons, and how we went swimming in the creek after and that you got invited to come up and visit sometime."

Sample product mix:

1. Summer fruit (e.g.,melons, tomatoes)
2. Flowers
3. Hard Squash

EXAMPLE CHANNEL #2 IN REGION:

Message:

Product mix:

1.
2.
3.

2. Develop a plan for each channel and region specifying attainable market goals for the channel/region. (Assign task and set due date.)

   Call 5 people a week in each segment/region. Ask five good questions:

   a. Would you advise me to sell in this region or market?
   b. What do you think the critical elements for success will be?
   c. What do you think will sell best there?
   d. Do you have any specific advice for me about breaking into this region or market, or about marketing my particular crop mix?
   e. Who else should I talk to?

   Get leads and take notes. At end of month evaluate marketing plan and determine next steps.

CALL LIST WEEK OF ____/____/____ (DATE)

CHANNEL #1	CHANNEL #2	REGION #1	REGION #2
1.			
2.			
3.			
4.			
5.			

QUESTIONS:

- ____?
- ____?
- ____?
- Who else should I talk to?
- Besides word of mouth, what other avenues should I pursue in order to establish clients in this area?

3. Develop a plan for each channel and region detailing communication and product mix and pricing strategies (message, event participation, materials) tailored to that channel/region (after first date)

4. Develop a plan for each channel and region with a timeline by month and year for accomplishing marketing goals in the channel/region (after first date)

D. Pricing Strategies

1. Establish strategic pricing strategies to maximize short- and long-term revenues, smooth cash flow, and create good long-term relationships with clients
   a. Short term strategy – base price on competition
   b. Long term strategy – figure out what it costs you to grow and price accordingly
2. To do: Develop sample price sheets to support cash flow revenue projections. Develop different scenarios for price and product mix. (Set date.)

PART 3: TIME MANAGEMENT

A. Establish time management / project management procedures

1. Objectives of time management –
   · Ensure professional and timely delivery of services
   · Maximize opportunities to build on good relationship
   · Minimize errors and misunderstandings
   · Reduce the stress of a hectic work schedule
2. Time management tools and techniques: Need to consider options – software, phone apps, calendars (online, datebook, wall calendar), etc. Define what will work for you, the business?
3. To do –
   · A time needs and availability analysis for the first two years of operations. Make sure that all of your assumptions match the cash flow worksheet and the farm plan.
   · Discuss (options?) by____/____/____(date)
   · Begin (what?) by____/____/____(date)
4. Time management considerations –
   · 52 weeks x 50 hours a week equals 2,600 hours
   · 3 weeks of vacation and sick equals 150 hours
   · There are 2,450 work hours in the year
   · 1 day a week marketing equals 490 hours
   · 1/2 day a week administration equals 245 hours
   · 1/2 day a week research/education equals 245 hours
   · There are 1,470 farming hours left in a year
   · The workload in agriculture is not spread out evenly

PART 4: FARM/CROP PLAN

PART 5: FINANCIAL MANAGEMENT (see also Appendix 1, Sample Cash Flow Spreadsheet and Appendix 2, Cash Flow Spreadsheet Template in Unit 6.2, Dynamic Cash Flow Planning)

A. Financial management:

1. Define budgeting procedures. Discuss by ____/____/____(date)
2. Define cash flow management procedures. Discuss by____/____/____(date)
3. Define bookkeeping procedures. Discuss by ____/____/____ (date)
4. Complete cash flow budget by ____/____/____ (date)
5. Include the following –
   a. Marketing plan: short-term, mid-term, and long-term needs
   b. Budget for necessary technology and training
6. Update business plan, budgets, and cash flow projections often (target month)

Appendix 2: Business Plan Template

TABLE OF CONTENTS OF THE START–UP PHASE BUSINESS PLAN:

Part 1: Vision and Goals for the Business

Personal values and goals: Will be based on a self-evaluation and determination of personal values and goals, which is a separate exercise. Note: See DiGiacomo et al. 2014, Northeast Beginning Farm Project 2014, and Virginia Beginning Farmer and Rancher Coalition Program 2014 in Unit 6.0, Resources.

Business visions and goals: Separate and specific values and goals for the business

Resource Analysis

Skills

Personal reputation

Advisors

Time allocation

Constraints

Part 2: Market Analysis (What's out there? Where should I focus first? Do I see a niche?)

Region

Channel

Marketing Plan (How am I going to build my market(s) in my chosen region(s) and segment(s)?)

Establishing a Niche

Diversifying

Part 3: Time Management Plan

Strategies for tracking time and tasks

Analysis of available time/time flow budget

Part 4: Farming Plan

Serves the marketing plan

Is constrained by the financial plan

Part 5: Financial Analysis

Capital needs analysis

Start-up Cash Flow Analysis

Phase-one Cash Flow Analysis

Template begins on next page

PART 1: VISION, GOAL, PRELIMINARY ANALYSIS

A. Vision:

To produce __________________ in an environment that is_________________for the benefit of _____________

B. Goal:

Within____ years, to net an average of $___K/year from a total of ___hours in the field, ___hours marketing, ___hours spent in research and education, and ___hours spent administering the business, leaving _weeks for vacation and illness. This schedule is comparable to_____________________, and assumes ____________ workweeks per year.

C. Resources:

1. Skills and Experience:
   a.
   b.
   c.
2. Personal Reputation:
3. Circle of Advisors:
   a.
   b.
   c.

D. Potential Market:

1. Channel:
   a.
   b.
   c.
2. Regions:
   a.
   b.
   c.

E. Constraints:

1.
2.
3.
4.
5.

F. Strategies for Meeting Goals:

1. Market Analysis/Marketing Plan
   a. Summarize the strategic value/key components of Market Analysis and a Marketing Plan
2. Time Management Plan
   a. Summarize the strategic value/key components of a Time Management Plan
3. Financial Management Plan (including Cash Flow)
   a. Summarize the strategic value/key components of a Financial Management Plan
4. Farm/Crop Plan
   a. Summarize the strategic value/key components of Farm and Crop Plan based on known markets and constraints of Financial Management Plan.

PART 2: MARKET ANALYSIS/ MARKETING PLAN

A. Research and define each segment and region and rank according to priority. (Assign task and set due date.)

CHANNEL	**EASE OF MARKETING** HARD =1 EASY = 10	**AVAILABLE $$$** LITTLE =1 LOTS = 10	**COST OF DOING BUSINESS** EXPENSIVE =1 CHEAP = 10	***FUTURE POTENTIAL** NONE =1 LOTS = 10	**SCORE**	**RANK BY HIGHEST SCORE**

REGION	**EASE OF MARKETING** HARD =1 EASY = 10	**AVAILABLE $$$** LITTLE =1 LOTS = 10	**COST OF DOING BUSINESS** EXPENSIVE =1 CHEAP = 10	***FUTURE POTENTIAL** NONE =1 LOTS = 10	**SCORE**	**RANK BY HIGHEST SCORE**

B. Analyze skill set, products, resources, constraints and goals; match to market segment/region. (Do this with advisors, assign task, and set due date.)

SKILL	MARKETING ADVANTAGE	MARKETING DISADVANTAGE

KEY:

PRODUCT	MARKETING ADVANTAGE	MARKETING DISADVANTAGE

KEY:

RESOURCE	MARKETING ADVANTAGE	MARKETING DISADVANTAGE

KEY:

CONSTRAINT	MARKETING ADVANTAGE	MARKETING DISADVANTAGE

C. **Develop plan for market segments:**

1. Develop a plan for the top two or three channels and regions. Tailor message and offerings to that channel/region. (Assign task and set due date.)

CHANNEL #1 IN REGION:

Message:

Product mix:

1.
2.
3.

Farm Plan:

1.
2.
3.

CHANNEL #2 IN REGION:

Message:

Product mix:

1.
2.
3.

Farm Plan:

1.
2.
3.

2. Develop a plan for channel and region specifying attainable market goals for the channel/region. (Assign task and set due date.)

   Note: Call five people a week in each channel/region. Ask five good questions such as: Would you advise me to sell in this region or market? What do you think the critical elements for success will be? What do you think will sell best there?

   Do you have any specific advice for me about breaking into this region or market or about marketing my particular crop mix? Who else should I talk to? Get leads, take notes. At end of month evaluate marketing plan and determine next steps.

CALL LIST WEEK OF _____/_____/_____(DATE)

CHANNEL #1	CHANNEL #2	REGION #1	REGION #2
1.			
2.			
3.			
4.			
5.			

QUESTIONS:

· ____?

· ____?

· ____?

3 Develop a plan for each channel and region detailing communication and product mix and pricing strategies (message, event participation, materials) tailored to that channel/region.

4 Develop a plan for each channel and region with a timeline by month and year for accomplishing marketing goals in the channel/region.

D. Establish pricing strategies

1. Establish strategic pricing strategies to maximize short and long-term revenues, smooth cash flow and create a good long-term relationships with clients.
   a. Short-term strategy – base price on the prices set by your competition
   b. Long-term strategy – determine the actual costs of production and price accordingly
2. To do: Develop sample price sheets to support cash flow revenue projections. Develop different scenarios for price and product mix. (Set date for completion.)

PART 3: TIME MANAGEMENT

A. Establish time management / project management procedures

1. Objectives of time management –
   - Ensure professional and timely delivery of services
   - Maximize opportunities to build on good relationship
   - Minimize errors and misunderstandings
   - Reduce the stress of a hectic work schedule
2. Time management tools and techniques: Need to consider options: – software, phone apps, calendars (online, datebook, wall calendar), etc. Define what will work for you, the business?
3. To do –
   - A time needs and availability analysis for the first two years of operations. Make sure that all of your assumptions match the cash flow worksheet and the farm plan.
   - Discuss options by____________ (date)
   - Begin implementing time management plan by ______________(date)
4. Time management considerations –
   - 52 weeks x 50 hours a week equals 2,600 hours
   - 3 weeks of vacation and sick equals 150 hours
   - There are 2,450 work hours in the year
   - 1 day week marketing equals 490 hours
   - 1/2 day a week administration equals 245 hours.
   - 1/2 day a week research/education equals 245 hours
   - There are 1,470 farming hours left in a year
   - The workload in agriculture is not spread out evenly throughout the year

PART 4: FARM/CROP PLAN

PART 5: FINANCIAL MANAGEMENT (see also Appendix 1, Sample Cash Flow Spreadsheet and Appendix 2, Cash Flow Spreadsheet Template in Unit 6.2, Dynamic Cash Flow Planning)

1. Define budgeting procedures. Discuss by ____/____/____(date)
2. Define cash flow management procedures. Discuss by____/____/____(date)
3. Define bookkeeping procedures. Discuss by ____/____/____ (date)
4. Complete capital needs analysis by ____/____/____ (date). You may use Appendix 1, Sample Cash Flow Spreadsheet, in Unit 6.2, for a list of possible equipment needs. Refer to both the equipment list in the spreadsheet and your specific farm plan for equipment needs.
4. Complete cash flow budget by ____/____/____ (date)
5. Include the following:
   a. Marketing plan: short-term, mid-term, and long-term needs
   b. Budget for necessary technology and training
6. Update business plan, budgets, and cash flow projections often. (target month)

Appendix 3: Time Management Plan Worksheet

Please note: the **Time Management Plan worksheet** is an Excel file. You can access it online at: ***casfs.ucsc.edu/about/publications.*** Look for the *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors* link to find Unit 6.1 and the online appendix.

6.2

Dynamic Cash Flow Planning

Introduction: Dynamic Cash Flow Planning

UNIT OVERVIEW

Cash flow planning is a critical part of developing a sound and resilient farm plan. Setting up financial structures will minimize potential hazards down the road, and lead to a smooth running operation. Through a lecture and step-by-step exercise, this unit explores how to ensure you have the cash resources you need when you need them.

