



GETTING INTO FARMING

A WORKBOOK FOR
BEGINNING FARMERS
IN NORTH CAROLINA

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Bringing New Farmers to the Table is directed by the National Center for Appropriate Technology, in collaboration with the Carolina Farm Stewardship Association and Center for Environmental Farming Systems. The goal of the project is to create a stronger support system for beginning farmers in the state of North Carolina. For more information about Bringing New Farmers to the Table, please visit the North Carolina New Farmers website, www.ncnewfarmers.org.

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ABOUT THIS FIRST EDITION

This workbook was conceived as a printed companion piece to the resources built over the three-year life of the Bringing New Farmers to the Table Project, which was funded by USDA's National Institute for Food and Agriculture back in 2010. The project on its front end produced a 2010 edition of *Planning the Future of Your Farm: A workbook on farm transfer decisions*.

The *Planning the Future of Your Farm* workbook, which continues to be updated and adapted for projects in North Carolina and other states, is targeted at older landowners and established farmers to support their decisions to make land and farm assets available to a younger generation. Because it has been well-received by its target audience, it seemed appropriate that we put together a workbook for the generation of new farmers working to acquire these assets and keep them in production. We are bold in calling *Getting Into Farming* a first edition, but like *Planning the Future of Your Farm*, it deserves future efforts to improve it.

The *Getting Into Farming* workbook is primarily for those folks looking seriously at farm production and ranging up to the point where they are feeling confident enough to strike out on their own. The workbook starts simply for those just looking at their first job in farming, then ramps up quickly to more serious business and asset management concepts. We hope to fill any gaps and provide more case and resource studies in future editions.

Key pieces of this workbook were written and edited for this published edition by staff at the National Center for Appropriate Technology (NCAT). The core of Section Two was written by **Marisa Alcorta**, NCAT staff member and partner in Davis, California's Cloverleaf Farm. These are: *Budgets and Financial Planning*, *Recordkeeping*, and *Financial Statements*. Marisa was generous enough to use her own farm as a model for the Excel examples you will find in those sections. Marisa co-authored the piece on *Marketing* with NCAT staffer **Tammy Howard**, who did an outstanding and tireless job coordinating a series of online

presentations which in many ways serve as visual and audio companion components to this workbook. These presentations feature a number of farmers in North Carolina who are either getting their start or have worked over the past decade to get their farms established. NCAT staffer **Hannah Lewis** authored the thorough piece on *Capital and Financing*.

As for the rest, hats off to **Lee Miller** (Yale Law 2016) for working through the summer to build this workbook, pulling together and editing the above works and writing his own, all while working at a law practice and helping out his sister and his girlfriend on their respective farms. He crafted Section One of the workbook, specifically *Envisioning Your Farm* and *Assessing Skills and Resources*, and wrote the *Risk Management* piece in Section Two. He assembled many of the worksheets throughout the workbook. Even while starting his first year classes up at Yale this August 2013, he still took the time to thoroughly edit and proofread **Andrew Branan's** pieces in Section Three, which deal mostly with the legal stuff: *Business Structures* and *Land Access*. Lee's sister, **Mary Beth Miller**, operator of her own Blue Merle Farm (and an inspiration for this workbook) provided the excellent illustrations throughout.

Finally, the workbook owes existence to the leadership of NCAT's **Mike Morris**, the overall Bringing New Farmers to the Table project leader.

All that said, we know the workbook needs more. This first edition of *Getting Into Farming* workbook at presstime bypasses several farm startup issues. It also needs more on-farm case study and review of innovative programs that have developed for new farmers in North Carolina, and probably needs more out-of-state case studies to inspire North Carolina entrepreneurs interested in filling gaps in farmer support. Still, the editors and authors welcome feedback in the hopes that we have the chance to add more materials in later editions. Please send your comments to Andrew Branan at abranan@gmail.com, and Mike Morris at mikem@ncat.org.

A WAVE OF SUPPORT, A TSUNAMI OF LAND

Forward by Andrew Branan

Getting into and establishing a farm is hard. Taking the risk to start any business isn't easy. But unlike any other business, farming captures the public's imagination. Farming is the most ancient of careers and the foundation for all civilizations, and produces something that makes all humans the same. After all, society needs its food. For all that our country needs farmers.

Seems someone recognized this because those seeking a path into farming are enjoying enormous support from publicly-funded resources. Such is the Beginning Farmer and Rancher Development Program (BFRDP), funded in 2009 to launch projects around the country with one purpose - capture the energy and strength of a new generation of Americans of all backgrounds bent on producing a real thing society can't live without. This funding has led to an explosion of program growth in the non-profit sector, and has attracted interest from state and local governments and traditional agriculture groups. One small product is this workbook in your hands. And while none of this creates the farm, it aggregates into a measure of attention and support no generation of landless farmers has enjoyed in over half a century. But these programs only kick-start a cycle, not sustain it.

Society didn't put up all this capital just because young people wanted to farm or own land. The expected return on investment is producer participation in building a food system that is healthier for consumer and farmer alike. For all this, there is still the requirement of land, and apart from more funding for FSA beginning farmer loans, the government didn't put up land as part of the investment package. Instead it has put new farmers in a stronger position to capture the growing release of land title that is now unfolding across the country.

Over the past decade as director of the North Carolina Farm Transition Network (NCFTN) and in private law practice, I've had the good fortune to observe the entry and progression of a good number of new farmers starting out without family land. I can report that those I know who stuck with it now

own land purchased with savings, jobs, loans from FSA and banks and family and friends in too many creative combinations to count. All are serious farmers who got land with determination and patience, like farmers before them.

Still, though there is plenty of land available, getting it isn't easy. But consider that getting land to farm has always been difficult, it's just that the challenge has changed with the settling and improvement of our continent. In the 20th Century money more than life

Larger parcels should continue to break into smaller tracts new farmers can afford.

and limb got land for farming, but it was always expensive relative to the purchasing power of the times. My older clients - who purchased land to start out or expand decades ago - tell me how much it cost at the time, and after all these years they are no less humbled by the risks they took for themselves and their families. Most started small then grew it from their leaseholds.

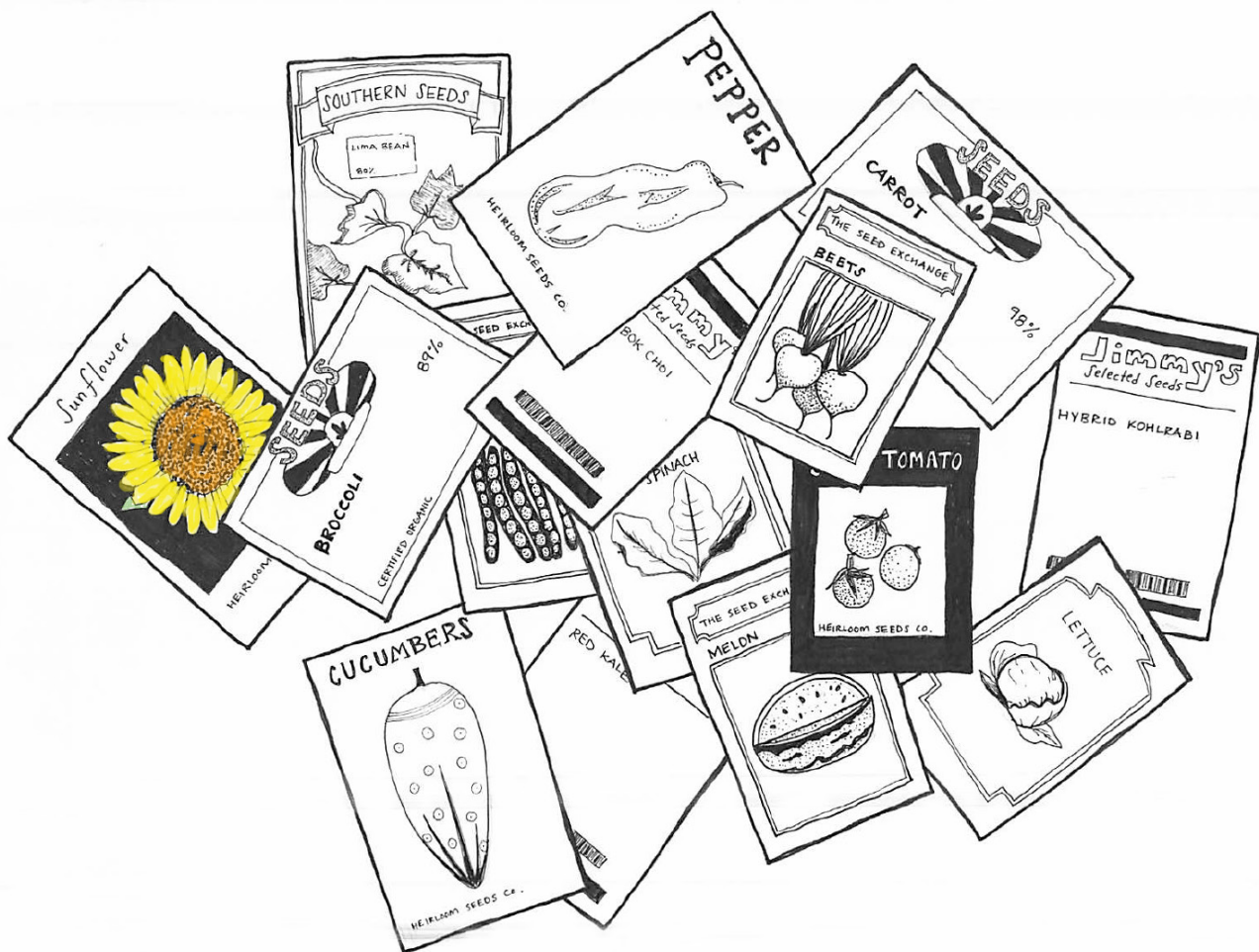
I think a part of the land-access challenge is a perception that supply is restricted, tied up in families determined to keep it. Most simply won't be able to. From my perspective, farming will end in most families and when it does, it is a legal and financial inevitability that title will disperse in smaller pieces based on the forces of heir equality. As the "radio generation" - those born before World War II and arguably the largest landowning bloc - passes on, heirs will break up large and unaffordable parcels into smaller tracts new farmers can better afford.

Land title flows through history, pools with some families, then flows on. Think of it this way: That 460 acre farm you know about today was likely built over the years by one strong generation who acquired land from the neighborhood as other farms had ended for whatever reason. Farms will come apart and release tracts of a size more affordable to direct-market farming while less suitable to large-scale residential development. Land won't be cheap, but thanks to the internet (Google Earth, county GIS, property tax listings, whatever else), the probability that you will be in the right place at the right time has increased dramatically. You got a push, now it is up to you to get in the market to keep the good land clear.

NOTES

Section One:

Crayons to Paper Coloring Your Vision



GUT CHECK: CAN I HANDLE FARMING?

For those of you willing to actually pursue your interest in farming, this book is *not* meant to scare you off. Indeed, let us say here that it is probably in the public interest that as many people - particularly young people - as possible try their hand as producers in our food and land systems. The USDA census continually reminds us that the average age of farmers is increasing, and the question persists “Who will take over farming these lands?” As with all businesses, a certain fraction will survive long enough to become established enterprises. For those that try it and move on, the skills and lessons learned in farming will serve well in other endeavors. But at the least, if we want to eat food produced near where we live (or even in this country), it is in the best interest of society to help and encourage as many people as possible to try in the hopes that a percentage will succeed.

All that said, by and large, you are on your own to master the toughest of professions. It is true that “no one farms alone.” You will find yourself learning from numerous farmers, educational programs, and hands-on experience. Your farm will depend on market access and processing infrastructure. However, at the end of the day, there is no one that can make the essential elements of farming (particularly small direct market farming) easier. Farming has always been hard work. Getting established and getting the resources takes patience and determination. And finding land to farm has

always had its challenges at any time in history. Still here? OK good. This workbook is meant to kickstart or kick along your understanding of what you can expect in starting and growing a farming enterprise, including many of the nagging details you will have to deal with along the way.

As a good starting point, check out the Start2Farm website at **start2farm.gov**. The Start2Farm project asks the following questions to serve as your jumping-off point:

*Are you prepared for a job requiring long hours, early mornings and late nights?
Have you considered the economics of seasonal earnings?*

Are you able to take on the physical rigors of the job?

Can you learn to make do and fix things yourself?

Can you handle setbacks with grace and determination?

Do you have the patience to start a career with a steep learning curve and a long road to finally getting on your feet?

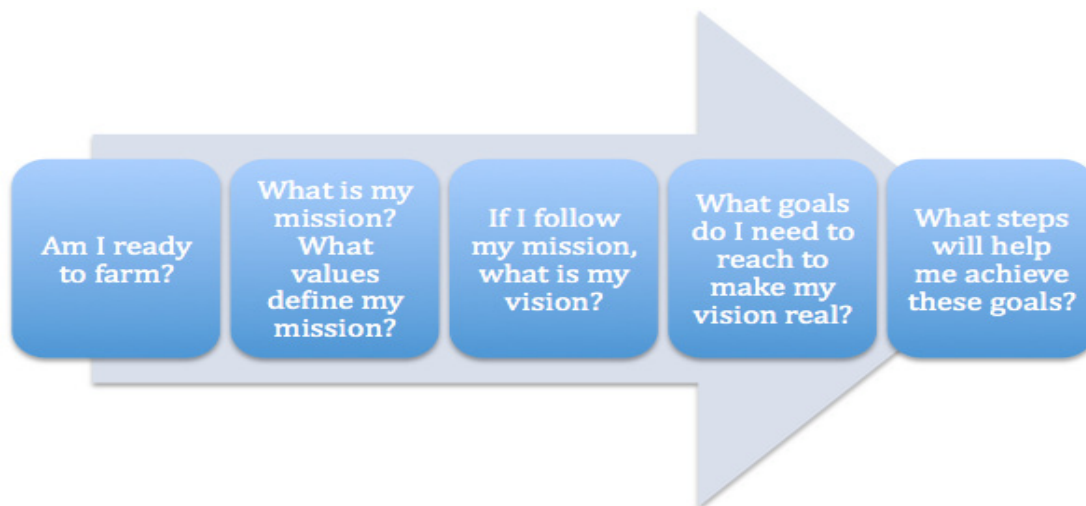
A Few More Resources

In addition to Start2Farm, many projects around the country have produced pre-assessment resources on deciding whether to go into farming. Here are two good ones:

New England Small Farm Institute. These folks developed an online presentation to help you decide whether you are ready to try farming. Google “Exploring Small Farm Dream” or go to www.smallfarm.org/uploads/uploads/HTML/ExploringSmallFarmDream.html

Another good resource is a piece by one **John Hendrickson** from University of Wisconsin called *Grower to Grower: Creating a Livelihood on a Fresh Market Vegetable Farm*. This piece, published by University of Wisconsin-Madison College of Agricultural and Life Sciences is a detailed look, with case studies, of the main considerations that prospective farmers face in making a livelihood in small farming.