Note to instructor: This unit is designed to be presented using a projector to show the students the design and organization of the cash flow Excel spreadsheet line by line. One of the benefits of using the projector is you can show the formula cells and the input cells and change the input numbers to show how the formula cells carry the changes through the rest of the worksheet. These Excel files can be downloaded free from casfs.ucsc.edu/about/publications (go to the link for Teaching Direct Marketing and Small Farm Viability: Resources for Instructors). They also can be used as a template to develop individual cash flow projections for actual or hypothetical farming operations. Hard copy examples can be found in Appendix 1, Example of a Cash Flow Spreadsheet and Appendix 2, Cash Flow Spreadsheet Template (Excel files).

MODES OF INSTRUCTION

> LECTURE (1 LECTURE, 1 HOUR)

> STEP-BY-STEP EXERCISE (1 HOUR)

LEARNING OBJECTIVES

CONCEPTS

- Lenders look at income and expense in a very particular way. If a farmer wants to finance something like a tractor or a new barn, she or he will need to be able to show ability to make monthly or annual loan payments. Lenders will want to see financial projections that show income and expenses associated with producing agricultural products clearly separated from other sources and uses of cash such as outside savings or employment or owner living expenses.
- Loans for operating expenses are different than loans for long-term assets. Operating loans are expected to be paid back within twelve months and typically charge a higher interest rate; assets loans are typically for a period of years that correlates to the expected life of the asset and typically charge a lower interest rate.
- Most farms need to spend money on farm inputs such as seed and soil amendments some months before they have products available for sale. This requires farmers to estimate income, expense, cash and credit needs on a month-by-month basis so they can plan in advance to have cash or credit available when it is needed.

SKILLS

- Ability to understand the vocabulary of cash flow planning
- Ability to categorize different sources and uses of cash using the vocabulary of a banker
- Ability to visualize a month-by-month cash flow budget, and for advanced students the ability to create a month-by-month budget to identify credit needs

Lecture: Dynamic Cash Flow Planning—Planning For Your Cash Flow Needs

A. Talking to a Lender

1. A lender will use the terms presented in this unit. Be conversant with these terms when approaching any lending agency. If you bring in a cash flow projection that demonstrates you do not understand the difference between "operating expenses" and "loan payment," you are unlikely to get a loan.
2. A lender wants to see that income from operations will cover your basic living expenses and your monthly debt service. If you cannot demonstrate this, you will need to demonstrate how you will self-finance the operation (i.e., show that you have income from an outside job that you will contribute to the business).
3. An operating loan is typically paid back within twelve months and charges a higher interest rate. A typical farm operating loan covers cash shortages between planting and harvest.
4. An asset loan is typically paid back over a few years for equipment, or many years for land or buildings. The interest rate is lower because the lender takes a security interest in the property they are financing. This means they have a legal right to sell the secured property if you are unable to pay the amount due. (If they sell it for more than you owe you will receive the difference back.)

B. Introduction to the Small Farm Cash Flow Spreadsheets (Appendices 1 and 2)

Instructor's Note: Share the Cash Flow Spreadsheet with the class for the rest of the lecture. This can be done as a handout from Appendix 1, or through projecting the Excel spreadsheet version. Note that this exercise assumes a sole proprietorship or a partnership. Some of the terms would be different for a corporation. Business entities and other bookkeeping conventions are covered in Unit 6.3, Basics of Bookkeeping and Farm Taxes.

1. The cash flow spreadsheet allows you to enter your beginning cash investment and your assumptions about monthly inflows and outflows of cash
2. The spreadsheet automatically calculates the summarized activity every month, and you can see, based on the negative or positive balance projected for your checking account at the end of the month, if you need to change your assumptions
3. Entries are made in the yellow cells (they may look tan on a PC)

   The green and blue cells have imbedded formulas

   The white cells identify what information goes in the row or the column

   Column C is for January. There is a column for each month of the year.

C. Components of Small Farm Cash Flow Spreadsheet (see Appendix 1)

1. **Part I Savings**—Savings is included to encourage good saving habits
2. **Part II Business Checking**—All business transactions should go through the business checking account
   a) In this example the beginning balance in the checking account is zero and $10,000 is transferred in from the savings account. (See "Business Checking"/ "Contribution to (From) Savings"/ Jan.)
   b) The section under the Business Checking account ("Ending Balance") summarizes the cash flow activity of each month. IMPORTANT: You will not enter any figures here. All of the cells in this section contain formulas that automatically calculate totals from the figures entered in the worksheet sections described in detail below.

c) Actual hard currency cash income should be deposited along with checks and credit card receipts in the business checking account. Petty cash (cash you keep on hand) should not be substantial enough to change basic cash flow planning. Accounting for petty cash is discussed in Unit 6.3.

d) **Operating Income.** All income generated from the sale of items grown or produced on farm.

e) **Operating Expenditures.** All of the direct expenses associated with growing or raising farm products for sale.

f) **Net Cash Flow from Operations.** This is the critical line. Can you get to a positive cash flow from operations? Or, do you have to borrow to fund operations as well as capital acquisitions?

3. **Part III. Non Operational Sources of Cash (Borrowing).** If you are negative after operations, you will need to borrow or fund your business from personal monies. Allowing your checking account to run negative is not an option. Note: In any month when you see an automatic calculation of a negative amount in your checking account, you need to manually put in the amount of cash you need to borrow to keep your checking account balance above zero.

   Note to Instructor: This is a good thing to demonstrate in class: remove the amount borrowed and show how the predicted bank balances go negative, then re-enter an amount needed to borrow sufficient to keep the balance in the bank account positive with a bit of a cushion.

4. **Part IV. Non Operational Uses of Cash**

a) **Draws**. Money the owners take out of the business. Note that the owner of a sole proprietorship or a partnership is not paid a salary. The owner pays income taxes based on the total profit or loss of the business regardless of whether the owner takes cash out of the business or leaves the cash in the business. It is important to understand for tax planning purposes that the owner cannot predict the taxes they will owe based on how much cash they took out of the business; instead, they have to look at the profit or loss of the business. Remember, this cash flow projection is for a specific business enterprise—your farm. Your personal budgeting needs to be done separately in order to determine how much cash you need to take out of the business. If you do not have another source of income, and you are going to use this spreadsheet to support a loan application, be sure to show adequate draws because a lender will insist on verifying that you have enough money to live on as well as enough money to pay your loan.

b) **Asset Purchases.** Assets are things that will benefit the farm for more than one year. They are shown separately from operating expenses. Operating expenses are things like seeds, which are used in a year. Long-term assets are things like tractors and barns, which should be around for many years. Be careful not to skew your cash flow from operations by putting equipment purchases in with operating expenses.

c) **Contribution to Savings is just money moving from the checking account to the savings account.** The only effect it has is on the available cash in your business checking account. In this example sometimes the farmer borrows money and puts money in savings. This might be a good idea if the farmer is participating in a matched savings program, or just to develop the discipline of always having some savings.

d) **Loan Payments.** This is also in a category by itself, since it is neither operational nor capital. You will need to make payments on your debts according to the terms of the loan (e.g., an equipment loan may require monthly payments, whereas your family may let you pay nothing for the first six months, and then make monthly payments thereafter). Paying debt is critical so that you do not damage your credit. Enter the amount of debt you need to pay each month according to the terms of the loan. Again, be careful not to skew cash flow from operations by putting debt service in with operating expenses.

Instructor's Note: This is a good place to show students how the spreadsheet changes automatically when they change the amounts entered. Delete one of the loan payment amounts and ask students how much they think they can afford to pay back in that month. Enter that amount, then look to see if the predicted ending balance in the bank account is sufficient to cover predicted expenses plus a cushion for errors and unpredicted expenses.

5. **Part V. Operating Income.** This section is to show the detail of sources of income. Enter each major market or each major crop on a row and put your monthly sales projections in each column. You can use a separate worksheet to do detailed calculations based on crop mix, price, and volume to support your entries in this section.
6. **Part VI. Operating Expenditures.** This section is to show the details of your production costs. Enter all expenses associated with crop or livestock production here. Your overall farm plan should provide information to help you determine when your expenses will fall/decline. Shop around and make sure you are using good pricing assumptions.
7. **Part VII. Equipment and Other Long Term Assets.** This section is to show the detail of your equipment needs. Your farm plan should provide information to help you determine when your expenses will fall. Shop around and make sure you are using good pricing assumptions. Use a new row for each piece of equipment, and enter the expected purchase price in the column corresponding to the month you expect to purchase the equipment.

D. Assessing Economic Viability: Can This Farm Succeed?

1. The farm must show positive cash flow from operations, sufficient to cover draws and debt service, in order to be financially viable
2. If you must use outside earnings or credit to fund annual operations, your farm does not have even minimal viability
3. If you have outside earnings to fund personal living expenses and debt service for the farm, you may have a viable plan if you only break even on operations, especially if your main goal is to build equity in land and assets
4. If you need credit but you cannot obtain it, you do not have a viable farm plan

Step-by-Step Exercise: Entering Your Financial Information into the Small Farm Cash Flow Spreadsheet Template

for students

Instructor's Note: This step-by-step exercise should be used with **Appendix 2: Cash Flow Spreadsheet Template**, in developing a cash flow projection and assessing the economic viability of an actual or hypothetical farming operation. Walk through the items below—showing students what it looks like in the actual spreadsheet. You can use a student's financial plan, or have the class create a hypothetical plan, to create numbers to put in the spreadsheet.

Appendices 1 and 2 are Excel files that can be downloaded from casfs.ucsc.edu/about/publications. Go to the link for *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors*. They also can be used as a template to develop individual cash flow projections for actual or hypothetical farming operations. Hard copy examples can be found in **Appendix 1, Sample Cash Flow Spreadsheet** and **Appendix 2, Cash Flow Template** (Excel files).

See Glossary on page 278 for definition of terms used below.

DIRECTIONS:

1. Only make entries in yellow cells.
2. **Do not make any entries in the green or blue cells.** The green cells have imbedded formulas. Show an example in the formula bar.
3. White cells identify what information is in the row or the column.
4. There is a column for each month of the year. For example, show Column C is for January.

   Instructor's note: Data for the following items can be drawn from a student's plan, or have the class offer a hypothetical plan.

5. Initial Investment
   - Start with an entry in cell C4 to show how much cash you have saved up to start the business
6. Start Up Loans, Equipment Loans
   - Make entries in C19 and 20 if you expect to receive loans to start your business. Identify the loans in cells B19 and B20. Enter the money you plan to take out of the business in C24 and 25. Identify loan payments in cells B30 and B31. Enter your loan payments in C29 and 30—you usually will not have a loan payment due your first month of operations.
7. Operating Income
   - Identify major sources of income (such as markets or crops) at B34–B37 (rename these markets or other sources as appropriate). Cells C34–C37 are for your projected income from your first month of operations for each market or crop. These cells should be empty because you won't have any income until you have something to sell.
8. Operating Expense
   - Detail your operating expenses in cells B41–B71. Cells C41–C71 are for your projected operating expenses for your first month in business.
9. Equipment and Other Long-Term Asset Purchases
   - Identify the specific equipment you need to buy in cells B75–B160. Cells C75–C160 are for the equipment you plan to purchase in your first month in business.
10. Summary of Activity
    - When you have entered all of your information for January in rows 19 through 160, go back to the top of the worksheet to look at the summary for the month of January

11. Cash Flow from Operations (Sales less Expenses)
    - Row 12 shows negative cash from operations because you worked but had no sales
12. Non-Operational Sources of Cash (Borrowing)
    - Row 13 shows the cash infused into the business from borrowing
    - Row 14 shows the total cash you had available after operations and borrowing
    - Non-Operational Uses of Cash Row 15 shows the total of: cash taken out of the business by the owners, cash paid on debts owed, and cash paid for capital expenditures
13. Ending Balance
    - Row 16 shows your predicted ending cash balance in the bank-one of the purposes of the worksheet is to plan so this number will never go negative
14. Now you can continue entering information for each successive month. You can enter month by month (column by column) or category by category (row by row).
15. The most important part of the process is to return to the summary and study row 16—Ending Balance (of your checking account.). You cannot leave a negative balance in row 16.
16. Borrowing to cover a deficit—If you are confident of your operational income and expense numbers, and you are planning to borrow each month to fund a deficit, study row 20 and enter there the amount you need to borrow—month by month—to keep row 16 positive. Remember to schedule the REPAYMENT on row 30 in future months, as per the terms of the loan.
17. Changing assumptions about operating income and expense so that you will show positive cash flow: You should start with your best and most realistic estimates of operating income and expense based on your farming and marketing plan. You may need to change your farming and marketing plans based on your initial cash flow projections. If you do this, then you can change the amounts you enter on your cash flow projections. Be sure your numbers are as accurate as possible. Just changing the numbers so that you will come out positive defeats the whole purpose of business planning.
18. About draws (rows 24 and 25): You can show zero draws, or very small draws, to make your cash flow projections look better to you… but a lender will not believe that you can live on a hundred dollars a month. Be prepared to demonstrate to a lender that you have outside income (or the equivalent, something like free rent because you take care of your granddad) and that you are capable of covering your basic living expenses. You may need to show a lender a basic personal budget to convince them that you are being realistic.

Glossary

Capital Expenditures

Expenditures for long-term assets that will benefit the business over many years

Draws

Cash removed from the business for personal use including personal savings

Net Cash Flow From Operations

Operating Income less Operating Expenditures—demonstrates the profitability of the operation before considering debt service, equipment purchases or any personal financial needs of the owner.

Non-Operational Sources of Cash

Cash contributed to the business other than from sales of farm products. Cash contributed from personal savings, from borrowing, or from selling farm assets like equipment.

Non-Operational Uses of Cash

Draws, debt service, capital expenditures

Operating Income

Sales, the income associated with the regular business of the farm. Not income from unusual activities such as a one-time sale of an old piece of equipment.

Operating Expenditures

The direct expenses associated with growing crops for sale. They are period expenses, i.e. they are all used up when the crop is harvested —unlike the expenses of buying a piece of equipment that will last many years.

Appendix 1: Example of Cash Flow Spreadsheet

Note that you can access this Excel file online at **casfs.ucsc.edu/about/publications.** Go to the link for ***Teaching Direct Marketing & Small Farm Viability: Resources for Instructors.***

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
I. Personal Savings or Checking Account														
Opening Balance	10,000	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500		
Contribution (Draw)	(9,500)	100	100	100	100	100	100	100	100	100	100	100		
Ending Balance	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600		
II. Business Checking Account	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Year's Total**	
Beginning Cash in Ckg	**10,000**	1,147	650	445	533	706	881	604	217	553	644	617		
Operating Income	-	-	900	2,600	2,500	4,800	7,200	10,000	10,600	9,800	9,200	4,700	72,300	
Operating Expenditures	(7,597)	(2,397)	(3,005)	(3,367)	(3,727)	(5,025)	(3,877)	(5,287)	(4,164)	(3,109)	(2,627)	(2,269)	(46,450)	
Net Cash Flow From Operations	**(7,597)**	**(2,397)**	**(2,105)**	**(767)**	**(1,227)**	**(225)**	**3,323**	**4,713**	**6,436**	**6,691**	**6,573**	**2,431**	**25,850**	
Cash From Borrowing	40,000	3,500	3,500	4,500	3,500	2,500	-	-	-	-	-	-	57,500	
Subtotal - Cash Available	**42,404**	**2,250**	**2,045**	**4,178**	**2,806**	**2,981**	**4,204**	**5,317**	**6,653**	**7,244**	**7,217**	**3,048**		
Non-Operational Uses of Cash	(41,257)	(1,600)	(1,600)	(3,645)	(2,100)	(2,100)	(3,600)	(5,100)	(6,100)	(6,600)	(6,600)	(2,100)	(82,402)	
Ending balance	**1,147**	**650**	**445**	**533**	**706**	**881**	**604**	**217**	**553**	**644**	**617**	**948**		
III. Non-Operational Sources of Cash (Borrowing)														
Secured Loans (Mortgage or Equipment)	40,000												40,000	
Operating Loans (Personal or other)		3,500	3,500	4,500	3,500	2,500							17,500	
Subtotal	40,000	3,500	3,500	4,500	3,500	2,500	-	-	-	-	-	-	57,500	
IV. Non-Operational Uses of Cash														
Draw _ partner #1	1,000	1,000	1,000	1,500	1,500	1,500	1,500	1,500	1,000	1,000	1,000	1,000	14,500	
Draw - partner #2									500	500	500	500	2,000	
Total Draws	**1,000**	**1,000**	**1,000**	**1,500**	**1,500**	**1,500**	**1,500**	**1,500**	**1,500**	**1,500**	**1,500**	**1,500**	**16,500**	**16,500**
Asset Purchase	**40,257**	**-**	**-**	**1,545**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**41,802**	
Contribution to Savings		100	100	100	100	100	100	100	100	100	100	100	1,100	
Fixed Loan Payment		500	500	500	500	500	500	500	500	500	500	500	5,500	
Other Loan Payments							1,500	3,000	4,000	4,500	4,500		17,500	
Total Non-Operational Use of Cash	**41,257**	**1,600**	**1,600**	**3,645**	**2,100**	**2,100**	**3,600**	**5,100**	**6,100**	**6,600**	**6,600**	**2,100**	**82,402**	**82,402**
V. Operating Income														
Ukiah Farmer's Market			500	1,000	1,000	1,200	2,400	3,200	3,400	3,400	3,000	1,500	20,600	
Willits Farmer's Market			400	600	400	800	1,200	1,600	2,000	2,000	2,000	1,000	12,000	
Santa Rosa Farmer's Market				800	800	2,400	3,200	4,800	4,800	4,000	4,000	2,000	26,800	
Restaurant				200	300	400	400	400	400	400	200	200	2,900	
Subtotal	-	-	900	2,600	2,500	4,800	7,200	10,000	10,600	9,800	9,200	4,700	62,300	62,300
VI. Operating Expenditures														
Labor, on farm (1 person @$8/hr)	1,120	1,120	1,120	1,120	1,920	1,920	1,920	1,920	1,920	1,280	1,120	1,120	17,600	
Labor, at market (1 person @$10/hr)					600	600	600	600	600	600	600		4,200	
Payroll Tax & Ins (Estimated at 20%)	224	224	224	224	504	504	504	504	504	376	344	224	4,360	
Organic Certification	800												800	
Rent (3 acres @ $350 per acre)	88	88	88	88	88	88	88	88	88	88	88	88	1,056	
Utilities	85	85	85	85	85	85	85	85	85	85	85	85	1,020	
Gasoline/Diesel Fuels	140	140	200	250	250	200	200	225	225	200	140	140	2,310	
Banking/Accounting	150			100									250	
Office Expense	40	40	40	40	40	40	40	40	40	40	40	40	480	
Auto Maintenance/repairs	50			50		100		50	50		50		350	
Auto Insurance			188			188			187			187	750	
Liability Insurance			225			225			225			225	900	
Tractor Maintenance		200						200					400	
Soil Tests	350												350	
Seed	4,000							500					4,500	
Amendments														
Compost			400			400		400					1,200	
Manure			250			250		250					750	
Gypsum			85			85		85					255	
Kelp Meal				200									200	
Fish Meal				150									150	
Liquid Kelp	350												350	
Liquid Fish	200												200	
Biological Innoculants				100									100	
Veggie Mix Meal			100			100		100					300	
Farmers Market Fees				160	240	240	240	240	240	240	160	160	1,920	
Season Extension														
Row Cover				600									600	
Plastic Mulch		300											300	
Miscellaneous														
Plastic Shopping Bags		200		200			200			200			800	
Total Operating Expense	7,597	2,397	3,005	3,367	3,727	5,025	3,877	5,287	4,164	3,109	2,627	2,269	46,450	46,450

Appendix 2: Cash Flow Spreadsheet Template

This spreadsheet template is a companion document to the lecture on **Dynamic Cash Flow Planning** (see *Teaching Direct Marketing and Small Farm Viabililty: Resources for Instructors*, Unit 6.2, Lecture 1)

This spreadsheet allows you to enter your beginning cash investment and your assumptions about monthly inflows and outflows of cash, to determine what you ultimately need to make the business sustainable. The spreadsheet automatically calculates the summarized activity every month, and you can see, based on the negative or positive balance projected for your checking account at the end of the month, if you need to change your assumptions.

Why do a cash flow analysis?

1. It can be a primary decision making tool - to answer questions such as:
   a) Can I afford new equipment? Can I afford to expland?
   b) Is there any way to avoud being really short of cash at a certain time every year?
   c) Where and when am I profitable and how can I expand on that?
2. To show a lender your ability to re-pay a loan.

When to do cash flow analysis?

1. Before you start farming: Should you start farming? What will it take to start and get through the first year? You may have a different cash flow analysis for each of the farm locations under consideration.
2. Every year so that you can see how you are managing for profitability (and stress!)
3. Anytime you consider a change, such as expanding, contracting or re-mixing. Example include:
   a) Adding capacity with a new tractor or hired help
   b) Giving up a lease on marginal land
   c) Changing crop mix, timing
   d) Picking up a new lease

How to use this spreadsheet

1. Make entries in the yellow cells (they may look tan on a PC)
2. The green and blue cells have imbedded formulas
3. The white cells identify what information goes in the row or the column
4. Column C is for January. There is a column for each month of the year

Components of the spreadsheet

Part I. Savings
Part II. Business Checking
Part III. Non Operational Sources of Cash (Borrowing)
Part IV. Non Operational Uses of Cash
Part V. Operating Income
Part VI. Operating Expenditures
Part VII. Equipment and Other Long Term Assets

Appendix 2 (cont.): Cash Flow Spreadsheet

Note that you can access this Excel file online at **casfs.ucsc.edu/about/publications.** Go to the link for ***Teaching Direct Marketing & Small Farm Viability: Resources for Instructors.***

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
I. Personal Savings or Checking Account														
Opening Balance		-	-	-	-	-	-	-	-	-	-	-		
Contribution (Draw)		-	-	-	-	-	-	-	-	-	-	-		
Ending Balance	-	-	-	-	-	-	-	-	-	-	-	-		
II. Business Checking Account	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Year's Total**	
Beginning Cash in Ckg		-	-	-	-	-	-	-	-	-	-	-		
Operating Income	-	-	-	-	-	-	-	-	-	-	-	-	-	
Operating Expenditures	-	-	-	-	-	-	-	-	-	-	-	-	-	
Net Cash Flow From Operations	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cash From Borrowing	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal - Cash Available	-	-	-	-	-	-	-	-	-	-	-	-		
Non-Operational Uses of Cash	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ending balance	-	-	-	-	-	-	-	-	-	-	-	-		
III. Non-Operational Sources of Cash (Borrowing)														
Secured Loans (Mortgage or Equipment)													-	
Operating Loans (Personal or other)													-	
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	
IV. Non-Operational Uses of Cash														
Draw _ partner #1													-	
Draw - partner #2													-	
Total Draws	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	
Contribution to Savings													-	
Fixed Loan Payment													-	
Other Loan Payments													-	
Total Non-Operational Use of Cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V. Operating Income														
Ukiah Farmer's Market													-	
Willits Farmer's Market													-	
Santa Rosa Farmer's Market													-	
Restaurant													-	
Subtotal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VI. Operating Expenditures														
Labor, on farm (rate x hours)													-	
Labor, at market (rate x hours)													-	
Payroll Tax & Ins (Estimated at 20%)	-	-	-	-	-	-	-	-	-	-	-	-	-	
Organic Certification													-	
Rent													-	
Utilities													-	
Gasoline/Diesel Fuels													-	
Banking/Accounting													-	
Office Expense													-	
Auto Maintenance/repairs													-	
Auto Insurance													-	
Liability Insurance													-	
Tractor Maintenance													-	
Soil Tests													-	
Seed													-	
Amendments														
Compost													-	
Manure													-	
Gypsum													-	
Kelp Meal													-	
Fish Meal													-	
Liquid Kelp													-	
Liquid Fish													-	
Biological Innoculants													-	
Veggie Mix Meal													-	
Farmers Market Fees													-	
Season Extension														
Row Cover													-	
Plastic Mulch													-	
Miscellaneous														
Plastic Shopping Bags													-	
Total Operating Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-

6.3

Basics of Bookkeeping, Farm Taxes, and Special Tax Issues—Value Added and Perennials

Introduction: Basics of Bookkeeping, Farm Taxes & Special Tax Issues—Value Added & Perennials

UNIT OVERVIEW

Whether or not you decide to do your own bookkeeping and taxes, it's important to understand the concepts behind these critical tasks, the importance of accurate record keeping, and the need to be engaged in the finances of the business—even with support from a bookkeeper or accountant. This unit introduces the basics of bookkeeping, taxes, and the special tax issues involved in value-added products, perennial crops such as orchards, and farm improvements such as a new barn. It also looks at the decision making that goes into managing a farm's financial structures, e.g., whether to act as a sole proprietor or form a partnership or other business entity.