MISSION CONTROL: VISIONS OF YOUR FARM



Once you have decided to give farming a go, what is the next step? Should you start by drawing up crop rotations? Breaking open the piggy bank and counting your life's savings? Looking for markets to sell your product? Imagining what you want your farm to look like in ten years? You'll do all these things in time, but perhaps you should just start with a mission statement.

You've probably heard this before, but have you ever done it? If it helps, you could also call this a "purpose" statement instead. A mission statement can be a tough thing to write down, but it really does not need to be more than one sentence. Your mission statement should answer the question, "Why do I want to farm?"

Most importantly, your mission statement should be a reflection of your core values; it should not include your specific goals and plans.

This is an opportunity to reflect on why farming attracts you. Perhaps you have spent a decade working a desk job and want to find a career that requires you to be outside. Or you despise the food insecurity you see around you and want to ease that burden on your community. Or you read *Omnivore's Dilemma* and want to be like the Joel Salatin guy and restore environmental health to your little corner of the earth. Or you want to achieve some measure of

self-sufficiency on your homestead. Or you want to get rich. Or you want to teach your kids the values of country living. Each of these examples reflects a core value (environmental sustainability, social justice, self-sufficiency, money, etc.). You likely have more than one core value that draws you to farming, and your mission statement should reflect as much. Just try not to get so carried away that you wind up listing every single thing that you *think* appeals to you about farming. Stick to the values that are driving you toward the fields.

A clear, honest and contemplative mission statement will be your compass in farming, always pointing North toward your true values. Over the years, your fortunes, goals and plans may (okay, will) change, but your values will likely remain intact. Your mission will help you make tough decisions and adapt to changing circumstances. You can always return to your mission statement and ask, "Will this decision support or compromise my mission?"

One more thing: there is no *wrong* mission statement. People get into farming for all sorts of reasons. The key to your success will lie, in part, with your ability to define those reasons clearly for your self.

So here are some sample mission statements:

To work outside every day in a job that I love.

To provide for my family and for future generations who will depend on my land.

To make enough money to send my children to college and take my wife to Paris (or Myrtle Beach).

Painting Your Farm Vision

Once you have written out your mission statement, use it to start painting a vision for your farm. A vision is sometimes out of focus. Maybe you cannot see all the details in your vision. A vision is always vivid. It should excite and inspire you, make you feel a little giddy, even. It can be grandiose or humble. The only rule is that your farm vision should reflect the values embodied by your mission statement.

Your vision can be as detail-rich as you want to make it. The goal is to provide enough detail to set specific goals, but not so specific that it constrains your ability to adapt to unforeseen roadblocks and opportunities.

In crafting your vision, here are some questions to consider:

Do you have or want a farming partner?

Do you want or have a life partner? What will their role be on the farm?

Do you have or want kids? How do you envision their involvement with the farm?

How long do you want to work (when do you want to retire)?

How (materially) comfortably do you want to live?

Is it important to live near family?

Do you see yourself passing the farm on to your kids?

Goal Setting

Goal setting is the process of attaching tangible benchmarks to your rosy vision of the farming life. This section focuses on setting goals that will move you closer to the vision you painted in the previous section. These goals will provide a critical starting point for the more nuts-and-bolts work you will do in the next chapter in business planning.

Specifically, you will use worksheets at the end of this chapter to formulate revenue and land access goals based on your mission and vision.

Estimating a Total Revenue Goal

Before launching into calculations, familiarize yourself with the terms below. Be sure you know what they mean, and get comfortable using them. This will give you a leg up in assembling a business plan or securing a loan when the time comes.

Your **gross income** is the total revenue that your farm makes—that is, any money that is paid to the farm.

Your **net income** is the total amount of money left over after your farm expenses have been paid—that is, all the money your farm was paid minus all the money the farm spent on inputs, labor, gas, etc. This is the farm's profit that you will either go on vacation with or reinvest in your farm.

An **income ratio** is a ratio of your gross income to your net income. This calculation will give you a ballpark figure of how much total revenue your farm will need to bring in to reach your net income goal. In your planning, you might assume an income ratio of 25%, which is reasonable. In other words you assume that, of every dollar your farm brings in, the farm will keep 25 cents and 75 cents will be used to pay for land, seeds, equipment, and other farm expenses.

It also varies with time as your farm equipment arsenal is built.

Assume that you want a “salary” of \$30,000. This would not support an extravagant lifestyle, but it is a reasonable amount for one person to live on comfortably. This figure would be more for a couple or a family with children. If you are unsure of how much you will need for an income goal, track your

living expenses for several months. This will help you extrapolate to your annual expenses.

Estimating Land Needs: A Simple Calculation

In order to find the amount your farm needs to gross (or the total revenue of the farm), divide your desired net income by .25 (or 25%). Using the net income goal of \$30,000 divided by .25 (this is the equivalent of multiplying by 4) and you see that the farm will need to gross \$120,000 in sales for a season.

So how many acres will it take to support farm revenue of \$120,000?

Production values vary widely per acre. It depends on the productivity of your land, what you grow, your markets, etc. However, it is important to at least have a starting point for you to determine how much land you will need to support your income goals. An overall average, per acre, for a diversified market farm is \$12,000.

Taking this as a hypothetical number, it is simple to estimate the number of acres you will need to meet your income goal. Simply divide your gross revenue goal by the average gross revenue per acre to determine that you will need approximately 10 acres to “net” \$30,000.

$$\begin{aligned} &(\text{Total revenue goal}) / (\text{Expected revenue per acre}) \\ &= \text{Total Acres Needed} \end{aligned}$$

$$(\$120,000) / (\$12,000/\text{acre}) = \mathbf{10 \text{ acres}}$$

This calculation will vary with livestock enterprises and intensive production enterprises, but this at least gives you a guideline.

Wait, What?

Now for the reality. Ten acres is a lot of land. Earthwise’s Tony Kleese often advises - in his comprehensive presentations at the annual Carolina Farm Stewardship Conference - that as a rule of thumb for vegetable production you should count on one acre per person of labor before you have figured out a more efficient production and labor system.

So what does this tell you? Well for starters, your not going to make \$30,000 in take home pay in farming, at least not for a while. At least not until

you break that magic barrier where you feel that you are “established” and you know what you are doing. That said, many many expenses associated with farming take the place of personal expenses, and you do grow a lot of your own food, and even your living quarters may be covered. In the words of Peregrine Farm’s Alex Hitt, you can expect to be farming for 10 years or so before you really feel like you have it wired. This doesn’t even mean you will be killing it financially in ten years (or whenever), but if you have made it that far you will have adjusted your expectations for the farming life.

Exercise Your Brain

Forests of paper have been devoted to these soft issues like “vision statements” and “mission statements” and “business plans” and the like. Many folks who go into business just get moving to see how things will fall into place, and consider such exercises to be hokey. Well, get over yourself and take a few minutes to just play around with pencil and crayon on the following exercises. You are going to find yourself in situations where you need to come up with a twelve-word description of why you want to produce food, and if you want people to help you, it has got to be genuine. Think of it this way: the next time you are talking with a would-be mentor, an adviser, whoever, and they ask something as simple as “What’s your mission statement?”, you can impress them by *not* responding with a blank look. What’s it going to hurt?

Worksheet 1.1

YOUR FARM VISION

This worksheet should help you paint a vision for your farm. It asks the question: if you follow your mission, how do you see your farm in two, five or ten years?

Many beginning farmers already have a vision for what they want their farm to look like a decade from now. Others will have no idea, just “waiting for things to play out.” Crafting and writing down your vision will help you set goals and will give you a goal to strive for. The tricky part is to align your dreams with the values embodied in your mission statement. In general, your values (and mission) won’t change that much, but your “vision” of the perfect farm will adapt as circumstances change and as you get older. The vision you construct in this worksheet is just a first shot at where you see your farm when you feel you are steadily on your way.

If I follow my mission, where do I see my farm in two, five and ten years?

	Allow me to...	Support ‘take home’ pay of...	Provide my community and customers with...	Impact the environment by...
In two years my farm will...				
In five years my farm will...				
In five years my farm will...				

Worksheet 1.2

SKETCHING YOUR FARM DREAM

Dreaming is part of succeeding, and sometimes words just don't do the trick. This worksheet provides two blank spaces where you can (literally) sketch your farm dream: your land, house, barn(s), fields and animals. There are no rules, except that your dream farm must reflect the mission and vision you have already put into words. Colored pencils are encouraged:

Draw your farm as it will look in TWO years

Draw your farm as it will look in FIVE years

CRAFTING YOUR PURPOSE STATEMENT

At its best, a mission statement clearly and succinctly states the ***purpose*** of your enterprise—in this case, your purpose in starting a farm. Many entrepreneurs - and that's what you are - begin with their vision of the future and write a mission statement that they think will bring about that vision.

Say you want to go to Mars. Do you thirst for knowledge for its own sake? Are you trying to win a space race for geopolitical gain back on Earth? Do you seek mineral resources to bring back to Earth? Your purpose in any endeavor—space travel or farming—ultimately guides how you will proceed. Just getting to Mars (to win a space race) requires a different approach than a mission that requires mining equipment and long-term survival. In a sense, your purpose should serve as a broad frame for your decision-making, your approach to the endeavor.

This worksheet asks you to consider (and record) your ***values***—that is, those principles that have led you to farming. After writing down your values, take a shot at incorporating those values into a succinct statement of your purpose in farming.

Personal Values:

Community Values:

Economic Values:

Environmental values:

Now, go back and circle your “core values.” These are the values that, no matter what, you would never compromise on. They are the values that, if standing up for them meant going out of business, you would. These are the values that will guide you in your farming career; they will point North on your farming compass.

Worksheet 1.4

FINANCIAL GOAL SETTING

Your work on the previous worksheets should outline why you want to farm and where you see your farm enterprise going, eventually. This worksheet is designed to help you figure out what you need to take the first step toward your vision. This worksheet focuses on two basic numbers: how much money you need to bring in, and how much land you will need to do it. These numbers, while preliminary, will give you a rough estimate of your financial and land needs as you move through the rest of the book. If any of the terms below confuse you, go back to the chapter section on goal setting and familiarize yourself with the terms below.

Estimating a Total Revenue Goal

Write down your **income goal** for the year here: \$ _____

Write down your estimated **income ratio** here: % _____

\$ _____ (divided by) \$ _____ (equals) \$ _____
(Your **income goal**) (Your **income ratio**) (Your **gross income**)

Your **gross income** is how much money your farm needs to bring in in order to support your **income goal**.

Estimating Land Needs

To estimate how much land you will need, take the gross income figure from your calculation above and divide it by the expected revenue per acre for the crops and/or livestock you plan to raise. Use the enterprise crop budgets provided by your state's extension service to determine the average revenue per acre for the crops or livestock you are considering.

\$ _____ (divided by) \$ _____ (equals) \$ _____
(**Gross Income**) (**Expected Revenue/Acre**) (**Total Acres Needed**)

A Note About Paying Yourself

"Something else I learned from farming with partners in 2012 was about how to compensate ourselves fairly. In the beginning of the year, we had a goal to pay ourselves something, even if it was just \$3 an hour. So we decided that instead of taking owner draws based on our ownership percentage or a set salary, that we would take our draws based on the amount of labor hours we put into the farm. This was important since some of us were working full time

at other jobs, and some were working part time at other jobs. So the ones working part time could put a lot more time into the farm, and they could get fairly compensated for their farm work. We also set it up so that our profit sharing followed the same model. Any profits we made from the farm would be shared based on the amount of hours that we worked, not on our % ownership. This seemed a more fair way to compensate those who were working more hours."

—Marisa Alcorta, Cloverleaf Farm

EVALUATING SKILLS AND RESOURCES

Achieving your goals will require skills, resources and hard work. If you are committed to farming, you are already committed to hard work. The last two worksheets at the end of this chapter are designed to help you take inventory of the skills and resources that will turn your hard work into an operating farm business, and to help you make a plan for filling in the gaps.

You live in an increasingly specialized economy where each worker is expected to hone his or her skills in a particular field. In fact, escaping this reality may be exactly what has prompted you to consider farming. Like other segments of the economy, agriculture is an increasingly segmented and specialized industry; in corn country, you might build your entire career around your ability to operate the latest combine. This is not true for most beginning farmers, especially those with small-scale or diversified operations. To succeed you will need a breadth of skills with enough competencies to at least get by.

Like other segments of the economy, agriculture is an increasingly segmented and specialized industry

You will not have the cash to hire someone every time you need “specialized” work. There will be times when you need to hire a mechanic, lawyer, accountant, plumber, machinist, veterinarian, carpenter, etc., but keeping these services to a minimum will help keep your farm profitable. Leave behind the mentality of specialization, and work on becoming a jack-of-all-trades (and a master of some).

Once you have identified your current skill set and resources, set out filling in the gaps. The time you invest in learning new skills (or honing ones you have) will pay off nicely on the farm. Remember, you do not need to be an expert in everything, but you should be able to fix most daily problems on your own, and have the skills to assess when you need help.