The first lecture addresses the vocabulary, definitions, and functions of bookkeeping and using a Chart of Accounts. In the second lecture, students are introduced to the various tax forms specific to farm operations, tax record-keeping methods, planning for tax profit or loss, and business entities such as partnerships and corporations. The instructor and students will read through a 1040 Form, Schedule F, Schedule C, and Form 4562 together to discuss issues such as self-employment taxes, allowable expenses, and categorizing assets and depreciation. Lecture 3 highlights some financial and business structures, and issues specific to producing value-added perennials, such as inventory tracking. Instructor's note: Plan whether to teach Lecture 3 depending on where you are and what sorts of farms your students will likely operate. Lecture 3 is only appropriate for farms likely to have permanent crops (trees or bushes that bear fruits or nuts) or farms that do value-added processing.

MODES OF INSTRUCTION

> LECTURES (3 LECTURES, 1 HOUR EACH)

LEARNING OBJECTIVES

LECTURE 1

CONCEPTS

- Understand that the basic vocabulary of a bookkeeping system starts with five types of accounts: Assets, Liabilities, Equity, Income, and Expense, and that all of the accounts together are listed on a "Chart of Accounts"
- Understand the definitions of Assets, Liabilities, Equity, Income, and Expense
- Understand that the basic functions of bookkeeping are to keep a complete, accurate, and timely accounting of all financial activity so that the farmer can make decisions, pay bills on time, and file income tax returns

SKILLS

- Ability to read and understand a Chart of Accounts for a farm business
- Ability to categorize different activities using the Chart of Accounts
- Ability to assess the importance of bookkeeping and ability to consider the relative costs and benefits from keeping the books themselves or hiring a bookkeeper

LECTURE 2

CONCEPTS

- Understand the basic requirements for filing a farm income tax return
- Understand that there is a difference between farm income and expense, and other income and deductions for the individual farmer

CONCEPTS (cont'd)

- Understand why simply minimizing taxes owed is not always in a farmer's best interests
- Understand why the most important documents to have to substantiate your income tax returns are often a diagram of your farm and a calendar recording your business activities
- Know that the most valuable resources to learn more about farm taxation are the IRS's Publication 225 and the website RuralTax.org

SKILLS

- Ability to identify a Schedule F and a Schedule C and the ability to relate the lines for income and expense on those two forms back to the concepts covered in the prior lecture on bookkeeping and the Chart of Accounts
- Ability to plan to incorporate income tax concepts into routine bookkeeping procedures
- Ability to assess the importance of income tax preparation and to consider the relative costs and benefits from learning to prepare your own tax returns or paying for professional assistance

LECTURE 3

CONCEPTS

- Understand when you have to get an accountant: When you buy a farm, when you plant permanent crops, when you undertake major new construction such as a remodel of a barn
- Understand that food manufacturing is a fundamentally different business than farming. Your farm may include both; your tax returns must appropriately reflect all of your business activities.
- Understand that planting permanent crops or self-constructing major assets requires very complex accounting

Lecture 1: Basics of Bookkeeping

Bookkeeping is an essential task—but it isn't for everyone. As a farmer you may choose to hire a bookkeeper, but you still need to understand the basic way a bookkeeping system operates so you can read and understand the reports your bookkeeper generates. You may choose to hire a bookkeeper directly, or to work with a Certified Public Accountant to set up a system for your farm and hire and train a bookkeeper. If you like working with numbers you may find that learning about bookkeeping is a valuable way to improve your ability to think analytically about farm finances.

Permanent crops such as orchard trees and fruit-bearing bushes, and animals such as dairy goats are subject to special accounting treatment and special tax treatment not covered in these materials. Additional information on those advanced farm accounting topics is available in the IRS Farmer's Tax Guide (Pub 225) and at ruraltax.org.

A. Chart of Accounts

A Chart of Accounts is a list of all the accounts in use by the business. It includes the name of the account, the account number for systems using numeric codes to identify accounts, and most importantly the type of each account. There are five possible types of accounts: Asset, Liability, Equity, Income, and Expense.

1. If you use QuickBooks or any other system, it is imperative you understand the differences amongst the major types of accounts. This means that you have to understand these five definitions:
   a) Assets stick around
   b) Expenses go away
      i. If you build a new fence, you expect it to stick around. It is an asset.
      ii. If a fence rail breaks and you replace it you are sort of back where you started, the broken rail and the old nails (not to mention your time) "went away."
      iii. The cost of the new board and the new nails (and labor, if you paid someone else to do the work) is an expense. You would not need to add a new account in either case because the new fence would be called "farm equipment" and fence repairs would be "property repairs and maintenance."
   b) Income is yours
   c) Liabilities belong to others
      i. If you get paid for selling product, or for renting your land to someone else, it is income. If you take out a home equity loan and deposit $10,000 cash into your business, it is a liability.
      ii. If you have a new loan, you would need to set up a new liability account, and you would specify whether it is a short-term loan (due in one year or less) or long term (due in more than a year)
   d) Equity is what's left over for you
      i. In QuickBooks there are default equity accounts called Beginning Balance Equity and Retained Earnings. Beginning Balance Equity automatically calculates the difference between beginning assets and liabilities. In a partnership you will want to set up each partner with an equity account. "Retained Earnings" is the QuickBooks default account for your annual profit or loss—note this is not the proper accounting term for annual profit or loss for a sole proprietorship or a partnership.
      ii. When you take regular living expenses out of the business checking account and put them in your personal checking account, you should record the transaction to an equity account called Draws. For a partnership, each partner should have a draw account.

The money you take out of the business is not necessarily your profit—it may be more than your profit (unsustainable) or less than your profit (because you are reinvesting part of your profit back into your business)

iii. If you want to track personal expenses through your business you can set up a few draw accounts, for example: Draws-health and medical, or Draws-mortgage payments

iv. You should try not to pay personal expenses from the business account. Your life will be much simpler if you keep your living expenses separate.

2. Unless you are incorporated and on your own payroll, your own labor is never recorded directly on your farm books
   a) You see it each month on a Profit and Loss statement as the difference between income and expense or "Net Income"
   b) You also see it on the first day of the new year when your income and expense accounts go back to zero and your equity account is bigger or smaller depending on if you had "Net Income" or a "Net Loss"
3. If you have years of net income and you leave most of that cash in the business, then you will see your equity in the business grow
   a) If you take the cash out of the business to pay yourself, then, even though you may have good income, your equity in the business will not grow. This might be ok if your personal equity in things like a house or a retirement account is growing.
   b) If your equity in your farm is going down every year then you are either losing money each year, or taking too much money out of the business, or both
4. Recommended structure for QuickBooks Chart of Accounts
   a) Do not use the QuickBooks default Chart of Accounts
   b) Do not use any sub accounts, other than as recommended below
   c) Use a tax return schedule F to give you an idea of what categories to use for farming expenses, and a Schedule C to give you an idea of what categories to use for general business expenses
   d) In general, you want to use the fewest number of accounts that will give you a meaningful and accurate picture
   e) Ask yourself:
      i. Did the IRS ask for this information (by putting a line for it on the Schedule C or Schedule F?)
      ii. Will I ever use this information to make a decision?

Instructor's Note: Use Handout "Chart of Account" for this exercise (see Appendix 1, Sample Structure for QuickBooks Chart of Accounts)

5. The Structure of the Chart of Accounts is:
   - Assets
   - Liabilities
   - Equity
   - Income
   - Production Expenses: Sub-accounts
   - Marketing Expenses: Sub-accounts
   - Administration Expenses: Sub-accounts
   - To Be Allocated: Sub-accounts—ONLY IF NEEDED

6. Set up your expense accounts under one of the three accounts; Production, Marketing, or Admin (and To Be Allocated if needed)
   a) This will allow you to look at these aspects of your operation separately. You may end up with three "supplies" accounts, but they will all represent fundamentally different kinds of supplies.
7. In addition to the Chart of Accounts, QuickBooks allows two additional markers: Jobs and Classes
   a) You can set up jobs and classes to keep track of other important aspects of your operation
      i. Possible jobs: Fields or plantings or individual animals or a flock of chickens
      ii. Possible classes: Crops, livestock enterprises, or value-added products.
      iii. You could make a certain field a job and bell peppers a class and get special reports on how well you utilized a certain field or how well your bell peppers did relative to other crops
      iv. You could make each new lamb a job and record essential information, and also make meat a class and then run special reports on the individual animals, and on the segment of your business overall
      v. Jobs or classes are also a good way to separate out on-farm events
         - You want to know how much the events cost you but you do not want to set up new accounts to track all the expenses because the reports will be hard to read and it will crowd out the essential information your accountant or banker wants to see
8. Use the chart of accounts to tell a simple story about the whole farm and to share with your accountant and banker.
9. Use jobs and classes to give yourself and your partners more nuanced information to make internal decisions.

B. Entering Activity

1. The best way to learn is just to get out your checkbook and credit card statement for January and enter everything that happened as best you understand it
   a) When you are done, go to reports and look at various reports and see if they make sense to you. You will learn which reports you like, and you may find mistakes you made if you find a report that is obviously wrong.
   b) Reports that you should look at every month are: The Profit and Loss and the Balance Sheet
   c) Once you have entered January and reviewed it, enter the next month; then keep going one month at a time until you are in the current month
   d) In addition to looking at reports each month, you should get in the habit of looking at the same reports at the end of every three-month period and thinking about how the year is progressing
   e) You can compare reports to the same quarter of the prior year and you can compare year-end reports from one year to the next
2. Bank and Credit Card Statements
   a) Each month you should reconcile your physical bank and credit card statements to your QuickBooks accounting
      i. This is the single most important thing you can do to ensure you have recorded everything correctly—at least in terms of dollars in and out if not in terms of putting everything in the exact right account

ii. There is a module in QuickBooks that is very easy to use, but you must follow these three rules:
    - If you do not balance, and QuickBooks offers to balance for you say, "no"! You need to find the mistake. QuickBooks is just offering to hide your mistake, which will make it that much harder to find and fix it later.
    - When you balance, print out the reconciliation statement and keep it with your bank statement. QuickBooks overwrites the prior statement every month, and of all the records you keep, proof that you balance your bank every month may be the most important.
    - Do it as soon as possible every single month. As much as possible, designate a regular time and place for a person to do this. Likely there is one person among the partnership who inclines more toward this task, but it is important that he or she write down or explain procedures to someone else. This has to be done before it feels overwhelming, and it can't not get done!