Building Your Skills

Fortunately, there are many ways to acquire the skills you lack. Some North Carolina community colleges - such as Central Carolina Community College in

Pittsboro and Western Piedmont Community College in Morganton - offer a breadth of inexpensive classes that will prove useful on the farm. These range from basic accounting and horticulture courses to shop classes like machining, welding, carpentry and mechanics. Online resources serve much the same purpose, and you should expect to do a lot of “Googling” as you get your farm off the ground. Keep in mind that attending in-person classes has several advantages. First, you will get hands-on instruction in the subject, and an expert will review your work. Second, in-person coursework is a great way to meet people with similar interests, providing you both a social outlet (farming can be lonely) and a network of peers to call on if you get stuck down the road.

Apprenticeships and Employment

Without a doubt, most new farmers get their start working for established farmers, often for several years at a stretch. Such opportunities range in impact depending on how established the farm is you are working for and how much experience the farmer has mentoring employees. Generally, beginning apprenticeships are low-paid labor positions on small, yet established direct-market farms. On these farms you are really an employee, though many in the business refer to the positions as apprenticeships because the high impact hands-on educational experience generally outweighs the value of the money compensation. Those employees who prove themselves in their first year can be invited back for the next season. Some even work year round on the more established farms.

Most apprentices are recruited and interviewed late-fall/early-winter and generally start early season. At the farmer’s direction, they help that farm get prepared for planting, perform planting, crop management and harvesting throughout the season, and help out with markets by working at the farmers market, doing CSA and restaurant delivery, etc. Many farms provide housing on site.

Getting a choice apprenticeship (and keeping it for several seasons) can be competitive and is utterly dependent on your attitude towards hard work and curiosity. The better established farmers take such apprenticeships to the next level where you can get exposure to that farm's business management, including planning, managing certain aspects of the operation, and a look inside "the books." You will have the opportunity to observe and learn the systems that have made that farm successful. Established mentor farmers take great pride in seeing their employees graduate to take on their own farms, and are often willing to provide good advice years into the future as you manage your own farm. Furthermore, you will meet other farmers with similar interests, perhaps future business partners as you look toward starting your own farm.

All that said, washing out after your first season is a win-win for you and the farmer. Leaving half-way through the season is a lose-lose for both. (Indeed, some farms on the west coast are rumored to have their employees sign a compensation agreement prohibiting them from taking off to go to Burning Man!)

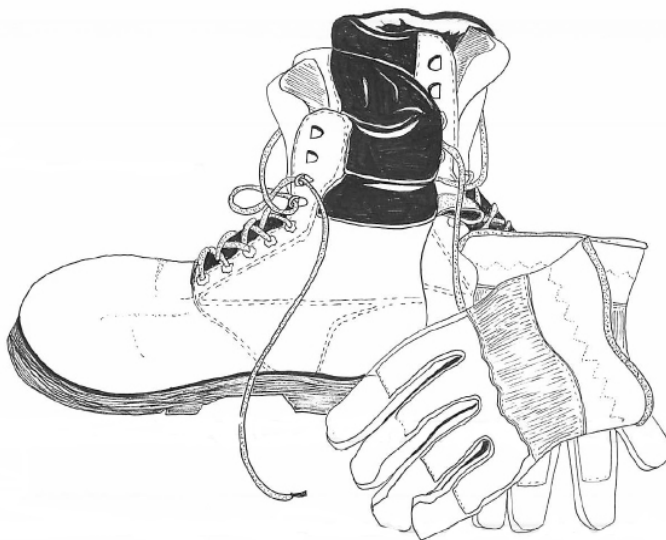
Farm Incubators

Farm incubator projects have continued to develop over the last decade. Farm incubators are generally projects managed by non-profits or public agencies that allow new farmers the opportunity to rent small patches of ground in a (relatively) controlled environment. You can get involved in a farm incubator as a green newbie, but many move to incubators as a next step after a year or two as an employee on another farm.

Participants in incubators are often required to take coursework offered by the organizers, generally during the late-fall/early-winter prior to spring planting. This coursework includes many topics on vegetable production and animal husbandry, soil

fertility and covercropping, and business skills such as accounting and management. Most incubators have equipment sharing on site, and provide the basic infrastructure such as hoop houses, deer fencing, pollinator sources (i.e. bee hives close by), irrigation and production mentoring. Participants generally have several years to work on their production skills while building their marketing skills on their own according to their goals. Three examples of such operations are the Breeze Farm in Northern Orange County, the Lomax Farm in Cabarrus County, and the Onslow County Incubator Farm. (At press time of this first edition of this workbook, a number of other projects are in development around North Carolina

with support from the Bringing New Farmers to the Table Project sponsored by NCAT and USDA NIFA.)



Conferences and Farm Tours

There are a number of conferences that are put on in the fall and winter between farming seasons, and these are great places to meet other farmers and learn from experienced farmers on

a range of topics. Two of the most established is the Carolina Farm Stewardship Association's (CFSA) Sustainable Agriculture Conference (which tends to pivot year to year between Durham, NC and Greenville, SC). Depending on funding availability, scholarships can be offered to new farmers to attend the conference. Organic Growers School (OGS) is another great conference held up in Asheville and generally tailored toward the mountain area, but the topics and concepts apply statewide, particularly in the realm of organic production practices. There are a number of other programs offered throughout the year in various counties by the cooperative extension service, Center for Environmental Farming Systems, and other groups.

Farm Tours are also valuable experiences, as they offer new farmers the opportunity to tour, hear the stories and ask questions of established operations scattered around a particular foodshed. You have

the opportunity to see the most established farms, and you have the opportunity to see farms that are in their first years of operation and working out the kinks. You can build your own tour (if you have a car), although the organizers might offer tour tracks associated with certain types of operations (i.e. vegetables vs. livestock).

Community College Education

Finally, when it comes to building on-farm skills you cannot beat on-farm experience. As noted earlier, several solid education programs have developed around North Carolina. The first and perhaps most established of these is the Sustainable Agriculture Program at the Pittsboro Campus of Central Carolina Community College (CCCC). This program offers a degree in sustainable agriculture, but also the opportunity to pick from a menu of classes one or two at a time. Many classes are offered in the evening. Topics cover a range of production topics (which can include hands-on work at the college's "land lab") as well as business management topics. Classes are normally taught by experienced farmers and other professionals in the area. Participants in these classes range from the new farmers currently working on mentor farms, to older new farmers that have recently acquired or inherited land.

These are just some of the ways new farmers build their skills, and it is hard to prescribe a sequence as you go along your path into farming. Just know that we are very fortunate in North Carolina to have so many resources available to new farmers. The only key is to take advantage of them according to your needs.

The worksheets on the following pages are designed to help you assess your current skills develop a plan for getting out there and skilling-up as you head along into farming on your own.

Apprentice's Equipment Checklist

(from the Greenhorns' *Guidebook for Beginning Farmers*, Zine Edition, 2010)

sunhat	
sunglasses	
pocketknife	
work gloves	
water vessel/camelback	
flashlight	
pruning shears	
sleeping bag	
medical kit	
work boots	
rain boots	
long underwear	
rain gear	
wool sweater	
thick work pants/overalls	
tent	
supply of high energy treats	
bike	
running shoes	
bathing suit	

*Worksheet 1.5***SKILLS AND RESOURCES ASSESSMENT****Part One: Skills Assessment**

Basic Farming Experience	Needs Attention	Passable	Excellent	Don't Know
Garden experience—specific to the region where you want to farm.				
On-farm employment experience				
Experience with livestock				
Experience with machinery				
Technical and Mechanical Skills	Needs Attention	Passable	Excellent	Don't Know
Make basic repairs to farm equipment and tools				
Fabricate new tools and restore old equipment				
Make repairs to farm buildings and structures				
Build new farm buildings and structures as needed				
Business/Financial Skills	Needs Attention	Passable	Excellent	Don't Know
Selecting/setting up a legal structure				
Online research of licensing/permit requirements				
Buying insurance				
Financial recordkeeping				
Collecting money owed				
Paying bills and taxes				
Applying for credit/loans				
Managing debt/keeping good credit score				
Designing marketing materials				
Selling yourself and your products				
Personal Preferences	Disagree	Neutral	Agree	Don't Know
I like hard work				
I can analyze and take risks				
I am a good problem solver				
I enjoy an outdoor and physical lifestyle				
I enjoy working alone				
I enjoy working with partners				
Crop Production Skills	Needs Attention	Passable	Excellent	Don't Know
Writing a crop management plan				
Preparing and planting the soil				
Harvesting and handling crops				
Understanding Good Agricultural Practices (GAP)				
Experience operating a tractor and implements				

Crop Production Skills (continued)	Needs Attention	Passable	Excellent	Don't Know
Preparing for and responding to weather events				
Managing pests and disease				
Managing soil fertility				
Livestock Production Skills	Needs Attention	Passable	Excellent	Don't Know
Soil and pasture management				
Forage management				
Hauling a livestock trailer				
Feeding and watering				
Slaughtering/processing (plus knowledge of regs)				
Waste Management				

Part Two: Resource Assessment

Personal Resources	Poor	Acceptable	Excellent	Don't Know
Ability and desire to maintain professional connections to potential customers, financiers, and service providers				
Personal financial backing and resources				
I have strong management skills (I have managed a business in the past)				
Mechanical/construction/maintenance skills				
Access to land (e.g. own, rent or family land)				
Access to equipment (own or rent)				
Flexible off-farm job				
Market Resources	Poor	Acceptable	Excellent	Don't Know
Local population (metro areas within 60 miles)				
Relative high income level of this population				
Access to nearby farmers markets, co-op, grower co-ops, restaurants, natural food stores				
Access to wholesale markets or distributors (within 60 miles)				
Potential market niches (organic, pick-your-own/ specialty markets)				
Community Resources	Poor	Acceptable	Excellent	Don't Know
Availability and quality of labor				
Affordability of local property taxes				
Zoning for agriculture				
Proximity of farm supply, dealers, vets, repair				
Proximity to meat processing				
Activity of local growers associations				
Supportive local government				
Supportive rural community and other farmers				

Worksheet 1.6

SKILL-BUILDING ACTION PLAN

Now consider the skills you marked “Needs Attention.” Of the skills you lack, which are the most essential to getting you started? For example, if your mechanical skills are poor, but you have a neighbor who will trade fresh eggs for repair work, then you might decide it’s more important to focus on getting your accounting skills up to snuff first (and to ask your neighbor if she can teach you something about mechanics along the way). Below, prioritize three skills to improve in the next six months. Write down specific action(s) you will take to gain competency in each one.

Example: “I need to improve my skill in managing soil fertility.”

Action Plan:

Take continuing education class	Where: _____	Cost: _____
Read a book	Title: _____	
Read online	Sources: _____	
Learn from mentor farmer	Who: _____	
Get an on-farm apprenticeship	Who: _____	When: _____

Priority 1: “I need to _____.”

Action Plan:

Take continuing education class	Where: _____	Cost: _____
Read a book	Title: _____	
Read online	Sources: _____	
Learn from mentor farmer	Who: _____	
Get an on-farm apprenticeship	Who: _____	When: _____

Priority 2: “I need to _____.”

Action Plan:

Take continuing education class	Where: _____	Cost: _____
Read a book	Title: _____	
Read online	Sources: _____	
Learn from mentor farmer	Who: _____	
Get an on-farm apprenticeship	Who: _____	When: _____

Priority 3: “I need to _____.”

Action Plan:

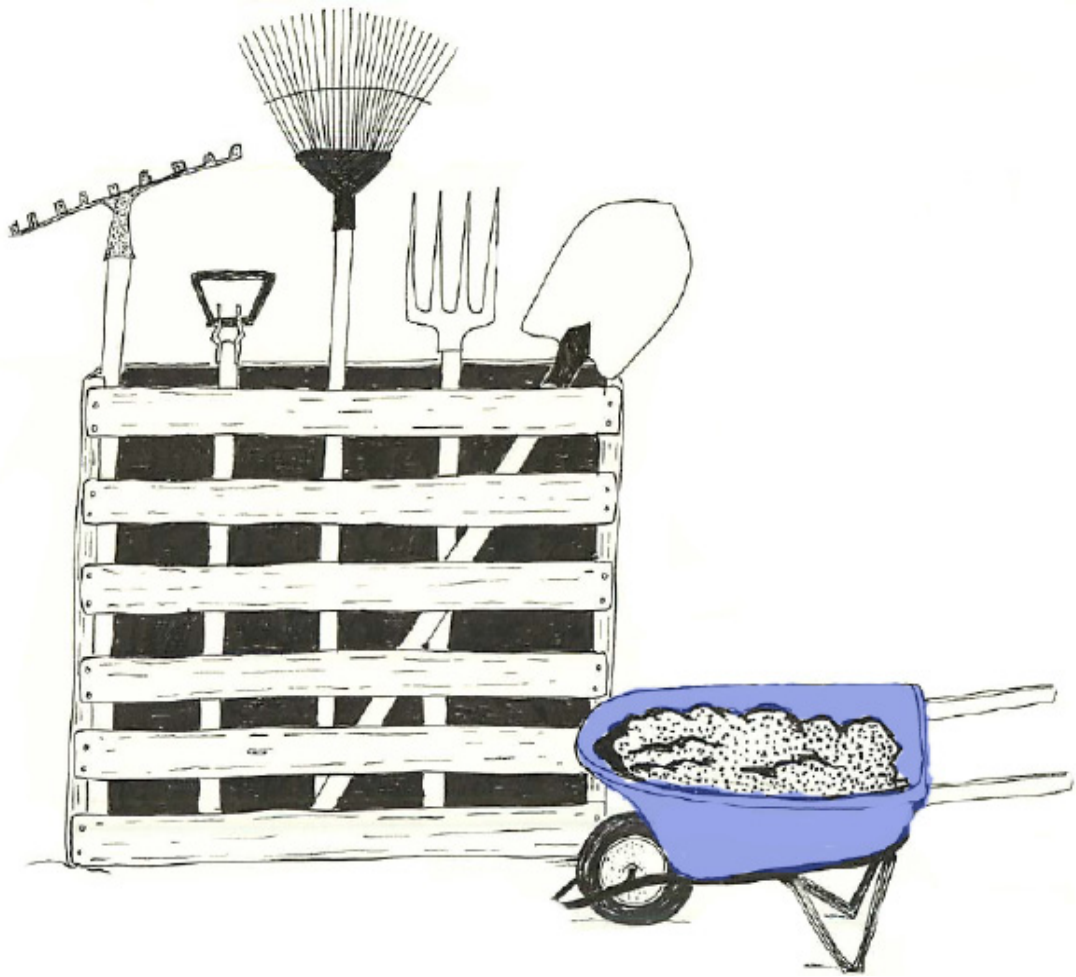
Take continuing education class	Where: _____	Cost: _____
Read a book	Title: _____	
Read online	Sources: _____	
Learn from mentor farmer	Who: _____	
Get an on-farm apprenticeship	Who: _____	When: _____

NOTES

Section Two:

Pencil to Paper

Fun with Numbers



THE FARM BUSINESS PLAN

A farm business plan is simply the plan you have in your head about what you will produce and how you will make money at it. It becomes a “proper” business plan when you invest the energy to write it down on paper. In addition to its role as an internal guide for the farm, a business plan may also serve as a proposal for financing—be it from a bank, the FSA, or family and friends.