3. Billing
   a) When you make a sale on account, create an invoice using "Accounts Receivable"
   b) Then, when you make a deposit, use the "receive payments" function to match the amounts you received to the amounts you billed
   c) QuickBooks will maintain accounts for each of your customers and you will be able to print and view a variety of reports with information about your sales
4. Paying Bills
   a) You can enter all your bills in "Accounts Payable" and then pay them all through the "Accounts Payable" module
   b) This is the most accurate way to keep your books. It is helpful if you need to manage your cash flow very carefully and cannot afford to pay bills before they are due.
   c) QuickBooks will maintain detailed vendor reports showing all the bills you have entered and paid or not paid
      i. This can be very useful if you ever become confused about what you have and have not paid to a regular supplier
   d) Alternatively, you can bypass the "Accounts Payable" section and just use the "Write Checks" section to enter your bills as you pay them. This means your reports will not necessarily show amounts you owe but have not yet paid.
5. Payroll
   a) You can do payroll through QuickBooks or through a payroll service such as ADP or Paychex
      i. Although a payroll service may seem expensive, it is very time consuming to do your own payroll. Most people make a lot of mistakes at first, then spend even more time fixing mistakes, and often pay fines. So actually the professional services are not that expensive; using one can be a wise, cost-effective choice.

Lecture 2: Basics of Farm Taxes

Instructor's Note: Use current versions of these forms as handouts for this section. They are available from ***www.irs.gov/Forms-&-Pubs***

A. Overview of Federal Income Taxes

1. Filing responsibility
   a) Any self-employment gross income
   b) Any self-employment net income greater than $400 is subject to self-employment tax
   c) Any loss (will offset current taxable income and certain deductions can be carried forward to offset future income)
2. Other uses of the tax return
   a) Your tax return may show that you qualify for the earned income credit, a special payment (or a negative tax) intended to help low-income people get started in new jobs or businesses. The earned income credit may automatically pay taxes you owe, or it may even come to you in the form of a tax refund check even if you did not pay taxes.
   b) You will usually need to provide three years of tax returns when applying for a loan
   c) Copies of tax returns are needed for participation in various federal programs
   d) You may need to verify that you are current with tax filing and payment to participate in government programs such as student loans or crop insurance
   e) Preparing a tax return is a good way to take stock of your business at the end of the year
3. Decision scenarios
   a) There are many different options for recording certain kinds of income and expense. Some choices will increase your net profit and some will decrease it. When you have a choice to make—keeping in mind you may want to be able to apply for a loan—should you:
      i. Maximize profit?
      ii. Minimize profit?
      iii. Strike a middle course and try to have your taxable net be as close as possible to your actual cash net profit?
   b) There is no one correct answer to these questions: It depends on the individual's circumstances and goals. This is why the financial decision-making can never be fully outsourced to an accountant or taught as a strict set of rules. A business owner needs to be actively engaged in the financial health of the business no matter how much support they may hire from an expert. A good analogy would be that even though we may sometimes rely on the expert advice of a physician, we cannot outsource our fitness and diet goals.
4. Record requirements
   a) Calendar showing the business purpose of business use of a car or of meals and entertainment
   b) Map or diagram showing how the property is divided between business and personal use
   c) Bank Statements
   d) General Ledger: This is the record of all the transactions posted to all of the appropriate accounts—in QuickBooks it is called "Account Detail"
   e) Receipts—important, but note: They are not actually the most important documents
   f) Additional records if Hobby Loss rules may apply

i. Hobby loss rule says if you lose money for five years in a row, then, instead of the IRS assuming you intended to make money (but weren't very good at it), you have to be able to prove to the IRS that you intended to make money (but weren't very good at it). This additional proof you would need for the IRS includes things like a marketing plan, and continuing education—things that show you took your business seriously and made efforts to modify your operation to improve profitability. One way to show this would be to keep a copy of your annual business plan and update it each year to reflect what you learned in the prior year.

5. Entity selection: You should decide what sort of entity to form in consultation with a Certified Public Accountant because there are significant tax consequences to your decision. Below are definitions of the different types of entities you might consider (for more information on Entity selection, see Unit 9, Land Tenure Options).
   a) Sole proprietorship: Just an individual working at his or her own business
   b) Partnership: Two or more individuals working together at their own business
      i. The partnership files a tax return but does not pay taxes. Instead, the income and expenses on the partnership tax return "pass-through" the partnership to the partners, who report them on their individual tax returns. The partners will each individually file tax returns and pay taxes on the "pass-through" income, or deduct the "pass-through" farm loss against other earned income.
      ii. Partners are personally liable for the debts of the partnership. That means you can lose your house, and your spouse's wages can be garnished.
      iii. You do not have to do anything to become a partnership—anytime two people are in business together they are automatically a partnership for tax purposes
      iv. But you SHOULD have a written partnership agreement that spells out your mutual expectations about:
         - How much each contributes initially
         - How much each may take out of the business and under what circumstances
         - How to share profit and loss
         - When a partner can be required to contribute to the business
         - How to let a partner out of the business in the event of death, injury, or voluntary withdrawal
         - How a partner's spouse, children, and other heirs will be treated
   c) Corporation: A corporation gives you limited liability so that you will not lose your house or have your spouse's wages garnished to pay the debts of the farm
      i. Generally, a small farm will choose to be an "S Corporation," which operates much like a partnership for tax purposes in that the S corporation does not pay taxes; instead, the shareholder's share of income and expense passes through the corporation and is reported on the individual's individual return
      ii. All shareholders in an S Corporation are treated equally—they may not own equal shares, but they all have decision-making authority proportional to the shares they own
      iii. A C Corporation pays taxes and the owners of the corporation also pay taxes. This form of corporation is almost never appropriate for a small farm.
   d) A Limited Liability Company or LLC is another type of partnership that gives some of the liability protections of a corporation, but allows for some of the unequal distributions of decision-making power and profit sharing that do not work well in an S Corporation. An LLC is often a good way for parents to pass farms to children, since it allows the parents to retain all of the decision-making authority while starting to vest some ownership in the next generation.

   e) Non-profit Corporation. Educational farms are often operated by not-for-profit entities. Non-profit management and accounting is very complex, and is not covered in this course.

6. Read through the 1040 in class
   a) Federal Form 1040 – Page One
   b) Personal Information
   c) Filing Status
   d) Single, Married, MFS, Head of Household
   e) Dependents
   f) Wages
   g) Investment and Retirement Income
   h) Self-Employment
      i. Schedule C - OR
      ii. Schedule F for FARM/RANCH
      iii. Schedule E for income from partnerships and S corporations
   i) Subtract Special Adjustments
      i. Retirement, Health Insurance, etc.
      ii. Adjusted Gross Income
   j) Federal Form 1040 – Page Two
      i. Itemized Deductions (Schedule A)
      ii. OR Standard Deduction for Single, Married, or Head of Household
   k) Note there are different types of taxes:
      i. Income Tax
      ii. Self-Employment Tax (calculated on Schedule F or Schedule C)
      iii. Tax Credits (negative tax—note: There is a credit for on-farm fuel used)
      iv. The Earned Income Tax Credit (EITC) works best for Head of Household. The EITC goes up as income goes up, up to about $15,000:
      - then goes down as income goes up;
        - and is gone at around $30,000
      - So, sometimes more income will give you a bigger EITC
      - And sometimes less income will give you a bigger EITC
      - Only earned income counts

7. Read through Schedule F in class:
   a) Schedule F – Farm Income
   b) Sales of Products Purchased
   c) Sales of Products Raised
   d) Other Income
   e) Farm Expenses
   f) Cultivation
   g) Harvest

   Note that the Schedule F has not been updated in many years. It has categories for a conventional commodity farm. Just because the other expense categories are not pre-printed does not mean you cannot use them. Use the line for "Other" to list your other expenses. It is common to attach a separate page to continue a list of other expenses. You can get ideas about other expenses on the Schedule F by looking at the Schedule C.

8. Read through a Schedule C in class to identify the pre-printed expenses on the Schedule C that you would also expect to have on a farm
   a) Office expenses, e.g., telephone and postage
   b) Marketing expenses, e.g., meals and entertainment
   c) Vehicle Expense: There are two methods to choose from—"Actual" and "Mileage." Each one has its advantages and specific record-keeping forms and requirements. You cannot switch back and forth.
9. Depreciation is reported on Form 4562—this is relatively complex, and one of many reasons not to do your own taxes!
   a) Major Asset Categories
      i. Not depreciable: Land
      ii. 36 months: Software
      iii. 5 year: Computers
      iv. 7 year: Most other movable equipment, movable fixtures
      v. 10 year: Trees, vines, single purpose agricultural structures
      vi. 15 year: Land improvements
      vii. 27.5 year: Residential rental buildings
      viii. 39 year: All other buildings, including non-movable leasehold improvements
   b) Types of depreciation
      i. Straight line over category life
      ii. Modified Accelerated Cost Recovery System (MACRS) use tables by category life
      iii. Alternative Cost Recovery System (ACRS) use tables by category life—can be important for some farms; see section 11(c)
      iv. Section 179 "Bonus Depreciation" allows full deduction for equipment in year of purchase
10. Shared Use of Farm and Personal Assets
    a) Allocate based on appraisal
    b) Determine value of property
    c) Determine value of components: House, barn, road, septic, prime land, marginal land, permanent crops (trees, vines)
    d) Determine value of farm components and personal components, and the total percentage of each
    e) Use the percentage to allocate shared expenses such as mortgage interest, property taxes, and utilities

f) Allocation example:

Allocation Example

Per Appraisal page 1				Personal	Farm	
Purchase Price	300,000					
Value of House		155,000		155,000		
Value of Barn		20,000			20,000	
Value of Ag Well and Improvements		8,000			8,000	
Value of Apple Trees		7,000			7,000	
Value of Land		110,000				
		300,000	equals purchase price			
Breakdown of Land per below:						
Value of Prime Ag land	75,000				75,000	
Value of marginal farm land	21,000				21,000	
Value of Homesite	11,000			11,000		
Value of access and unfarmable	3,000		(2/25 = .08 = personal)	240	2,760	
	110,000	**agrees with above**		166,240	133,760	300,000
				55%	**45%**	
Allocation Data per appraisal page 3-4						
Total Acres	25					
Acres of prime farmland	15		Value per acre	5,000		
Acres of marginal farmland	7		Value per acre	3,000		
Acres of Homesite	2		Value per acre	5,500		
Acres of Access and unfarmable	1		Value per acre	3,000		

g) How to use allocation
   i. Farm assets (well, trees, etc.)
   ii. Allocation percentages for:
      - Mortgage interest
      - Property Taxes
   iii. Utilities, if no separate meter

h) What about an office in the home?
   i. Will require more detail on allocation sheet
   ii. Asset information for Tax Depreciation Schedule

Instructor's Note: Use the "Sample Chart of Accounts" as a handout for this section. This is located in Appendix 1 and is also found online at ***casfs.ucsc.edu/about/publications***; click on the ***Teaching Direct Marketing & Small Farm Viability: Resources for Instructors*** link

11. Maintain a list of assets owned by the farming operation.

    Why? Required for income taxes and county property taxes.

    a) Description
    b) Purchase date
    c) Purchase amount
    d) Depreciation taken to date (accumulated depreciation)
    e) Major repairs that extend the life of an asset are additions to the original asset (e.g., a rebuilt engine)

12. Other Farm Expenses
    a) Education related to your business—this is a necessary business expense!
        i. Magazines, newspapers, books
        ii. Classes, workshops, or conferences, including travel and lodging
        iii. Note: Does not include education that gets you into a whole new line of work
    b) Promotion, including on-farm events
        i. E.g., extra porta-potties, music, banners, etc.
    c) Business gifts
        i. Remember: You must be able to show the business relationship—but everyone eats and thus is a potential customer, so this should not be hard to do!
    d) Business Meals and Entertainment
        i. Subject to 50% limitation, includes entertainment in your home (e.g., a dinner party)
        ii. Document each event in your calendar, and include the business purpose of the relationship (who, what, why, when, and where)
    e) Meals and incidentals while away from tax home
        i. Allowed if for a period substantially longer than a regular workday (a period reasonably requiring an additional stop to eat and rest, i.e., a dinner break in addition to a normal breaks and lunch)
        ii. They are subject to the same 50% limitation for meals
        iii. When you travel to a distant farmers' market or to take a class, you may claim a "per diem" deduction for your meals instead of keeping receipts. Use the amounts in annual published tables www.gsa.gov/perdiem.
        iv. You usually get over $30 a day!