Why Create a Business Plan?

A written business plan allows you to see how your ideas fit together, to identify the gaps and to fill in the details. Listing out your projected income and expenses gives you (and your creditors) a sense of your business’ potential to make a profit. Once the numbers are laid out it may prompt you to alter your plans until you have worked out a realistic strategy for achieving your income goals, making your vision a reality, and following your “mission” or “purpose” in farming.

In addition, your business plan will be your guide throughout the year, especially during the intensity of the growing season when you barely have time to think (let alone to plan). For instance, your vision and mission statement can guide you and help you make tough business decisions. Go back to your business plan at the end of each year; it will give you a chance to reflect on what went well, what needs to change, and to revise your business plan and farm plan accordingly.

Finally, your business plan is an invaluable resource as you consider new or innovative practices on your farm. There will always be risk in change, but a business plan can significantly reduce the financial risk by estimating the profitability and feasibility of your ideas. A business plan will help you evaluate production alternatives, new market opportunities, and unproven management practices. As Sustainable Agriculture Research & Education (SARE) explains: “Producers considering innovative management practices and immature markets use business plans to map out strategies for taking advantage of new opportunities such as organic farming, on-farm processing, direct marketing and rural tourism. A

business plan helps producers demonstrate that they have fully researched their proposed alternative; they know how to produce their product, how to sell what they produce, and how to manage financial risk.” (SARE “Building a Sustainable Business”)

Writing business plans can be mechanical, and many avoid the task. Just consider it part of your exploration in to the myriad of business and resource issues you are going to be encountering along the way. As Dwight Eisenhower is supposed to have said, “The Plan is nothing. Planning is everything.”

What’s In A Business Plan?

Depending on its intended use, a business plan may contain any combination of elements. If you plan to use it only as an internal reference document, a business plan may take its simplest form. Additional elements can be added to meet the needs of a potential lender. Below is an outline of a variety of elements. Also see the sample business plan included in the Appendices at the end of this workbook.

Essential elements of a good business plan:

1) *Mission, Vision, & Goals*

This includes an explanation of why are you farming, what drives you, and what you hope to achieve through a career in farming. This is covered in *Envisioning Your Farm*.

2) *Description of services/products*

This includes what products and services you offer, both now and what you hope to do in the future.

3) *Marketing plan*

This involves some market research. Include in your plan where, how, to whom, and at what prices you intend to sell.

4) *Production plan*

This includes your planting/harvest schedules, fertility methods, pest management plan, irrigation, suppliers, rotation plan, number of acres to be used, etc.

5) *Projected income and expenses*

It is important to determine if your farm will make money—projecting your income and expenses will help you estimate if your plan will make a profit.

Additional elements (as needed):

1) *Executive summary*

This is a summary of your business plan and why it's likely to succeed.

2) *Business description*

Describe the location, history, values, land, products of your farm business.

3) *Resume*

A description of the farmers' relevant experience/education.

4) *SWOT analysis of the business*

- **Strengths** (such as organic certification, proximity of markets, farm teams' abilities/skills)
- **Weaknesses** (needed skills that nobody on the farm team has, limited availability of labor)
- **Opportunities** (such as market niches and trends)
- **Threats** (such as competitors, weather, economic conditions)

5) *A resource inventory*

This includes the members of your farm team and their skills. Also your land, accounting, experience, financial, legal, and technical resources. (See *Skills and Resource Assessment* chapter).

6) *Financials*

This includes how much money you need to borrow and what for, monthly cash flow budget, cash flow statement, balance sheet, income statement. (See chapters on financials)

7) *Contingency plan*

Describe the risks your farm faces, such as injury/illness of a farm operator. Is there someone who could step in on a temporary basis if needed? What

plans are needed for other sorts of unexpected events?) (See *Risk Management* Chapter)

8) *Exit strategy*

Describe when you see yourself retiring or transitioning out of farming, or just bailing if it's not working for you. Do you expect to transition to a new farm owner/operator? Liquidate assets?

Business Plan Resources

- ATTRA resources
Beginning Farmer Business Planning Resources. <https://attra.ncat.org/oasdf/>
- SARE's "Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses"
- Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses. Minnesota Institute for Sustainable Agriculture.
- Fearless Farm Finances: Farm Financial Management Demystified is a very useful book published in 2011 by the Midwest Organic and Sustainable Education Service (MOSES).
- National Agriculture Library's Start to Farm resources (www.start2farm.gov)
- Primer for Selecting New Enterprises for Your Farm. Tim Woods and Steve Isaacs. University of Kentucky 2000. (www.uky.edu)
- Starting an Ag Business? A Pre-Planning Guide by Steve Richards. Cornell University Department of Applied Economics and Management 2004. (www.dyson.cornell.edu)
- Sustainable Vegetable Production from Start-Up to Market by Vern Grubinger, 1999. PALS Publishing. (www.palspublishing.cals.cornell.edu)
- Northeast Beginning Farmers Project, Business Plan Templates (nebeginningfarmers.org)

PLANTING WHAT YOU CAN SELL: AN INTRODUCTION TO MARKETING

Marketing is a critical part of your farm business. You can grow high quality, beautiful produce, but if you haven't spent time figuring out where and how to sell it, you won't be in business very long. It's important to think about how you are going to sell those farm products, and make a plan for it, before you put a single seed in the ground.

First Steps

Start with market research. Market research should examine the existing marketing channels in your area, assesses the competition, look for areas of unmet demand or niche opportunities, and consider the demographics of your potential customers.

For example, if you are considering direct sales to customers through local farmers markets, you might start by attending several markets and making careful observations. What product volume are vendors selling? How many customers come through the market in a day? What kind of products are other vendors selling? Do you notice any products that are not being sold? What could you grow to distinguish you from other vendors and enrich the market overall?

You can conduct similar research at local grocery stores and co-ops, farm-to-fork restaurants, and local foods aggregators such as CSA delivery services. Ask the grocery store's produce or meat manager what products they have trouble sourcing locally. Ask the restaurant's chef if there are any local ingredients they would like to feature on their menu. Your goal is to develop a sense for the opportunities that exist in your area. You're not going to start growing mangoes in the red clay of central North Carolina, but you should be able to identify opportunities at the intersection of unmet market demand and what's feasible on your farm.

Start looking at demographic data for your area. If you plan on selling directly to consumers, who are

these consumers? Are they likely to be professionals with disposable income and an interest in more exotic and expensive offerings? Are they more likely to be working class folk looking for the staples? There are many ways to get a sense for the demographics of your potential customers. The US Census Bureau maintains an online database of useful data, viewable on a very fine scale (e.g. by individual neighborhood). But observations also play the key role. Observe the kinds of customers who attend the local farmers markets, grocery stores and restaurants that you are considering.

You should have a marketing plan before you put a single seed in the ground

Approaching Markets

After you've identified some markets you might be interested in selling to, call them and ask them questions about how it might work. Here are some good questions to start with:

Are you currently buying products from local farmers? If not, are you interested in doing that?

What products would you be interested in buying from a local farmer? What are you missing?

What new products do you think are emerging trends?

It may also be useful to ask them what is important to them about their food. Is it just price, or are there other things too? This last question is significant, because it gives you an idea of what your potential customers might value about their food.

A lot of local farmers seek to produce unique products that are different from typical stuff you would get in a grocery store. These are called "Niche Markets." As mentioned earlier, a niche is defined as a distinct segment of the market. It may be a specific crop, or a time of the year, or it might even be an activity that someone needs produce for, like freezing and canning. A niche is simply a demand, a

need or a value in the community. Some farmers find success by focusing on a particular niche and catering to those customers. Spend some time thinking about what other things your customers might value. Is there a particular “niche” in your community that you might be able to fill?

Pricing

So what about price? Is offering a low price considered a niche? While most customers will value a low price, low prices are not a niche. Your price comes from knowing how much it costs you to produce your product. Competing only on price can be dangerous. In order to offer lower prices than what you see in the market, you have to know exactly what it costs you to produce your products. Do you know how much it costs to grow one head of broccoli? If it costs you \$2.00 to grow that broccoli plant, and you sell it for \$1.00 at the market, you are losing money by selling it.

Figuring out what it costs you to produce your crops takes time, and very good recordkeeping. Are you a good record keeper? Do you know how much of your expenses (like your fuel, your labor and your water) are going to produce a particular crop? (See the recordkeeping section elsewhere in this workbook).

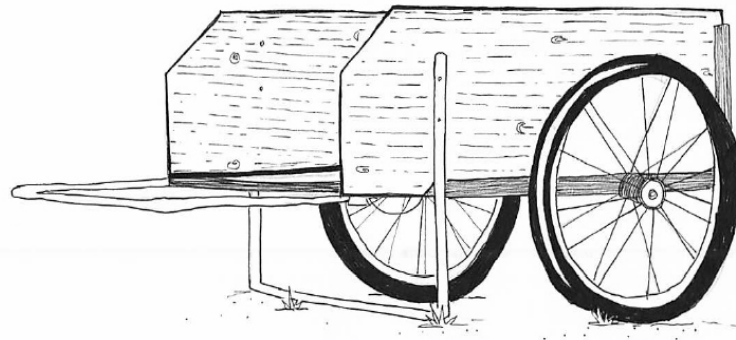
Most beginning farmers don’t know exactly what it costs them to produce their crops their first year, or even first few years, until they have established their systems and are keeping good records. This is why trying to offer a lower price than other farmers your first year is not a good idea. Instead, a successful farmer will find creative ways to provide value to his or her products that customers are willing to pay more for, such as the niches that we talked about previously.

Finding & Keeping Your Customers

This leads us to the next basic marketing concept, which is how to find customers, and how to build relationships with these customers. Many people want to know more about who is growing their

food, where it comes from, or why it is different. As you do your market research and meet people, they will want to know about you, your farm, and your produce. How will you make sure that they remember you?

Start with a business card. One of the simplest and most effective things you can do is make a business card. This is an easy way to help people remember who you are. When you meet a buyer, or bring in samples, you should hand them a business card immediately. This way, they can associate your name with your products, and have a way to contact you if they want to purchase your products.



You will want to make sure you have a reliable way to communicate with you on the card. You can make a card using an online business card website. These services provide a simple template, allowing you to take

an image from your farm and apply it to the card. You can get started with a couple hundred cards for \$20-30.

Tell your story

David Visser, a marketing specialist in California, notes that more and more people want to know where their food comes from, and who grew it. Many seek out products that are local, or organic, or grown on a small farm or by a family, or by an underrepresented or immigrant farmer. They want to know your story. David recommends that you write your story down and practice telling it as often as possible. He says that the purpose of a written document is to have something you can give to buyers that will make them want to keep talking to you, and also remember you. You don’t have to cover everything. You need a unique marketing story that is short and persuasive.

Build trust in your practices and your product. The techniques mentioned above tell customers who you are and keeps you in their mind. But the real secret to building relationships is trust, which in the farming world, translates into two things: following through

with your commitments, and producing high quality products.

Following through on your commitments means that you do what you say you are going to do. Arrive on time, keep your word, and return a buyer's phone calls immediately. This is how you keep your customers happy, and build a good relationship with them. This may seem very intuitive, but it is easy to forget how important it is in the frenzy of the season. Some buyers don't want to work with small farmers because they have had bad experiences. If you agree to sell to someone, they need to be able to count on you to provide their product. Over time, this creates trust.

Marketing Channels

There are at least thirteen common ways for most farmers to sell their products. The National Center for Appropriate Technology (NCAT) has developed thirteen "Marketing Channel Tip Sheets," available in the marketing section of their ATTRA website. The tip sheets are designed to help you think about each marketing channel individually and how well it might fit for your farm.

Each tip sheet has a similar format. Up in the right corner notice the picture with the carrots and dollar signs. This indicates the quantity you might expect to sell through this market (one carrot means you would sell smaller quantities, and more than three carrots at the bottom means you could sell a large quantity). The dollar signs indicate the level of prices you can expect. One dollar sign means you can expect to receive lower prices, and 3 dollar signs means you can expect to get higher prices for your product. In

this particular marketing channel, which is a CSA, you would usually sell a smaller volume of product directly to the customer, but because there are no middlemen involved in the sale, you can expect to receive a higher price for your product.

In addition to letting you know which volume and price to expect, the sheets outline the advantages, some things to consider and tips for selling through this channel.

The tip sheets also include questions to ask yourself before entering this market. Try to answer these questions for each tip sheet to get a sense of whether this type of marketing channel is right for you or not. We have also developed a list of resources if you want to learn more about this type of marketing channel.

Most farmers sell through more than one channel as a safety measure, but trying to manage more than 4-5 different types of marketing channels can take a lot of time and resources. You can use these tip sheets to help narrow down your marketing channels to a few that are best suited for your farm.

Marketing Plan & Marketing Assessment

Now that you know some basic marketing concepts, and have looked at different types of marketing channels that interest you, it's time to work on drafting your marketing plan. You will find a Marketing Plan Worksheet at the end of this section. Use it to help you think about and outline some of the things that will go into your marketing plan. Once you have filled out the worksheet you should be able to complete your marketing assessment for your business plan. Assess how your proximity will affect your markets. Your assignment is to:

Write a list of 2-3 markets you intend to pursue in your operation.

Write a strategic assessment of your competition in this market.

Write what important trends will affect your success.

How will you set yourself apart in these markets?

To help answer these questions, use the worksheet on the succeeding pages.



SKETCHING YOUR MARKETING PLAN

Use ATTRA's Marketing Channel Tip Sheets (<https://attra.ncat.org/marketing.html>) to help you navigate this worksheet. Answer the questions in this worksheet based on what you've read in the previous narrative and from the tip sheets. Finish this worksheet, you'll have a draft marketing plan.

The best marketing channels for your farm will depend on what kind of work you like to do, the size of your farm and where it is located in relation to potential customers, and other factors that vary from one farm to the next. As you consider which marketing channels to pursue, think about which market outlets will allow for the best combination of the following criteria:

- Location
- Low risk
- High potential profit
- Low associated costs (labor, supplies, or equipment)
- Enjoyable to you and/or your farm business partners

Section 1: Choosing Your Marketing Channels.

List what you would consider to be the best three (3) marketing methods for your farm. Remember that having multiple marketing outlets is an excellent risk management practice. List the market channel that you would use as your main method of marketing first:

a) _____

b) _____

c) _____

Now, why did you choose these marketing channels? Give a detailed explanation for your first choice especially.

How will you use the other (secondary) marketing methods listed above in combination with your main method? (For instance, perhaps you plan to produce more than enough for your main market to ensure a steady supply, but you keep the secondary markets open to take surplus produce as needed.)

Section 2: Your Market, Your Goals, and Your Resources

How do your goals, location, and resources influence how you will sell your products? Are the markets you've chosen consistent with your work-style goals, your life-style goals, and your available resources, including labor? Keeping these things in mind, answer the following questions:

- 1) How will the markets you've chosen impact your time, both on the farm and your free time?

- 2) Do you need people skills to sell at these markets? If so, do you have them?

- 3) How much labor do you need to harvest for and perhaps staff these markets?

- 4) How far away from these markets are you and how much time and money will it cost to get there?

- 5) What are your financial goals, and will these markets help you meet them?

- 6) What is the size of your farm, and will you be able to supply enough for these markets?

Section 3: Challenges

What are the biggest challenges you expect to encounter in developing these marketing methods?

List 1 or 2 ways you will address these challenges.

a) _____

b) _____

Who or what will be your biggest competitors?

How will your product or service be unique to overcome your competition?

Section 4: Getting Started with Your Markets

What are the first 3 steps you need to take now to develop these marketing channels for your farm business?

1) _____

2) _____

3) _____

Congratulations! You've made the first step in outlining your marketing plan for your farm business. To develop your plan further, use the other resources in this workbook.

NOTES

ABOUT RISK MANAGEMENT

There are risks in any deliberate endeavor, and especially in farming. You can never completely prevent the possibility of a catastrophe bringing an end to your farming effort. The difference in how risk affects your success comes down to whether you willingly disbelieve that bad things will happen, or pro-actively face risk head-on. You can make the choice not to ignore unfortunate possibilities: bad weather, employees getting hurt, unsanitary conditions. You can also choose not to deliberately ignore those things that can happen in anyone's life - disagreements, divorce, bad luck on the road - and even take steps to minimize their impact on you, your farm and those you care for.

Your Risk Profile

Part of knowing what you are capable of when it comes to risk management is an understanding of your attitude toward risk. You are not a passive player and you can change your attitude, but first consider how you have approached other endeavors in your life and how well you came through them.

Read over the chart below to get a sense for your risk profile.

Your risk attitude influences how you think about risks, but it does not protect you from risk. In other words, just feeling like a risk adventurer does not give you any magical mechanism for coping with a bad year. There may be other people involved, like family members or your farming partner, who do not share your feelings about risk. The next section introduces you to the basics of risk analysis, which will provide you with a framework to analytically manage risks to your farm and your self.

Basics of Risk Analysis

Reader, meet your basic three-step risk analysis. Your new friend will help you analyze and prioritize the risks faced by your farm.

For any given risk, you will first judge the chances of occurrence. In some cases, the **probability** that an event occurs is out of your control (e.g. bad weather). In other cases, you will have a lot of control over whether an adverse event happens at all. Next, judge the probability that—if the event occurs— it will cause a **disruption**. This is an assessment of the direct effects of the adverse event you are considering. Finally, predict the **costs** of disruption. This requires

What Is Your Risk Type?	
Risk Avoider	You are a very cautious risk taker. You either don't take chances, or you expend a lot of resources protecting yourself from adverse consequences. Unknown ventures scare you. Your farm will tend to follow a well-established slow-growth model.
Risk Calculator	You understand the concept "nothing ventured, nothing gained." While you try to be realistic, you can recognize risks and gather information to try to manage risk and minimize the impact of an adverse event. You probably devote more resources towards a bigger pay-off than to over-protecting yourself from risk.
Risk Adventurer	You find risks challenging and exciting. This causes you to spend less on management and mitigation. You will get by on good luck. Perhaps you don't find risk to be a challenge, but you are focused on certain aspects of farming and trusting to chance.
Risk Daredevil	You might be a nice enough person, but you probably ignore the advice of other more experienced farmers who, failing to teach you anything, abandon teaching you altogether. Perhaps experience and failure will help you move out of this category.
Adapted from <i>How Risk Tolerant Are You?</i> by Wen-fei Uva and Joanna Green, Cornell University	

you to think about how a disruption would affect your farm’s bottom line, your own goals, and your family.

The simple framework above provides a powerful tool to document, analyze and prioritize your risks. This risk management strategy focuses on the types of risk management tools available to you. The risk management worksheet at the end of this chapter will help you create a risk management plan that prioritizes all the risks you may face. Once you have prioritized the risks to your farm and family, you will make a plan for addressing them using the tools that you will learn about in the rest of this chapter.

Using the Risk Assessment to Take Action

This framework will also help you to address each risk on your farm. Each element of risk assessment—its probability of occurrence, the probability that its occurrence means a disruption for your farm, and the cost of that disruption if it occurs—is usually best addressed by a specific type of risk management activity. So, if you are a risk avoider or risk calculator, you will usually favor a “preventive” tool if your goal is to reduce the probability of an adverse event occurring. Furthermore, often the best risk management begins with Prevention, continues with Planning & Investment, and uses Insurance only when necessary.

This should all be rather intuitive. It is almost always easier and cheaper to lower the probability of adverse events than to address them once it is too late. Likewise, it is almost always easier and cheaper to plan for disruptions with documentation and investment than to face the full cost of such a disruption. Finally, some risks must be insured against—that is the final step.

Managing Risk—Drought Example

Say you’ve already identified drought as a high priority risk, using the risk assessment protocol above. Now it’s time to think about how you will address the risk in a cost-effective way.

Begin with the first tool: prevention. Ask yourself: what can I do to prevent drought? Unless you have a serious ego complex, you probably agree that you alone cannot prevent a drought from hitting your farm. Perhaps the only thing you could do is avoid buying land in the desert, where it doesn’t rain so much. If you are considering farming in the desert, you may want to return to Section One: “Am I ready to Farm?”

Since you cannot prevent a drought, you should next consider what planning and investment you can undertake that would significantly decrease the probability of a disruption. In the case of drought, the disruption is going to come in the form of crop loss. Planning and investment can go a long way to reduce the crop loss you will suffer in drought conditions. For example, many crops are available in drought-tolerant varieties. When you make your crop plan for the year, you might considerZ planting some or all of your rows in varieties noted for their drought tolerance. Second, you might consider investing in an irrigation system depending on what you’re growing. When drought comes, an irrigation system will limit or even eliminate crop loss, not to mention give you an edge over the competition even in good years.

Finally, having exhausted your imagination for prevention, planning and investment, you want to investigate how insurance can mitigate—that is, reduce—the cost of the disruption if it occurs. In this case, you would think about how insurance might help you out if your farm revenue plummets because of crop loss. Crop insurance pays your farm a percentage of the revenue that you would have made if the drought had not occurred. As we’ll see, there

Risk	Probability of Occurrence	Probability of Disruption if Event Occurs	Cost of Disruption	Overall Risk
Liability Lawsuit	Depends on Operation and Prevention	Medium	High	Medium
Stubbed Toe	High	Low	Very Low	Low
Drought	Medium	High	High	High
Abduction by Aliens	Extremely	Very High	Very High	Negligible

are insurance policies to cover just about every aspect on your farm. You will find that many of them—and this includes crop insurance—are not necessary and probably not advisable for beginning farmers.

Three Tools of Risk Management

The remainder of this chapter is organized in three parts. The goal is to introduce you to the three types of tools mentioned in the drought example: Prevention, Planning and Investment, and Insurance. There are many risks that are best dealt with, at least at first, with common-sense prevention. These include unsafe working conditions, hazards on your property, poor handling of produce, etc. There are other risks that you can address through planning and investment—oftentimes, these risk management tools are used in concert with the risk prevention strategies. Finally, you can mitigate possible losses with the understanding that, in many cases, prevention and planning simply cannot protect you and your farm from the vicissitudes of fate. In our society, this usually means purchasing an appropriate suite of insurance policies.

Risk Management Strategy: Prevention

Learning about Prevention will help you:

- Reduce risk of injury on your farm
- Improve employee/visitor safety
- Protect customer health (and reduce your liability)

On Farm Hazards

If you have people coming to your farm, say on a farm-tour or for a u-pick crop, then risk management begins with keeping your property in good repair. Your goal here is two-fold. First, to keep you and your visitors safe as they use and enjoy your farm property. Second, to limit your liability in case someone gets hurt.

Begin this process by taking a walk around your property and listing out anything you might consider a hazard. These might include aggressive animals, manure pits, moving vehicles or equipment parts, etc.

Next, prioritize the risk of each hazard based on the notion of “premises liability”: that is, the risk that you will be held responsible if someone gets injured on your property.

To understand premises liability, it is important to understand the concept of “negligence” (see sidebar). Being “negligent” is what makes you liable if someone gets hurt, and allows the injured party to sue you for damages. So, Goal #1 is to avoid negligence.

“Negligence” in Legal Terms

In legal terms, “negligence” depends on a standard called “duty of care,” which amounts to what you have the duty to do in order to avoid being negligent. Importantly, your “duty” varies depending on who is on your property. Under common law legal principles, there are three general types of people on your property:

You have the lowest “duty” to TRESPASSERS; if you’re not aware of their presence on your property, you are generally not liable for their actions on your property.

You have a higher “duty” to LICENSEES on your property—that is, someone whom you have allowed on your property for their enjoyment. For example, if you allow a neighbor to come fish on your pond, they are a LICENSEE. Your duty is to warn them of any hidden dangers on your property that they might not be aware of.

You have the highest “duty” to INVITEES—that is, anyone you invite to your property for your benefit. This includes any visitor that pays to attend an event on your farm, or anyone you invite to your property to help with your farm operation (employees, lawyers, crop advisors, accountants, etc). For INVITEES, you have a duty to provide a safe environment, equipment, facilities and training.

In North Carolina, the two latter categories have been merged to the same standard of care. In other words, whether you actually benefit from the person’s presence on your property is arguably irrelevant.

Begin by listing the potential hazards on your property. Some examples include:

- Broken fences
- Unsecured chemicals, weapons, or equipment
- Water features, such as a pond

Once you have listed and prioritized hazards on your farm, get to work fixing what is broken, fencing in any hazards you cannot remove, and using signage to warn visitors of hazards that they of which they might not be aware.

Employees

Employees are considered a special class of “invitee” discussed in the sidebar above. In addition to your “duty” to invitees, you assume extra duties when it comes to employees. As a beginning farmer, you might not have any “employees” other than yourself and perhaps your partner. Even so, now is the time to begin thinking about how you will manage the risks you take on when you hire additional people, even if they are only seasonal labor.

Even if you have zero employees today, or any plans to hire them in the near future, there are several steps you can take now to prepare for the day when your farm expands and you being to hire.

First, provide employee training. Make sure you and your employees train to use machinery, chemicals and tools in a safe way. You should keep a log of what training has been provided to which employees, and have them sign off on the training they have received. This practice will ensure good recordkeeping and provide you liability protection if one of your employees gets hurt on your farm.

Second, create an Employee Handbook. Use an employee manual to clearly state your responsibilities to your employees, your expectations of them, and their responsibilities (especially with respect to safety). To help you get started writing your employee manual, the resources section contains a link to the University of Missouri’s sample handbook, which you can edit to meet your needs. [<http://agebb.missouri.edu/commag/swine/hdbook.pdf>]

Preventing Harm to Consumers

Product liability insurance and Limited Liability Company (LLC) status can help protect your personal assets in case someone gets sick from food traced back to your farm—these tools are covered later in this chapter. However, if a foodborne illness is traced back to your operation, your farm may never recover, no matter how much insurance you have. Who wants to buy food from a farm that has been tainted by an outbreak of foodborne illness?

The best precautions start on the farm: research best practices for growing, handling and storing your product. As they say, An ounce of prevention is worth...a pound of you not going out of business because some lady at the market didn’t wash the collards you sold her.

The website onfamfoodsafety.org has an excellent online tool that will guide you through the creation of your own food safety plan. While an important document for anyone selling food directly into the marketplace, this document will also bring you much closer to Good Agricultural Practices (GAP) certification. GAP certification opens up new markets for your products, such as State institutions (prisons, schools) and universities.

Risk Management Strategy 2: Plan & Invest

This section will help you:

- Plan for uncertainty
- Think of capital investment as a risk management strategy
- Begin planning for long-term uncertainty (e.g. divorce) and certainty (e.g. retirement, death)

Natural Crop Insurance

There are insurance policies to protect against lost crops and farm revenue. Unfortunately, crop insurance is far from a panacea, and an unviable option for many beginning farmers (see the next section on insurance).

For now, just consider that beginning farmers often find that their best crop insurance is not purchased in the form of a policy. Rather, it is purchased in the form of careful crop planning and capital investments.

The oldest form of crop insurance is the natural kind: Diversify what you grow. Corn farmers in Iowa can afford to plant feed corn fencerow to fencerow on 2,000 acres because the government will compensate them if drought ruins their crop. As a beginning farmer in North Carolina, you cannot afford to think like that because, more than likely, the government will not care if your acre of zucchini withers and dies. Instead, consider planting a diversity of crops that tolerate different weather conditions so that, even if one crop fails completely, you still have something to bring to market. For each crop you plant, consider planting varieties with different maturation rates. And finally, use succession planting to spread your risk over an entire season.