B. Special Tax Rules (see more at Lecture 3)

1. Uniform Capitalization Rules, IRS Code Section 263A or "UNICAP" applies to:
    a) Value-Added Products (e.g., wine, apple-sauce, almond butter, tinctures)
        i. There are special rules for value added activities such as making blueberry jam
    b) Self-Constructed Assets (Establishing Permanent Crops)
        i. There are special rules for perennials; crops with a pre-productive period in excess of one year such as blueberry bushes, grape vines, fruit or nut trees. These special rules are the subject of Lecture 3.

C. Conclusion

1. Find a Certified Public Accountant who specializes in farms. Beware of the special rules for self-constructed assets including permanent crops and value-added processing (see Lecture 3).
2. Teach yourself: IRS Publication 225 is updated each year and available on the IRS web site or you may order it for free from the IRS. The website RuralTax.org is run by the Land Grant Tax Education Foundation and also has excellent information including sample returns.
3. Hint: The best farmers do both

   Best resources for more information:

   - IRS Publication 225 The Farmer's Tax Guide
   - RuralTax.org

Lecture 3: Special Issues—Value Added & Perennials

> **Instructor's Note:** Plan to teach Lecture 3, or not, depending on where you are and what sorts of farms your students will likely operate. Lecture 3 is only appropriate for farms likely to have permanent crops (trees or bushes that bear fruits or nuts) or farms that do value-added processing.

A. Tax Definition of Farming Activity

1. Farming activity includes all activity necessary to bring agricultural products to the state in which they are generally marketed in your local area
   a) Tomatoes are generally marketed as harvested unprocessed tomatoes. In your local area heirloom tomatoes may usually be sold in cardboard boats. In that case for you the cardboard boats would be a normal farm marketing expense.
   b) BUT—Even if you normally cannot sell all of your tomatoes in an unprocessed form and have to make tomato sauce at peak season in order to avoid waste, there is generally a market for whole tomatoes, so when you start making tomato sauce, you have crossed the line between farming activities and manufacturing activities
2. If you visit a vineyard and winery, you may think of it as one business. If you saw their tax returns, though, you would see that they report the farming activity associated with growing the wine grapes as farming activity (generally reported on Schedule F) and the manufacturing and marketing activity associated with making and selling the wine as other non-farm activity (a Schedule C for an individual sole proprietor).
   a) The vineyard and the winery act as if there is a sale between them and the price of the grapes is the prevailing price for grapes of that quality in that region. Actual money may or may not be involved. The books of the vineyard show a sale and the books of the winery show a purchase. This allows the winery to include the value of the grapes in the calculation of the value of the wine inventory.
3. For tax purposes, this means the income from the grapes can be used to qualify the farmer for some of the special (beneficial) tax treatments available to farmers but the additional income associated with the wine cannot
4. Should you set up a separate business because you sometimes sell some tomato sauce at the farmer's market?
   a) There is a de minimus exception to the rule requiring you to calculate your self-manufactured inventory, for activities that make up only about 2% of your total activities
   b) If you start getting much above that, you need to start thinking about a plan for coming into compliance with the rules, since it will be much easier to develop a system while your business is small

B. Tax Requirements for Inventory and Grown or Constructed Assets

1. Capitalizing Manufacturing Costs to Inventory

   Remember, when you spend money it may be for an annual type expense or for an asset. Inventory is an asset, so there are special rules for how to value the asset based on what it cost you to create it.
   a) Manufacturing is adding value to raw materials and creating an inventory of goods available for sale

i. In a simple situation, you buy stuff and make it into other stuff and sell it. You report total sales as total income, you report all of your expenses as deductions, and you pay taxes on the difference.

ii. In a more realistic example, you buy stuff and make it into other stuff and then you sell some of it. What you would like to do is show total sales as total income, all your costs as deductions, and the difference as your taxable income or loss. The only problem that the IRS has with this is that you still own valuable inventory. You cannot deduct the costs associated with the inventory you still have.

You have to hold those costs as an inventory asset and then you can deduct them in the year when you sell the inventory. This is called the "matching principle" in accounting. It means you should always try to "match" income in the same year with the expenses that generated the income.

b) Example:

Back when you were in the tie-dyed T-shirt business, things were pretty simple. T-shirts cost a dollar each, and when you got back home early on New Year's Day you had 100 T- shirts left. You bought $100 worth of dye in the spring and about a quarter of it is left. Your year-end inventory is $125. You add up all of your expenses, subtract $125, and you have your manufacturing cost for the year.

Life got a bit more complicated when you bought the goats and started making eight different kinds of herbed cheeses with aging periods from a month to a year.

c) A simple inventory system will track the following:

i. Quantities manufactured, "Work in Process" or "WIP"

Be careful to track conversions and changes in units of measurement.

*For Example: 20 **gallons** of milk and 180 **pounds** of cheese.*

ii. Costs at each stage of the process

Each time you convert quantities, you apply costs.

For Example: You go from pounds of bulk cheese to ounces of packaged cheese and you apply the costs of labor and packaging. Packaged cheese costs more than bulk cheese.

iii. Quantities Available for Sale (and where they are if you sell on commission) and Quantities Sold

It would be great if "Inventory Available for Sale" less "Sales" equaled "Ending Inventory," but it won't because some will be given away and eaten and some will get spilled or spoiled or will evaporate. These amounts are calculated at each stage of inventory as "spillage" or "shrinkage" or "samples."

iv. Year-End Actual Inventory

The more product you have in inventory at the end of the year, the less you can deduct on your tax return.

If you subtract what you know you sold from what you know you made, and call that ending inventory, you will overstate ending inventory and not account for the **deductible** costs of inventory that was given away for promotional purposes, or that was lost to spillage or spoilage.

If you have a perishable product, you need to track inventory in batches rather than on a calendar year, so that you will know spoilage rates on each batch.

d) Example

Example: The Really Simple Goat Cheese Farm's Inventory Calculations:

1. 20 gallons of milk turns into 180 pounds of bulk cheese
2. The 20 gallons of milk cost $120 and the labor to turn it into bulk cheese was 10 hours at $10 an hour or $100
3. 180 lbs of bulk cheese is WIP, valued at $220, or $1.23 per lb.
4. Add herbs, $25 and four hours of labor, $40
5. WIP is now $285 or 1.59 per lb.
6. Packaging costs $300, plus labor of 20 hours = $500 total
7. Conversion from bulk pounds to packaged ounces is 16 ounces/lb LESS SPILLAGE. You package to 4-ounce containers and when you are done you have 684 of them. Your TRUE conversion rate includes spillage of approximately 5%. You need that number to manage production efficiency.
8. Inventory Available for Sale is now 684 four ounce packages at $285 + $500 = $785 total value. Each 4-ounce package cost you $785/684 or $1.15.
9. You give away 200 containers of cheese for promotional marketing efforts
10. You find a store, and take 100 containers there on commission
11. You sell 50 at the farmers' market
12. Calculated Inventory Available for Sale is now 684-350 or 334, still valued at $1.15 each
13. Actual Physical Count is 328. The store reports that they dropped 10, sold 50, and still have 40 available for sale.
14. Spoilage was 334-328+10=16
15. The value of your ending inventory is 328+40=368 x $1.15=$423
16. **Deductible costs are total costs $784 less ending inventory $423 = $361**
17. **Alternative calculation:** *(difference is rounding)*

Cost of product sold	100 + 50 + 50 = 200 sold × $1.15	= 230
Cost of promotional products	100 × $1.15	= 115
Cost of spoilage	16 × $1.15	= 18
Deductible Costs	**230 + 115 + 18**	**= 363**

e) Systems
   i. If you are going into a value-added business, you need to plan to scale up to a bar-code system as soon as possible. Not only will it make your accounting easier, most retailers will require you to have barcoded products.
   ii. The manual system described here is to help you understand the concepts. It is probably only appropriate to use in the experimental, start-up phase of your business; it will likely not serve you once your business is mature.
   iii. QuickBooks will work only if you understand these concepts and track quantities and conversions separately. You will likely need professional help to set up any inventory system, even a simple system using Excel and QuickBooks.

f) Exercise/Discussion
   i. What would a simple inventory calculation for blueberry jam business look like?
   ii. What are the inputs to jam? *Blueberries, jam jars, labels, sugar, pectin, lemon juice*
   iii. What are the phases of manufacturing? *Cooking, canning, labeling, packing*
   iv. What are the quantity conversions? *Pounds (or tons), gallons, pints, and half pints*
   v. How are the jars of jam packed? *E.g., cases of 12*
   vi. Do you keep inventory by case or by jar? *Both, i.e., 12 cases and 10 jars*
   vii. How do you track samples you use to promote sales? *Segregate cases designated as "Samples" as "Samples Inventory" and keep track separately from "Inventory Available for Sale"*

2. Self-Constructed Assets (including permanent crops)
   a) If you purchase a building, you record it on your books at the purchase price, and you take a depreciation deduction each year for a fraction of the purchase price
   b) If you buy an orchard, you do the same thing, allocating the purchase price between land and trees, and then taking a depreciation deduction each year for 10 (or 20) years for 1/10th (or 1/20th) of the value
   c) If you build a building or plant an orchard and you do your own bookkeeping, you probably would not make a special effort to separate the costs associated with the building materials and the labor from your other farming costs. At the end of the year your books probably would not show that you own a new building or a young orchard.
   d) For tax purposes, you always need to separate construction or permanent crop development costs from normal operating costs
      i. You need to report a new asset on your tax return, valued at the sum of the costs of all the labor and materials
      ii. You also need to allocate a percentage of your other operating costs (e.g., insurance and electricity) and overhead (e.g., rent, bookkeeping) to the self-constructed asset
      iii. Once the asset is "placed in service" you may deduct the costs of the building or orchard through a fractional depreciation deduction each year
      iv. Permanent crops are considered "placed in service" the first year you can sell the crop for $1 more than the cost of harvesting, as long as that is longer than the statutory pre-productive period determined by the IRS
   e) In the case of planting a permanent crop with a pre-productive period in excess of two years, there are special rules
      i. First, the IRS decides what constitutes a permanent crop with a pre-productive period in excess of two years
      ii. Second, the general rule is that you must capitalize all cultivation costs associated with the pre-productive crop from the time of planting until the time you get a harvestable crop (and for at least two years)

- iii. Third, almost everyone qualifies for the exception to this rule, which means you can deduct your expenses but you must know how to make a valid election on your tax return in order for the exception to apply
  - As long as you are not planting almonds or citrus, and you are eligible to be a cash basis taxpayer, you are eligible for the exemption
  - There is no exception for any amount of almonds or citrus
  - People who make too much money cannot take the election, but anyone making that much money already has a CPA; the cutoff is $25,000,000 (25 million!) of gross revenue
- iv. The election is made by doing two things:
  - Deduct the cultivation cost of your pre-productive crop on your tax return
  - Take special depreciation, under the Alternative Depreciation System (remember this from the prior unit on depreciation?) on any assets acquired for any business you own, during any year for which you want a valid election

3. To summarize:
   - a) You must capitalize (not deduct, but may depreciate) all costs associated with building a building or planting a permanent crop
   - b) If you plant almonds or citrus, you must also capitalize all of the pre-productive cultivation costs of the orchard or grove
   - c) If you plant other permanent crops, you need to take a special (reduced) depreciation rate on any assets purchased between the time you plant and the time you get a marketable crop (at least two years from planting)
   - d) Best resources for more information:
     - IRS Publication 225 The Farmer's Tax Guide
     - RuralTax.org

Exercise / Discussion: How does this apply to Bonnie and Clyde and JJ?

Listen for:

1. When they remodel the barn, they will need to capitalize those costs.
2. When they plant new blueberry bushes, they will need to capitalize the costs of the blueberry plants, and they will either need to capitalize the growing costs of the blueberry bushes for two years or elect alternative depreciation on any other assets they purchase during that two year period.
3. They must develop an inventory system for their jam business. They may not include the jam business in their farm income; instead they need to report farm income and jam income separately on their partnership tax return.