Investment

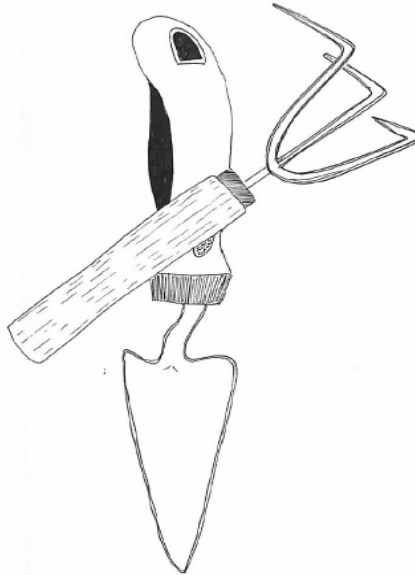
Next, think about how you will protect your plants from a bad weather event, say a late frost or a nasty drought. What capital investments can protect your crops and your harvest when bad weather happens? For example, how can hoop houses, row covers, irrigation equipment, and refrigeration facilities provide a measure of insurance against bad weather? Irrigation equipment can be costly up front, but provides insurance against drought years and increases yield even in favorable conditions.

Long-Term Planning

The “planning and investment” tool can be used to plan the future of your farm. Planning for the future of your farm is almost certainly the hardest—and arguably most important—risk management tasks that you will face. Several factors make this kind of planning difficult. First, it requires planning for a future that may be far off, and therefore highly uncertain. For example, most beginning farmers in their twenties and thirties do not want to think about the possibility of death, let alone begin planning for it. (There is nothing like getting out of the field after a 12-hour day, sweaty and hungry, and asking your partner to join you by the fire to plan for your own deaths.)

This type of planning is also difficult because it requires sobering—and sometimes awkward—conversations. For example, it is understandable that many beginning farmer couples would avoid talking about what happens to the farm if they decide to split up 5 or 10 or 15 years down the road. On the other hand, setting clear expectations (and putting them in writing) saves countless couples the inevitable legal fees and added heartache of a contentious separation involving shared real estate and business assets.

No one wants to think about the death or dissolution of their farm before they have planted a single seed, but this is a chapter on understanding risk management as a concept. Here are a few unsavory possibilities: you die; your partner dies; you divorce your partner; you give up on farming altogether. Begin thinking about these possibilities as early as you can stomach; this work is necessary to protect the long-term health of your farm.



Once you spend some time thinking about the future of your farm there are preliminary steps you can take to manage these risks in a thoughtful and intentional way. The first step in this kind of planning is to have conversations with the people closest to you—your business partner, life partner, and family. Discuss how you see the farm growing over the next decade. Take a deep breath and start a candid conversation about what would happen to the farm if you and your partner split up, if one of you died or became seriously incapacitated, and what would happen if one of you decided to get out of farming. For the time being, these conversations are probably enough. As your farm enterprise becomes more established, you can capture what you learn in these conversations with legal documents.

Attorneys use a suite of legal documents to help ensure that things go relatively smoothly (i.e. at lower cost) after major life changes such as divorce, death or a decision for one partner to give up farming. Depending on your age, farm and partnership situation, these may include healthcare powers of attorney and living wills in case you become incapacitated, wills and trusts to pass on

your assets if you die, and operating and buy-sell agreements to spell out what happens if you or your partner(s) want to exit the business.

Once you have a solid grasp on how you would like to handle long-term risk, it is probably time to sit down with a lawyer and discuss the legal options that can help make sure your vision becomes reality when things change down the road. The next chapter includes worksheets to help you prepare for your first meeting with an attorney.

Farm Structure

Consider another great application of the planning and investment tool: choosing a farm structure. How you structure your farm is a great example of a risk management tool. Here, “structure” does not mean the physical layout of your operation, but the legal entity that you choose to conduct your business. There are many considerations in choosing a farm structure, some of which are listed in the table on page 66. For now, concentrate on one aspect, Liability. Think about how your risk tolerance, farm goals and individual capacities would help you weigh your options.

Most farmers will begin as a sole proprietorship or, if you are farming with a partner, a general partnership. There are no legal documents to operate these business types, and any income from your farming enterprise is taxed only once as personal income. These are the “default” farm business structures. From a liability perspective, notice that this “default” option means that you (and your partner or partners) are personally liable for any debts that the farm accrues. So, for example, if someone is injured on your farm and a court awards a settlement, your personal assets can be seized if the farm cannot afford to pay the settlement amount.

Contrast this arrangement with a more formal farm structure, such as a Limited Liability Company, or LLC. Creating and operating an LLC requires you to file paperwork with the state, pay annual fees and file an annual report, and (most likely) pay an attorney to help you draft the paperwork. On the other hand, LLC’s can protect your personal assets from debtors so that only the assets owned by the farm are “at risk.”

As with most risk management decisions on your farm, you can change the nature of your farm’s legal structure as your farm grows and your goals and risk tolerance evolve. Beginning farmers with a small operation and few personal assets often find that a sole proprietorship or general partnership meets their needs — after all, they have little to lose and may lack the time and money to manage a more complex business entity. As the farm grows, expands into new markets and your personal wealth grows, you may decide to form an LLC or even a corporation. Liability is only one aspect of this decision; you may find that you are ready to grow your farm using money from investors, and that an “S Corporation” meets both the financial and liability risk management goals.

As with all risk management decisions, start with the question of what could go wrong, how it would affect your operation and your mission, and what you can do to address those issues. Once you highlight the most important risks, consult a table like the one shown here to help you choose a legal structure that best addresses those risks.

Risk Management Strategy 3: Insurance

At the end of this section, you should be able to...

- Wrap your head around available insurance policies
- Weigh insurance against investment
- Prioritize among types of insurance to meet your goals

There are many types of insurance that a beginning farmer could buy. The question you need to ask is: which insurance will help meet the goals for my farm and my family? To answer this question, start by considering what unfortunate events you could not overcome financially. In other words, what could happen that would sink your farm and/or your family? Those are the risks that insurance protects against best.

Crop Insurance

It is perhaps the most prevalent and confusing insurance for new farmers (for all farmers, in fact). Here’s the bottom line: For most beginning farmers, crop insurance does not make financial sense. Few insurance products exist to serve beginning

farmers, especially those with smaller and diversified enterprises. Although this is changing, and it is worth staying up to date on new insurance programs coming out of the USDA's Risk Management Agency.

AGR-Lite ("Adjusted Gross Revenue Lite") is a USDA-subsidized "whole-farm revenue-protection plan" designed specifically with smaller, more diversified farms in mind. However, AGR-Lite requires five years of production history demonstrated with Schedule F's, which is the IRS form you will be filing as a farmer.

Ultimately, beginning farmers will need to decide whether or not to insure their crops. Even if you find an insurance policy that will cover your farm—given its size, the crops you grow, and the age of your farm—take a step back and consider how else you could spend the money you would otherwise be spending on crop insurance premiums. Would you rather put that money toward a new tractor? Toward a new high tunnel or irrigation equipment? Capital investment is another form of risk management, and one that pays dividends if the weather is good or bad. Start by talking to your county extension agent or

FSA representative. Find out what crop insurance is available, and then weigh the costs and coverage that these policies offer against the benefits of investing that money elsewhere in your operation.

Liability Insurance

Beyond crop insurance, liability protection may (or should) be a top concern for you as a beginning farmer.

"General liability insurance" is your first line of defense regardless of what other legal entity protection you have established. General liability insurance can cover everything from fire and flooding on your property to liability if someone gets injured on your farm to theft. It CAN cover these things, and that is the key. What your general liability insurance covers depends on one thing and one thing only: what is written in the insurance policy. The best thing you can do to make sure that your farm has the level of coverage and scope of protection you want or need is to sit down with your insurance agent and work through the details of your policy. Make sure that they understand your whole operation—what and where you farm, all of the special circumstances of your operation, and the kinds of things you want

General Liability Insurance	Covers injuries to people and property for which your farm is judged liable and mitigates your losses from lawsuits
Automobile Insurance	Covers vehicle damage while in your vehicle or to another vehicle while traveling
Home Owners Insurance	Typically covers fire, theft, personal property, lightning, riot, aircraft, explosion, vandalism, smoke, theft, windstorm or hail, falling objects, volcanic eruption, snow, sleet, and weight of ice. Usually flood and earthquake need to be purchased separately
Farm Insurance	Covers barns, rental housing, equipment, animals, and other farm assets
Workers' Compensation Insurance	Covers medical and wage for employees who are hurt working on your farm
Product Liability Insurance	For damages that may arise from the consumption, handling, use of or condition of products manufactured, sold, handled, or distributed by your business
Contract Liability Insurance	Covers the assumption of the liability of another party through a contract or facility use agreement. For example, you may be required to provide a certificate of insurance to buyers that includes \$1 million in product liability and additional insurance
Environmental Pollution Insurance	Covers clean-up of manure or pesticide spills
Crop Insurance	For weather, market, fire, pests, and other disasters. Options include: Multiple Peril Crop Insurance (50% yield loss), Adjusted Gross Revenue (50% income loss), or Non-Insured Crop Disaster Assistance
Life Insurance	To help your family in case something happens to the bread winner
Health Insurance	For yourself and family in case you are hurt and need medical care
Business Interruption Insurance	Will provide living expenses if you are hurt and cannot work
Vendor's Insurance	Will cover your liabilities if you are selling at a farmers' market or trade show
Umbrella Liability Coverage	A liability insurance policy. It provides extra insurance protection over and above your existing policies and typically carries a high deductible

to make sure are protected by your policy. The worst outcome is one where you thought you were protected and only discover after your barn burns down that it was not covered in the policy because the insurance company assumed it was built from brick instead of oak.

Other Insurance

Worker's compensation insurance pays your employees for medical bills and lost wages if they get injured while working on your farm. Most beginning farmers are not required to carry "worker's comp"—in NC, it is only required if you employ more than ten people in a given year. However, as your farm expands in the future and you begin to rely more on the labor of others, keep worker's comp in the back of your mind. If you can afford it, it's a good thing to have.

Likewise, most beginning farmers are not required to carry product and vendor liability insurance, but this is a decision best made on a farm-by-farm basis. For example, some farmer's markets and many wholesale distributors will require you to carry product liability insurance as a precondition to sell to them, especially if you are planning to sell any prepared foods. As you get your farm enterprise off the ground, begin investigating the insurance requirements of your expected markets.

Assuming you plan to farm for ten, twenty or thirty years, you will need medical care at some point. How will you pay for it? How will any absence (short or long) affect your farm enterprise?

If you plan to farm for ten, twenty or thirty years, there is a good chance that your farm buildings will need to be repaired or replaced. How will you cover these (sometimes unexpected) expenditures? By North Carolina law, your vehicles (both personal and farm) and your home will need to be insured. Have you budgeted for these expenses in your financial planning?

Catchall Insurance Policies

At this point, you may be asking, "Aren't there any insurance policies that cover more than one single thing?" And indeed there are. For example, you might be able to insure all of your farm buildings and equipment, your personal property including

your home and possessions, and pick up liability coverage and even some crop insurance in a single policy. Ask your insurance agent about "Farmowner" policies and "Commercial Insurance Packages". Farmowner policies usually include a pre-determined set of coverages with little room for customization, whereas commercial package policies allow you to pick and choose among a variety of insurance tools to build a custom policy. The key, as discussed above, is to make sure that you understand exactly what is covered by the policy, and that it covers the types of risks that you have identified.

Exercise

As you have certainly gathered, this chapter only scratches the surface of all the risk management considerations that will go into your risk management plan. At the very least, it should give you two things. First, a framework for listing and prioritizing risk, referred to here as a "risk assessment". Second, you have read about three risk management tools, which you have been encouraged to apply in order. They are: 1) Prevention, 2) Planning and Investment, and 3) Insurance.

Now, it is your turn. This chapter on risk management goes with the "Risk Assessment and Action Plan" worksheet at the end of the chapter. It is similar to the example chart discussed at the beginning of this lesson.

To make things easier, the worksheet includes the three elements of risk assessment and space to jot down your primary and secondary risk management strategies for each risk. The worksheet is broken into 5 categories—Liability, Capital, Labor, Production, and Succession Planning—to help you think through and classify the different risks you face. Finally, the worksheet includes one example from each category to help you along. You should feel free to ignore these examples, or replace them with your own assessment of those risks. When you run out of space, just make copies (or download additional sheets) and keep going.

RISK MANAGEMENT ASSESSMENT

RISK	Probability of Occurrence	Probability of Disruption	Cost of Disruption	Overall risk (priority)	Primary Risk Management Tool	Primary Risk Management Action	Secondary Risk Management Action	Secondary Risk Management Tool Action Steps
1	On-farm Injury LIABILITY							
a)	Liability lawsuit from ATV trespass accident	Low	High	MEDIUM	Prevention	No hazards in farm paths, locked gates	General liability insurance	Purchase umbrella policy for farm
b)								
c)								
2.	CAPITAL							
a)	Barn burns down	Low	High	HIGH	Prevention	Keep flammables in safe containment	Property Insurance	Make sure fire is covered in policy
b)								
c)								
3.	LABOR							
a)	Severed Toe	High	Lowest	LOW	Prevention (protect feet)	Buy steel-toed boots	Insurance (health, workers comp)	Schedule meeting in insurance agent to discuss options/prices
b)								
c)								
4.	PRODUCTION							
a)	Drought	Medium	Medium	MEDIUM	Prevention: Look into drought tolerant varieties	Invest in irrigation; install before summer	Crop insurance	Call crop insurance agent to discuss available policies in county and cost
b)								
c)								
5.	BUSINESS DISRUPTION							
a)	Partner Disagreement	Medium	High	Medium	Prevention (written agreement)	Regular Communication	Back-up plan if partnership doesn't work out	Draft agreement with partner(s) and schedule regular operation meetings
b)								
c)								

THE NUMBERS: ACCOUNTING AND BUDGETS

Before you put a single seed in the ground, start planning a system for tracking your finances. Experienced farmers know that a little work up front will free you up during those critical weeks in early April when spring crops are ready for harvest and summer crops need to go into the ground.

Step 1: Start by setting up a “Chart of Accounts,” which amounts to an organizational index for all the accounts that you plan to have.

Step 2: Create a projected farm budget to see if your farming plan looks like it’s going to make money this year.

Step 3: Set up a reliable recordkeeping system. The key word here is **SYSTEM**. Spend time and effort to create a system that will track your income and expenses from the beginning. This will save your neck in the middle of the crazy season; you will know exactly what to do with the receipts you collect and where they all go.

Recordkeeping can be as complicated or simple as you want it to be. This short list reflects the bare minimum of things you should be keeping track of in your system: Assets, Liabilities, Equity, Income and Expenses.

Setting up Your Chart of Accounts

In the accounting world, there are 5 different “types” of accounts that exist:

1. Assets
2. Liabilities
3. Equity
4. Revenue (also called Income)
5. Expenses

These form the backbone of your chart of accounts. The chart of accounts establishes the categories in which you will keep all of your financial transactions for the farm. These 5 main “types” of accounts will have many accounts listed under them, as you will see in the example below. The “type” of account it is will determine how it is going to behave, and where it’s going to go on your end of year financial statements. Note that as your business grows and

develops, your chart of accounts will change – accounts will come and go, so you will need to update it frequently.

Developing your chart of accounts will help you organize and create your farm’s financial plan. Where do you plan to get your income, and where do you plan to spend your money? Who is investing money in your farm and how much are you starting with? What debts are you expecting to have? What assets are you planning to purchase? Setting up your chart of accounts is the first thing you do when starting a business. Refer to the Cloverleaf Farm chart of accounts below as you learn about the following terms and concepts.

Example of Chart of Accounts

◇	A	B
1	Cloverleaf Chart of Accounts	
3		Assets (1000)
4	1000	Cash
5	1010	Checking Account
6	1020	Savings Account
7	1030	Accounts Receivable
8	5100	Tools
9	5110	Fencing
10	5120	Irrigation Equipment
11		
12		Liabilities (2000)
13	2000	Accounts Payable
14	2020	Loans Payable
15		
16		Equity (3000)
17	3000	Total Investments
18	3010	Partner 1 investment
19	3020	Partner 2 investment
20	3030	Net Profit (Earnings)
21		
22		Revenue (4000)
23	4000	Total Sales
24	4010	Sales CSA
25	4020	Sales Farm Stand
26	4030	Sales Wholesale
27		
28		Expenses (5000)
29	5000	Accounts Payable
30	5010	Sprays
31	5020	Fertilizers
32	5030	Fuel/oil
33	5040	Insurance
34	5050	Rent
35	5060	Repairs
36	5070	Seeds & plants
37	5080	Supplies
38	5090	Fees

Assets

On the simplified version of the chart of accounts (previous page) you can see that all the different types of accounts are set up as headings and there are lots of sub-accounts underneath them. What goes in each of these? Assets are all the things of value that the farm owns. This includes all cash, both your checking and savings accounts, and your “accounts receivable,” which is all the money that people still owe you. When most people hear the term assets, they think of equipment. This is right; an asset is anything of value that the farm owns. For equipment and non-money items, an asset is considered something of significant value that will last more than one year. Other examples of assets on a farm would include machinery, tools, fencing, vehicles, buildings, and land.

Deciding what is considered an asset is actually pretty important, because most assets are “depreciated” (except for land). Depreciation is a tax benefit that helps reduce the amount of taxes you owe at the end of the year. To receive this tax benefit, you must keep track of the individual item and file separate paperwork with the IRS.

Depreciation of Assets—Benefits

It may be hard to conceptualize what a big impact asset purchases will have on your business, and all the decisions you will need to make. The idea behind depreciating an asset is something the IRS came up with to help businesses reduce their tax liability when investing in equipment to help their businesses grow or be more productive. Depreciation allows a business to spread the cost of an asset over the lifespan of the equipment, so that instead of incurring the cost in one year you can count it as an expense for multiple years into the future. The effect is to reduce your profit in those future years, which decrease the taxes you owe.

Depreciation of Assets—Drawbacks

The drawback of considering something an asset is that you will need to keep track of the value of it as it decreases each year. You are also required to file special forms with the IRS for your assets, and to report any income from the sale of these assets, which you may need to pay further taxes on. If you are trying to do your own taxes, you may put in a lot of work to figure out what forms you need to file and

how to fill them out. One theme of this chapter is that you will really benefit from taking an accounting class, or even hiring a Certified Public Accountant (CPA).

Calculating Depreciation

If you are definitely planning to make a large equipment purchase your first year, you will need a simple formula to calculate that asset’s depreciation. To calculate depreciation, you take the total cost of the equipment, officially called the “cost basis” (which, by the way, includes not only how much you paid for it, but also any transportation costs, set up or installation fees) and you divide that by the number of years of its expected useful life, which is officially called the “recovery period.” The IRS actually has some strict guidelines on the life span of particular classes of assets, which are in Appendix B of IRS Pub 946. Most farm equipment is classed at 10 years or 7 years of life.

Technically, you are supposed to also consider the salvage value of an item, which is how much you could sell it for at the end of its life. So you take the cost of the asset, subtract the salvage value and divide that by the recovery period. This gives you the amount of annual depreciation you can deduct. In reality, most people do not use the salvage value, and just divide the cost of the asset by the recovery period, and use that number as their annual depreciation amount.

Depreciation Schedule

The IRS expects you to keep something called a “Depreciation Schedule” for each major asset. For smaller farms, it is okay to keep it all on one sheet; once your operation gets more complex and you have a large number of assets, it is better to make separate schedules grouping the different types of assets together, like one for field equipment, one for buildings, one for packing equipment, etc.

One more wrench to throw in is that the IRS will automatically assign depreciation values to significant pieces of equipment whether you wanted to depreciate them or not. So if you bought a truck, did not depreciate it, and then sold it in a few years, you would owe “recaptured depreciation” on it to the IRS, because you should have been taking depreciation from it according to their rules. The

take-home message is that depreciation is more complicated than it seems. If you are going to rent everything and start small in your first few years, consider carefully if you want to depreciate any of your purchases. If you are going to make large purchases like a truck, a cooler, or equipment, then it will probably be worth the tax savings to depreciate these items, and also probably worth it to hire a CPA to help you do it.

Liabilities & Equity

Now that you know a little more about what it means to have an asset, return to the sample chart of accounts! Next are Liabilities. Your liabilities are all the debts that you owe. Accounts payable are checks that you owe to your suppliers, e.g. for compost, irrigation parts, rent to your landlord, or bills like your electricity. Loan balances will also be a Liability account. If you sell things that you need to collect taxes on, like flowers, then you will also need to have a “Sales Tax Owed” account. If you have employees, you will have a “Payroll Tax Owed” account too. You should consult with your CPA about these categories if you think you will need to deal with them.

Equity

Equity is the total net worth of your business. It is the difference between the Assets and the Liabilities. Equity accounts are the money that you have invested in the business, or if you have partners or investors, where you keep track of what each person has invested. You will also include your net profit (or loss) here, because that is money that the business itself has generated.

Income

Income accounts are all the different ways that money comes into the farm business. These primarily include all sales of your farm products, but they could also be things like NRCS cost-share payments, crop subsidies, insurance payments, etc.

Expenses

There are two different kinds of expenses in farming, or any business for that matter. There are “Operating Expenses” and “Capital Expenses.” What you see listed on the chart of accounts sample on page 28 under expenses are only operating expenses. Capital expenses are things you buy that

have a life of more than one year, which are—this should sound familiar—your assets. Equipment purchases, buildings, and other major infrastructure of significant value are considered assets, and in your chart of accounts, they go under ASSETS, not Expenses. The distinction is important, as you will see in the next section on your balance sheet. Operating expenses are all the things that you buy to make your business run in the course of a year. They include administrative things like your rent, your labor, insurance, fees, and then anything non-administrative that will get used up in one year, like seeds, gas, or supplies.

Final Thoughts on Your Chart of Accounts

Remember that setting up your accounts is a process, and as things change on the farm or with your marketing plan, you will need to update your chart of accounts. You can create a chart of accounts list yourself by hand, in an excel sheet, or using a software program like Quicken or Quickbooks. These computer programs typically have a template chart of accounts that is standardized by industry, but you should feel free to change them to fit your operation. Remember that you are organizing your financial information so that you can get what you want back out of it. You can make it as detailed or simple as you want it to be, but put some thought into what you really want to know at the end of the year.

As you play around with it and make up your own categories and even sub-categories, keep in mind that you are creating a framework for all of the information you would really want to know at the end of the year. It does not have to be perfect, and you will want to update the format at the end of each year as you figure out what information you really want from your records.

Farm Budget

Once you have sketched out your chart of accounts, it is time to draw up your Projected Farm Budget (PFB). Cloverleaf Farm’s (the author’s farm) projected farm budget is reproduced below as a reference. It was created to predict income and expenses in 2012, and was used as the farm plan before starting the season. If you have not yet started your farming operation, then you will want to create one of these as part of your business plan before the season starts.

A farm budget lists your planned income and expenses for the year. Estimating these expenses and sales figures can be difficult, and you may feel a bit overwhelmed at first. Take a deep breath, sip some green tea, and try to remember that the numbers are only estimates. Regardless, the numbers can help you make important decisions. Invest a little time in research to get these numbers as accurate as you can before the season starts; you will thank your self in June when your time is scarce.

Notice that the expenses are divided up into operating expenses and capital expenses. You learned a bit about this distinction above, but a budget is usually where you see them separated like this. Remember that capital expenses are considered assets, and you keep them separate in a budget because they are used to inform other important financial statements that you have at the end of the year, like your Profit and Loss Statement and your Balance Sheet.

Example Projected Farm Budget

Take a closer look at the example projected farm budget. In this budget, the bottom line is your monthly net profit and losses. It shows the difference between the farm's total income and total expenses for each month. The monthly breakdown will allow you to see how much money you will spend early in

the year, before your sales start to pick up. This, in turn, will help you predict how much starting cash you need to cover these expenses so that you don't spend more money than you have.

If you add up the negative totals from January, February and March, you will notice that Cloverleaf Farm planned to spend about \$8,000 before they made any income. This meant they needed to have at least \$8,000 in the bank to start farming. \$10,000 in the bank would give them some margin for error in their estimates.

The last column lists all totals for the year. This provides a rough estimate for net profit if things go according to plan (which they rarely do). Again, this is a rough estimate – this total does not account for depreciation of assets. Later, you will use a Profit and Loss Statement to accurately calculate net profit.

Create Your Own Projected Farm Budget

The “Projected Farm Budget Worksheet” at the end of this chapter will help you create your own projected farm budget. Change the categories to match what you wrote in your chart of accounts. Remember, these are both fluid documents and it is OKAY to keep going back and forth between them making adjustments as you figure out what information you really want to know.

Example of Projected Farm Budget in Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Cloverleaf Projected Farm Budget 2012													
2		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
3	Income													
4	CSA				\$3,000	\$3,000			\$3,000	\$3,000				\$12,000
5	Farm Stand					\$250	\$1,000	\$1,000	\$1,500	\$1,000	\$500			\$5,250
6	Wholesale						\$1,000	\$1,000	\$1,000	\$1,000				\$4,000
7	Total Income	\$0	\$0	\$0	\$3,000	\$3,250	\$2,000	\$2,000	\$5,500	\$5,000	\$500	\$0	\$0	\$21,250
8														
9	Operating Expenses													
10	Sprays	\$250	\$50											\$300
11	Fertilizers					\$500			\$500					\$1,000
12	Fuel/oil	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$600
13	Insurance					\$825								\$825
14	Rent	\$2,500												\$2,500
15	Repairs						\$250			\$250				\$500
16	Seeds & plants	\$600	\$400											\$1,000
17	Supplies	\$500	\$500											\$1,000
18	Fees											\$200		\$200
19	Total Operating													\$7,925
20	Capital Expenses													
21	Tools	\$300	\$250	\$150										\$700
22	Fencing		\$1,000											\$1,000
23	Irrigation Equip	\$500	\$500	\$500										\$1,500
24	Total Capital													\$3,200
25	Total Expenses	\$4,400	\$2,500	\$550	\$50	\$1,375	\$300	\$50	\$550	\$300	\$50	\$250	\$50	\$11,125
26														
27	Monthly Net Profit/Loss	(\$4,400)	(\$2,500)	(\$550)	\$2,950	\$1,875	\$1,700	\$1,950	\$4,950	\$4,700	\$450	(\$250)	(\$50)	\$10,125

Developed under the USDA's Outreach and Assistance to Socially Disadvantaged Farmers and Ranchers (OASDFR) program (Project # 2009-00705)

SKETCHING YOUR OPERATING BUDGET

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total
Income													
CSA													
Farmers Markets													
Wholesale													
Total Income													
Operating Expenses													
Sprays													
Fertilizers													
Fuel/oil													
Insurance													
Rent													
Repairs													
Seeds & Plants													
Supplies													
Fees													
<i>Total Operating</i>													
Capital Expenses													
Tools													
Fencing													
Irrigation Equip													
<i>Total Capital</i>													
Total Expenses													
Monthly Net Profit/Loss													

THE ART OF DETAIL: RECORDKEEPING

Here's a fun fact: "bookkeeping" (and its derivative words) is the only word in the English language with three consecutive double letters. Take a moment to smile about this; perhaps grab a pen and write it out a few times just for the pleasure of it.

Here's a less fun fact: In the middle of June when you are harvesting after dark with a flashlight, exhausted after a day's work, it is hard to justify the time (or even remember) to keep farm records. Recordkeeping (or bookkeeping) is not always fun, but it is an essential part of any business. It helps you make decisions on the farm, increases your chances for getting a loan, and helps with preparing your taxes. If you decide to go for organic certification, you will need to keep specific production records as well. Most importantly, recordkeeping lets you know how well your farm business is doing—whether or not you are making any profit, where money is going and coming from, and how much your business is worth. Knowing this information helps you make important decisions like adding a new enterprise, expanding, or even figuring out how to get out of the business if you need to.