Appendix 1: Sample Structure for QuickBooks Chart of Accounts

Account Name	Account Type	Explanation
Main Farm Checking	BANK	NOT your personal checking account. Yes, you must have a separate business checking account
Petty Cash	BANK	This isn't really a bank account; it is a coffee can or an envelope. But treat it like a checking account for purposes of recording money spent and replenished. **Example #1:** Employee takes a $20 and returns $20 worth of receipts to the coffee can. You use the receipts to record $20 worth of expenses (gas, office supplies etc.) and cut yourself a check for "cash" for $20. Then the cash comes out of the farm checking account and goes into the coffee can. **Example #2:** You decide you need to increase petty cash from $100 to $200. Write a check for $100 payable to "Cash" and record it as a "transfer" in QuickBooks. You end up with $100 less in your checking account (correct) and $100 more in your coffee can (also correct). NOTE: If the employee spends their own money, then when you reimburse them you either use petty cash (replace a $20 with their receipts), or bypass petty cash by writing them a check and recording the expenses according to their receipts (gas, office supplies, etc.).
Farm Savings Account	BANK	NOT your personal savings. Yes, it can be useful to keep a savings account for your farm business in addition to your farm checking account. There are things that a savings account can do for you that a checking account cannot. They may earn interest (albeit miniscule in these times) and have other banking advantages (e.g., situations exist where banks charge a fee on multiple deposits into a checking account, but not a savings account).
Accounts Receivable	ASSET	Created by entering individual sales into Quickbooks billing module. Accounts receivable increases when you make a sale to be paid on credit and decreases when you receive the cash payment. When you enter an account receivable through the billing module you will also identify the sales account to increase to record the sale on account. When you receive the payment through the billing module accounts receivable is decreased (you are no longer owed money) and cash in the checking account is increased (you have deposited a check).

Account Name	Account Type	Explanation
Farm Equipment	ASSET	Be sure to keep a separate list of individual assets in Excel. You need the list for income tax purposes and for county property taxes. QuickBooks just keeps a running balance. Do NOT make each piece of equipment a separate account or sub-account, it will make your standard reports hard to read, and it will be difficult to fix. Your opening entry is for the beginning fair market value of all equipment contributed into the business. Thereafter, when you buy a piece of equipment, the purchase price decreases cash (or increases accounts payable), and also increases the running total in the Equipment account. When you sell a piece of equipment, the sales price increases cash, and the asset account is reduced by whatever value you have for the equipment you sold. The difference between the sales price and the amount in the equipment account is recorded to an "Other Income" type account called "Gain or Loss from Sale of Equipment." It is important to keep these types of sales separate from the regular sales of farm products because: 1) including it with income from crop sales would distort your crop income, and 2) The income tax treatment is different.
Farm Vehicles	ASSET	As above, keep vehicles separate from other equipment. They are treated differently for tax purposes.
Structures	ASSET	As above, keep structures separate from other equipment. They are treated differently for tax purposes. See notes on perennial crops if you build the structure yourself.
Perennial Crops	ASSET	See section on perennial crops.
Farming Supplies	ASSET (This is really an inventory account but it is probably simpler to manage it as an asset account.)	This is your year-end inventory of soil amendments, gloves, hand tools, flashlights, chicken wire, etc. You only need to adjust it each year at year's end. Here is a simple way to record a reasonable amount of inventory and expense each year. Simple Method: All of your supplies expenses to the expense-type account called "Supplies" during the year. Then in November and December (or the last months of your tax year if you are on a fiscal year), post your last supplies purchases of the year to the asset-type account called "Supplies" instead. Those last purchases represent your year-end inventory of supplies on hand. The total in your supplies expense account represents all the supplies you purchased and used during the year. In January (or the first month of your fiscal year), use a journal entry to move your prior year supplies from the asset account to the expense account. This is a decrease (credit) to the supply **asset** account for the total balance in that account, and a corresponding increase (debit) to the supplies **expense** account for the supplies you purchased at the end of the prior year. For tax purposes, you are deducting the last few supplies purchases of the current year in the following year. This should basically correspond to how you actually use your supplies. If your situation is not at all represented by this simple method, you should see an accountant to develop a more appropriate method.

Account Name	Account Type	Explanation
		Sample Structure QuickBooks Chart of Accounts
Computer Equipment	ASSET	As above, keep computers separate from other equipment. The tax treatment of computers is different.
Office Equipment	ASSET	As above, keep office equipment separate from other equipment.
Market Equipment	ASSET	You are not required to keep marketing equipment separate from farming equipment, but you may find it helpful to do so.
Marketing Supplies	ASSET (As noted above with respect to Farming Supplies, this is really an inventory account but it is probably simpler to manage it as an asset account.)	This is your permanent inventory of bags, boxes, jars, labels, twist ties etc. You only need to adjust it at year's end. Here is a simple way to record a reasonable amount of inventory and expense each year. **Simple Method:** Record all of your supplies expenses to supplies expense during the year. Then in November & December record your last supplies purchases of the year to this account rather than to supplies expense. In January, use a journal entry to move your prior year supplies from the asset account to the expense account. This is a decrease (credit) to the supply **asset** account for the total balance in that account, and a corresponding increase (debit) to the supplies **expense** account for the supplies you purchased at the end of the prior year. For tax purposes you are deducting the last few supplies purchases of the current year in the following year. This should basically correspond to how you actually use your supplies. If your situation is not at all represented by this simple method, please consult an accountant to develop a more appropriate method.
Intangible Asset—Logo & Label Design	ASSET	Your logo is a special kind of asset; an intangible asset. It is amortized rather than depreciated—really the same thing with a different name, but recorded separately on the tax return.
Accumulated Depreciation	ASSET	Year End Journal Entry: Debit Depreciation Expense, Credit Accumulated Depreciation for the total depreciation deduction taken on your federal tax return.
Accounts Payable	LIABILTY	Created by entering individual payables into Quickbooks payables module. When you enter individual accounts payable you also indicate the expense or asset account that was increased by the purchase. Later, when you use the payables module to record payments cash is decreased by the amount of checks written and payables are also decreased because the amounts are no longer owed.
Operating Loan	LIABILTY	This is typically a loan that is due within 12 months
Long Term Loan	LIABILITY	This type of loan is typically paid down through monthly or annual payments over several years
*Opening Balance Equity	EQUITY	Quickbooks uses this account to balance certain entries. Do not make an entry to this account unless advised by your bookkeeper or accountant.

Account Name	Account Type	Explanation
Capital Contribution—Partner 1	EQUITY	Partner #1's contribution to the business (may be cash or equipment)
Capital Contribution—Partner 2	EQUITY	Partner #2's contribution to the business (may be cash or equipment).
Draw—Partner 1	EQUITY	Cash Partner # 1 takes out of the business. Careful! This cash is not income, but a draw and as such, it is simply a change in Equity; it may not have any relationship to taxable income. Even if you do not take cash out of the business, you may owe income taxes on the profit made by the business.
Draw—Partner 2	EQUITY	Cash Partner #2 takes out of the business. Careful! This may not have any relationship to taxable income. Even if you do not take cash out of the business you may owe income taxes on the profit made by the business.
*Retained Earnings	EQUITY	Quickbooks uses this account to balance certain entries. Do not make an entry to this account unless advised by your bookkeeper or accountant.
Wholesale Sales	INCOME	Set up each of your accounts as "customers" in Accounts Receivable. Also note that new FDA regulations require you to be able to establish your percentage of wholesale versus direct sales in order to determine how the regulations apply to your farm. This is true even if you are currently exempt from FDA regulation, because you need to be able to show that you are exempt. You can also analyze income vs. marketing expenses (travel time and mileage, packaging and labeling required for this type of market).
Farmers Market Sales	INCOME	You might consider setting up each market as a sub-account of this account, or as a class or job. See discussion below.
CSA Shares	INCOME	Set up each of your members as a "customer" in Accounts Receivable. You can use the billing module to bill them for renewals and to track contact information.
On-Farm Sales	INCOME	
Restaurant & Catering Sales	INCOME	You will also want to set up each of your accounts as "customers" in Accounts Receivable.
School Tours	INCOME	Farm income that is not related to sales of farm products is OK until it becomes substantial, they you might start to think of it as a separate business and you will need to create a separate set of books and consult with a tax adviser about the income tax treatment.
Administration	EXPENSE	Do not post anything to this account; make all of your administrative expenses sub accounts of this account.
Administration: Bank Charges	EXPENSE	

Sample Structure QuickBooks Chart of Accounts

Account Name	Account Type	Explanation
		Sample Structure QuickBooks Chart of Accounts
Administration: Books & Subscriptions Administration: Conferences & Education	EXPENSE EXPENSE	Invest in your education! You may deduct expenses associated with maintaining and improving your knowledge needed to farm. This includes things like basic accounting or cooking classes but would not include things that qualify you for a whole new profession as an accountant or a chef.
~~Administration: Donations~~	EXPENSE	NO! Almost anything you are solicited to pay out of the farm is a promotional expense (getting your name and logo in front of potential customers is a type of advertising called "Promotion"; see below). So "sponsoring" a "fun-run" and getting your name on a t-shirt is a marketing expense even though the event benefits a charity. The expense is fully deductible as a farm expense. If a charitable deduction is totally unrelated to farming (e.g., for girls' literacy in Afghanistan) then it is a PERSONAL Expense. It should not be paid out of the farm account, since it does not promote the farm. The donation should be made by the individual farmer and it will be deductible on the INDIVIDUAL tax return (and it may not be as "deductible" as you think).
Administration: Insurance	EXPENSE	
Administration: Interest	EXPENSE	
Administration: Membership Fees	EXPENSE	
Administration: Office	EXPENSE	Office supplies and most any other random administrative expense like stamps or registering your domain name, a good catch-all account.
Administration: Professional Services	EXPENSE	Accountant and Attorney
Administration: Payroll	EXPENSE	Office staff salaries
Administration: Payroll Taxes	EXPENSE	Payroll tax expense for office staff
Administration: Payroll Service	EXPENSE	Even though the payroll service is for all payroll, put 100% of the expense of the service here because the service is administrative.
Administration: Depreciation	EXPENSE	Once a year entry, usually given to you by your accountant to record your tax deduction for depreciation.
Farming Costs	EXPENSE	Do not post anything to this account; make all of your farming expenses a sub account of this account.

Account Name	Account Type	Explanation
Farming Costs: Land Rent	EXPENSE	
Farming Costs: On-farm Fuel	EXPENSE	Also, keep track of the gallons of fuel you use on and off-farm because you can get a tax credit for on-farm fuel used.
~~Farm Costs: 1984 Tractor~~	EXPENSE	NO! Do not use this account. If you want to track operating costs and maintenance for an individual piece of equipment use a job or a class. The more accounts you set up the longer and harder to read your reports become. See discussion below.
Farming Costs: Custom Hire or Custom Farming	EXPENSE	Remember if someone "custom hires" you then set up an income account called "Custom Hire" or "Custom Farming."
Farming Costs: Equipment Rental	EXPENSE	
Farming Costs: Repairs & Maintenance	EXPENSE	
Farming Costs: Seeds & Plants Purchased	EXPENSE	Careful! See section on perennials if you are planting trees and other crops with a pre-productive period of more than a year.
Farming Costs: Soil Amendments	EXPENSE	
Farming Costs: Advice & Testing	EXPENSE	PCA, Soil and water testing, etc.
Farming Costs: Replacement Animals	EXPENSE	Replacing breeding stock.
Farming Costs: Animal Feed	EXPENSE	Feed purchased off-farm. If you want to keep track of feed grown and fed you will need to do that outside of Quickbooks.
Farming Costs: Veterinary & Other Animal Health	EXPENSE	
Farming Costs: Hand Tools	EXPENSE	An easy way to handle hand tools is to keep a certain amount in farming supplies inventory, and expense a certain amount each year. Even though the hand tools last more than a year, once you get going, replacing them becomes a pretty constant expense. As you grow you might want to also slightly increase the amount of hand tools in farming supplies inventory each year to reflect your growth.
Farming Costs: Irrigation	EXPENSE	

Account Name	Account Type	Explanation
		Sample Structure QuickBooks Chart of Accounts
Farming Costs: Waste Disposal	EXPENSE	This could go under Administration or Marketing, depending on which part of the business you think generates the most waste. It doesn't really matter where it goes.
Farming Costs: Payroll	EXPENSE	Gross farming wages before payroll deductions.
Farming Costs: Payroll Taxes	EXPENSE	Employer's portion of payroll taxes paid on farming wages.
Marketing Costs	EXPENSE	Do not post anything to this account; make all of your marketing expenses a sub account of this account (see examples below).
Market Costs: Marketing Supplies	EXPENSE	Boxes, bags, twist ties, labels, etc.
Marketing Costs: Meals & Entertainment	EXPENSE	You must keep a personal calendar showing the business purpose of your business meals and entertainment. You may only deduct 50% of the expenses recorded here. You may deduct here the expenses of groceries purchased to cook a meal at your home to host a potential customer. You may deduct the cost of a meal out or a ticket to a sports or entertainment event if you hosted a potential buyer. You must be able to establish the business purpose of the event.
Marketing Costs: Off-farm Gas	EXPENSE	Remember, you get a tax credit for gallons of gas used on-farm. This is to pay back the taxes you pay for each gallon of gas used on public roads. Be sure to point this out to your tax preparer too!
Marketing Costs: Organic Certification	EXPENSE	
Marketing Costs: Promotion	EXPENSE	Sponsoring local events or joining farm advocacy groups when your farm is acknowledged by name. Expenses associated with on-farm events such as farm-visits or farm field days with food and entertainment included. You may also deduct the cost of gifts to customers and other people important to your business (such as your landlord, mentor-farmer, accountant or banker). Go ahead; be generous in acknowledging the people who help you to succeed.
Marketing Costs: Utilities	EXPENSE	If you have a cooler, likely most of your utilities go to that. IF you pump a lot of water, most of your utilities may go under farming; otherwise, utilities may go best under Administration for office utilities. For most small operations it will not matter where you put it.
Marketing Costs: Basic Processing	EXPENSE	Hulling, off-farm packaging, drying, making flower bouquets or wreaths. See section on perennials and inventory.
Marketing Costs: Cut & Wrap	EXPENSE	
Marketing Costs: Supplements	EXPENSE	Supplements purchased from other farms to round out CSA boxes etc.

More on Chart of Accounts and Other QuickBooks Tools

Less is more! This is not a comprehensive list, but you should not need to add a lot of additional accounts. Before you add new accounts, ask yourself: "Who cares?" "Does the government require this information?" "Does my organic certifier need to know this?" Perhaps most importantly, "Will having this information (separate, rather than lumped together) help me make better farm business management decisions and have a more successful business?"

The more accounts you have, the longer it takes to do basic bookkeeping and the less valuable your summary reports. Use the memo field to enter detail about each transaction, but don't get carried away with over-categorizing your expenses. If the information will not help you to make a decision, it probably does not need to be separated.

In addition to the Chart of Accounts, you have two additional markers in QuickBooks: **Jobs** and **Classes.**

You can set up jobs and classes to keep track of other important aspects of your operation. Jobs are a good way to account for something temporary like a particular event or a particular flock of chickens. **Classes** are a good way to account for a whole sector of your business, like crops, and eggs. When you print financial statements in Quickbooks the accounts read down and the classes will read across, so you could see different farmers markets side by side, or supplies and labor expenses for crops and eggs side by side. You can also set up sub-classes so you could have all farmers markets as a class and each farmers market as a sub-class. This helps to keep your basic chart of accounts as simple as possible. If you add all your farmers markets as accounts then you will see all that detail every time you run an Income Statement. An Income Statement should be a useful summary report. If you want detail you can run a report showing jobs or classes. Think "short–but–wide"—keep your chart of accounts short (i.e. just farmers markets, restaurants, wholesale and CSA) and let your detail spread out to the right using jobs or classes. That way you can compare different parts of your business and you will not need to give your tax preparer an overly long and complicated chart of accounts from which to prepare your tax return.

Possible jobs: Fields or plantings or individual animals or a flock of chickens, or a particular farmer's market or a particular restaurant. Possible classes: Crops or products. You could make a certain field a job and bell peppers a class and get special reports on how well you utilized a certain field or how well your bell peppers did relative to other crops. You could make each new lamb a job and record essential information and also make meat a class and then run special reports on the individual animals, and on the segment of your business overall. Jobs or classes are also a good way to separate out on-farm events. You want to know how much the events cost you but you do not want to set up new accounts to track all the expenses because the reports will be hard to read and it will crowd out the essential information your accountant or banker wants to see.

Use the chart of accounts to tell a simple story about the whole farm and to share with your accountant and banker. Use jobs and classes to give yourself and your partners more nuanced information to make internal decisions.

6.4

Case Study Review—When Good Farms Go Bad

Introduction: Case Study Review—When Good Farms Go Bad

UNIT OVERVIEW

In reviewing the case study together, the instructor and class will address many of the issues presented in Units 6.0–6.3 and apply them to a farming operation.

OBJECTIVES:

1. Understand problems that can emerge in small-scale diversified farming and marketing operations
2. Integrate learning about how to apply business planning, cash flow, accounting, and tax issues from the curriculum into real situations

ACTIVITIES:

1. Either read or hand out to the class the follow-up story for Bonnie, Clyde, and JJ (see next page "Case Study: When Good Farms Go Bad"). It includes the 2-paragraph introduction from Unit 6.0 as a refresher before presenting the rest of the case.
2. Discuss: What could the partners of BeeBopABlueBlop have done differently to protect themselves?
3. Listen for the following items. If no one offers any of the items, share it with the class.
   - Kitchen safety training
   - Local health inspection rules
   - Health insurance
   - Food safety for on-farm meals
   - Food safety for manufactured food
   - Permits for on-farm meals and events
   - How did they justify spending so much time on full moon jams?
   - Properly permitted buildings
   - Minimum wage violations
   - Payroll tax violations
   - Diversifying your markets—not relying too much on one customer
   - Corporate status instead of general partnership status
   - Understanding when to get a CPA to help with your taxes
   - Understanding your liability insurance and getting special coverage for special events
   - Clear agreements about personal and business assets
   - Clear agreements about how a partner or shareholder can leave the business
4. Further discussion: Encourage students to share stories of farm missteps or failures and discuss how more planning could have made the farm more resilient

Case Study: When Good Farms Go Bad

Introduction

Bonnie and Clyde purchased a farm with a house, a barn, outbuildings, and a half-acre of productive blueberry bushes. Both plan to have off-farm jobs. They plan to use their off-farm income to plant more acres of blueberries over the years. They plan to convert the barn into a commercial kitchen to make blueberry jam. They will use the rest of the barn for community events, which will create more customers for the jam. JJ is going to work full time on the farm. She will plant the rest of the land to row crops, establish a CSA and sell at the local farmers' market and develop wholesale accounts.

The three friends decide that Bonnie and Clyde will treat their house and land as 100% their personal asset. They will rent the land and barn to the farming partnership. JJ will be the main farmer in the farming partnership and will receive a salary or "guaranteed payment" before the net profit or loss from all farming activity is divided equally.

They named their farm BeBopABlueBlop Farm and got to work.

Five years later…

Bonnie and Clyde invested part of their salary into planting another acre of blueberries each year. They also remodeled the barn and put in a kitchen. JJ has become locally famous for her full moon jam parties. People come from all around to help her make jam while local musicians jam and then there is dinner and dancing. She has developed a 20-person CSA and sells at the farmers' market once a week.

JJ's biggest client is the La Casa Saigon, the famous fusion restaurant downtown. She sells them all of her flowers and herbs and most of her vegetables. This is why she has been able to focus on the full moon jam parties instead of growing the CSA and expanding to new farmers' markets.

JJ does all the bookkeeping for the farm, and, after using a CPA for the first year to learn what forms to use she took a tax class and started preparing the farm tax returns on her own. She does not find it difficult; she enters all of her expenses in the expense accounts in QuickBooks every week and she balances her bank statement every month so she knows her books are accurate. At the end of the year she uses Turbo Tax to transfer all of her expenses from her QuickBooks to the right line on the farm tax return.

The farm is busy, though, so she has taken on an apprentice—a young man who wants to start a farm of his own one day but wants to learn from someone else first. In exchange for helping out with labor such as weeding and harvesting, Robert gets to live in the hayloft above the barn and use the commercial kitchen and learn other aspects of farming from JJ and Bonnie and Clyde when they are around.

It was a good life. Then things started to go wrong.

It was the full moon jam of August, and the kitchen was jamming. JJ and a guest were carrying a giant vat of boiling water across the kitchen and JJ slipped. JJ broke her arm and the guest's arm and leg were scalded. While Bonnie drove JJ and the guest to the hospital, Clyde and Robert jumped into the kitchen to direct the dinner preparations. After dinner there was dancing as usual but people left early.

The next afternoon while JJ napped (on painkillers) and Bonnie and Clyde were taking her place at the farmers' market, the health inspector showed up. Fortunately Robert was there to show the health inspector around the kitchen. It turned out several guests had been admitted to the hospital for food poisoning, and they had all been at the full moon jam.

The health inspector inspected the kitchen and shut it down. It was not built to code and the violations were too many to count. He also condemned the entire inventory of jam and issued a fine for failure to obtain a permit for the on-farm dinner. When he saw that Robert was sleeping in the loft above the kitchen he condemned Robert's living space as well and called the labor standards department. An hour later an auditor from the labor department showed up and asked Robert how he was compensated. Robert explained his arrangement. The labor auditor issued a fine for sub-standard labor housing and failure to pay minimum wage, and called the state and federal payroll auditors to let them know that there were payroll tax violations at BeeBopABlueBlop Farm.

Meanwhile at the farmers' market, Bonnie and Clyde ran into Jaun Nygn, the owner of La Casa Saigon. Jaun told them he had heard that lots of people got sick at the full moon jam and he was no longer going to purchase from BeeBopABlueBlop.

A month later it was September and JJ still had her arm in a cast. Robert had quit. There was no money to pay for help with harvest because La Casa Saigon had not purchased anything in a month. The fines from the health inspector and the labor department were huge, and then one day the Sheriff showed up and served Bonnie with notice that she was being sued by the man who was scalded at the full moon jam.

Bonnie had a small inheritance from her grandmother, but her lawyer told her that since BeeBopABlueBlop was a general partnership, Bonnie could lose all of her personal assets. It turned out JJ did not have health insurance, and the general liability policy for the farm did not cover the guest because the accident happened during a special event; the policy specifically excluded activities other than the normal activities of farming.

In October JJ opened the mail and found a notice from the IRS income tax division notifying her of an audit. She later learned that someone had called the IRS tip line to report their suspicion that she had not treated her blueberry plantings or blueberry jam business appropriately. She took her QuickBooks and tax returns to the local CPA and came back with a sick stomach and a headache. Her CPA had told her that every single tax return she had filed for the past four years was wrong, and that all of the partners would owe back income taxes as well as interest and penalties on the back taxes for all the time that the back taxes were owed and not paid. The CPA estimated it would cost about $1,000 per year to fix the mistakes, calculate the correct tax, and file the amended tax returns.

In November, Clyde decided he could not take the stress of farming anymore. He announced that he wanted out of the partnership and demanded that JJ and Bonnie cash him out of his 1/3 interest. When he and Bonnie went to meet with their accountant they learned that they did not have a written agreement about who owned the blueberry bushes they had planted over the past four years. It was not clear how much the partnership would need to pay to cash Clyde out. Not that it mattered since there really was not any cash at that point except for Bonnie's small inheritance from her grandmother.