When asked about recordkeeping, many farmers shake their head and frown. They don't enjoy it—after all, wasn't the whole point of farming to leave the office work behind? Other farmers, especially the successful ones, will talk your ear off about recordkeeping. They want to tell you about the new spreadsheet they made, the tabs in their binders, or the formula they invented to rank their most profitable crops. You want to be like this second group. There is no limit to the scope and detail of the records you could keep, and you will eventually find a balance that works for your enterprise. In the meantime, err on the side of too many records, and take care to organize them.

Systematize Like a Banshee

When it comes to recordkeeping, your goal is to design a system so complete, so intuitive, so simple that when documents and data arrive your milk

cow could figure out how to file them away. You will generate documents and data every day, and in forms you never conceived of. Purchase receipts, product invoices, sales receipts, bank statements, soil tests, FSA correspondence, checks, bills, etc., not to mention any data that you collect on seeding, inputs, labor, yield, etc. All of these things need a home, a place to be filed so that they are available when needed. Recordkeeping should be a daily activity, undertaken as quickly as possible before the documents or data are lost or forgotten. That is why you build a user-friendly system that you and any farm partners can use on autopilot.

Paper Filing

There is no wrong way to create a filing system, other than ignoring it altogether. Remember, the goal is to create a system that you and any farm partners will use, a lot. You could certainly do just fine by sticking to paper records (you old Luddite, you). You will inevitably receive a lot of paper, and you will want a dedicated place, like a filing cabinet, to neatly organize and store it. You can go the paper route for your financial recordkeeping as well. At the minimum, head down to your local office supply store and pick up a bookkeeping ledger. Use it to keep daily track of the farm's debits and credits, the same way you would in a checkbook.

Electronic Filing

Electronic filing systems can do almost anything a paper system can do, and many things it cannot. For example, popular software like QuickBooks allows users to enter expenditures and sales numbers directly into its database. When a receipt arrives back on the farm you just open up the trusty software and enter the information: 30 seconds and done. When it is time to generate a monthly (or annual) report, the software spits it out immediately, neatly tallying the numbers in any way you please. These programs also allow you to generate electronic invoices, which can be printed and mailed; all the while a copy of the invoice is saved on your computer. Using a high-

Recordkeeping helps you make decisions on the farm, increases your chances for getting a loan, and helps with preparing your taxes

capacity scanner, you can even digitize the paper records you receive, eliminating the need for a filing cabinet.

Farmers are turning to digital recordkeeping in growing numbers because it saves time, stores a lot more data, and does most of the work for you. If you left your desk job to take up farming, here is the irony: using a computer to manage your recordkeeping will allow you to spend more time out in the field and less time worrying about your filing system. And, while digital data is of course vulnerable to loss, this applies equally to paper records. You should always keep an up-to-date backup of your records in a safe place whether they are paper or computerized.

Scheduling

It is equally important to create a routine or schedule for when and where you are going to deal with all the administrative duties—that is, a time when you make use of all that filing you did. This might entail entering or totaling your monthly expenses, paying your bills, recording your income and depositing your checks. The more frequently you do this, the more you know about how things are going. Most farmers recommend making deposits once a week if you are collecting a lot of cash at farmers markets, and entering in receipts once a week or every two weeks. Doing these things once a month is kind of the bare minimum that you can do to stay on top of things, and realize that if you let that much time go by it may take you a whole day to finish.

Tracking the Bare Minimum

While there are certainly many things you should be tracking and keeping records of on your farm, at the end of the year you will need to create financial statements and get ready for taxes. To get a sense for the must-haves of recordkeeping, take a look at the Chart of Accounts on page 32. You want to track each of the main categories in this chart. What follows are some tips—secrets of the trade, you might say—for tracking your records in each of the five categories in your chart of accounts.

Tracking Assets

If you decide to purchase some major equipment your first year and depreciate it, heed the following. Make a list of all the significant equipment that you want to depreciate as you purchase it. Keep a

depreciation schedule to track it, and set a limit of value – is it worth it to track things under \$500? \$1000? It depends on the farm. You also want to keep track of any assets that are stolen, damaged or destroyed, as this will likely lower the taxes you owe. Record any assets that you sell since you will need to report it to IRS at the end of the year.

You also want to keep track of your Accounts Receivable, which is money that people owe you. Always make two copies of your invoices, and send them both with the delivery so that the purchaser can return one signed for your files (scan it in if you have gone entirely digital). Make a folder (paper or computer) labeled “Unpaid Invoices”. When a check comes in, match it with the unpaid invoice in your folder, mark it as “received” with the check # and

Recordkeeping Resources

The books and article below are excellent resources to give you more detailed information on how to do this:

- In *The Organic Farmers Business Handbook*, Richard Wiswall wrote a really great chapter called Office Paper Flows and Leaky Finances, which gives a great step-by-step explanation of how he organizes his incoming money and outgoing money, and how he processes all his paperwork.

- *Fearless Farm Finances*, published by Midwest Organic and Sustainable Education Service (MOSES) also gives a great explanation of how to set up your farm office with excellent examples, and also covers in detail practically EVERYTHING you’ll want to know about farm finances, including taxes, payroll, and talks about how to use Quickbooks. It’s a great resource.

- Chris Blanchard, of Rock Spring Farm in Iowa, and one of the authors of *Fearless Farm Finances*, also wrote an excellent article in the December 2012 issue of *Growing for Market* on bookkeeping, which also gives great examples, particularly on setting up your chart of accounts.

date, and then put the check with your Deposit pile for the week. The paid invoice can go into another folder called “Paid Invoices.” Processing these things weekly really helps you stay organized and on top of things.

Tracking Liabilities

Keeping track of what money you owe to others is also very important. If you have taken out loans, there will be plenty of paperwork with that process. Richard Wiswall, who wrote the *Organic Farmer's Business Handbook*, recommends bundling tasks. This includes paying all your bills at once instead of one by one as you open them. Create an “Unpaid Bills” folder and file your unpaid bills there, whether they are loans or suppliers. Most vendors and suppliers are okay with waiting for payment for up to 15 (or sometimes 30) days, but you should look at the bill to see exactly when they expect a check. Waiting to pay bills is not a great habit, as it is easy to forget them. That is where scheduling comes in. Wiswall suggests paying all bills once a week. Once bills are paid, they can go into the Paid Bills folder.

Tracking Equity

Tracking Equity can be pretty simple if you are a sole proprietorship. If you have partners in the business keeping track of equity can be a bit more complicated, but it is also more important. Each partner should have his or her own equity account on paper or in a spreadsheet. You could make two

sub-accounts, one for Partner Contributions to the business, which is all the money they have invested over time. The other account would be any draws that they take from the business. Partner draws should come from their own individual equity account. This way, a partner is not taking money out for himself or herself by dipping into the investments of other partners. Keep a separate spreadsheet that details these things out. Record any and all draws that are taken out and the dates. These are just as important to keep track of as expenses.

Tracking Revenues

Keeping records of your income seems like a no-brainer, but when you have more than one market, and money coming in different forms from different sources, many farmers quickly realize how easy it is to lose track of things without good systems in place. When it comes to tracking revenues, this means writing things down, keeping paper (or digital) trails for everything, and having a routine schedule for entering data and documents into your system. Your main system could be anything from a notebook to an Excel spreadsheet to a computer program. For example, you could use a basic spreadsheet to record the date a check or cash is received, who it was from, the amount, the check number, the deposit date. If you have multiple enterprises associated with your farm, you should also record the Revenue account it belongs to so you can track the differences between enterprises. Many farmers find that a simple column for “notes” comes in handy for recording odd details about the sale.

Example of revenue tracking in Excel

	A	B	C	D	E	F	G	H
1	Cloverleaf Farm Income Records							
3	Date	Received from	Amount	Check #	Deposited	Account	Enterprise	Notes
4	8/22/12	Be Well Market	\$525.70	264033	31-Aug	Wholesale	fruit	8/10/12
5	8/29/12	Lily's Kitchen	\$39.94	1152	31-Aug	Wholesale	fruit	53# O'Henry seconds
6	8/31/12	Farmstand	\$980.00	cash	15-Sep	Farmstand	veg & fruit	
7	9/14/12	Emilie Pratt	\$170.00	2141	10/5/12	CSA	veg & fruit	CSA half + wild card
8	9/14/12	Melanie Williams	\$250.00	2663	10/5/12	CSA	veg & fruit	CSA full
9	9/12/12	Jessica Green	\$250.00	121	10/5/12	CSA	veg & fruit	CSA full
10	9/30/12	Farmstand	\$265.00	cash	10/5/12	Farmstand	veg & fruit	
11	9/20/12	Antica Restaurant	\$60.50	4360	10/5/12	Wholesale	fruit	9# apricots firsts
12	10/7/12	Farmstand	\$198.00	cash	10/12/12	Farmstand	veg & fruit	
13	9/10/12	Soul Food Farms	\$58.31	5683	10/5/12	Wholesale	fruit	8-18 farmstand
14								

Tracking Expenses

Expenses are similar to revenues in that they need to be entered into your system frequently, and written down somewhere. Your expense records should include similar information to your revenue records: amount, date, the name of the person or company you paid, and any notes about the transaction.

The Excel recordkeeping examples were developed under the USDA's Outreach and Assistance to Socially Disadvantaged Farmers and Ranchers (OASDFR) program (Project # 2009-00705), part of the National Institute of Food and Agriculture.

Example of expense tracking in Excel

◇	A	B	C	D	E	F	G
1	Cloverleaf Farm Expense Records						
3	Date	Paid To	Amount	Check #	Account	Enterprise	Notes
4	1/5/12	Irrigation Supply Hardware	\$345.00	1102	Irrigation Equip	vegetables	layflat for veggies
5	1/5/12	Ron Matthews	\$2,500.00	1103	Rent	fruit	rent for orchard
6	1/8/13	High Mowing Seeds	\$150.00	debit	Seeds & plants	vegetables	online - organic
7	1/10/12	Johnny's Seeds	\$645.00	debit	Seeds & plants	vegetables	online
8	1/13/12	Orchard Supply Hardware	\$55.00	debit	Supplies	vegetables	hoes, gloves, buckets
9	1/14/13	Growers Ag Services	\$100.00	debit	Sprays	fruit	lime sulfur - brown rot

NOTES

THE SCORE CARD: FINANCIAL STATEMENTS

Previous chapters introduced you to the world of budgets, financial planning, and recordkeeping. This final chapter on finances covers what, exactly, you are supposed to do with all of this information. The answer is two-fold. First, you will use your records to produce several financial statements (usually on an annual basis). Financial statements will help you assess how your farm is doing—whether it is making a profit, the status of your assets and debts, and even give you a solid estimate of how much your farm is worth. Second, you will learn how to prepare your farm’s tax documents, or at least get a sense for what information your accountant will need to help you through this process.

Financial statements will help you assess how your farm is doing

So here are the “Big Three” financial statements you need to know about.

Income & Expense Statement (I&E)

Also called a “Profit and Loss Statement,” (or “P&L”) the Income and Expense Statement does exactly what it says: summarizes your farm’s income and expenses over a specified period of time. This is really useful if, say, you want to know whether your farm made any money over the past 3, 6 or 12 months.

In its simplest form, the Income and Expense Statement tracks all of your cash transactions. On the one hand, your income is a total of all the cash payments you receive: any sales of your product (livestock and/or crops), tax credits and refunds, and any conservation or crop insurance payments you receive. On the other hand, your expenses are the total of the expenses involved in the operation of your farm. Most of these should be fairly obvious: fertilizer, gasoline, seeds, water and electric bills, land rent, equipment repairs, and insurance premiums.

It gets a little trickier with large purchases like land, vehicles and heavy equipment. As discussed previously, these larger investments are usually treated as “assets,” and are depreciated over time.

If you buy a new tractor and expect to use it for ten years, and then you list the full price of that tractor on your I&E Statement, you will make your statement very unhappy. “It’s not fair!” cries the I&E. “We were making a tidy little profit and then you dropped this \$15,000 piece of equipment on my expense ledger.” And the I&E would be absolutely right; it would not be fair, and doing so would skew your perceptions about the financial health of your farm. Since you plan to use the tractor for 10 years, you should only count a fraction of the total cost as an expense in this year. In particular you should use the “depreciation value” discussed previously, which represents this year’s “share” of the total cost of the asset.

There are plenty of ways to make your I&E Statement more complicated (and, if you’re careful, more accurate). One is worth mentioning here: pre-paid expenses and inventory. In the same way that it would not be “fair” to list the full purchase price of major assets as an expense, you might think it would not be fair to ignore the supplies you bought this year but did not use. You’d be right. For example, say you take delivery on two years’ worth of feed at the beginning of this year. You pay the full cost up front, but you only use half the feed this year. You still want to record the full cost of the feed in your expense column, but you should also credit the “income” column with the value of the remaining feed. Doing so will give you a more accurate picture of your income and expenses in this particular production year.

Balance Statement

Also called your “net worth statement,” the balance statement offers you a snap shot of what your farm is worth. In doing so, it ignores almost everything from the I&E statement (all of the daily cash transactions). Instead, the balance statement totals up your assets (both physical and cash) and liabilities to determine your net worth. This gives you a snapshot of the farm’s financial health, particularly your ability to

pay off your current debts or take on new ones.

Many farmers conclude valuing assets is the toughest part of generating a balance statement. After all, equity is straightforward. Just total up the cash in the farm bank account(s). Similarly, liabilities are easily measured by the outstanding balance (debts) on any loans you have taken. On the other hand, valuing assets requires you to estimate the cash value of what the farm owns. This includes unsold product inventory, supplies, and tools. It also includes the remaining value on major assets like tractors and vehicles, and the value of your land if you own it. If you want an accurate balance statement (and you do, especially if you go in search of a bank loan), take the time to list all of your assets and value them carefully (and realistically).

Example of Balance Sheet in Excel

	A	B
1	Balance Sheet (Dec 31, 2012)	
2		
3	Assets	
4	Checking Account	\$14,510
5	Savings Account	\$0
6	Accounts Receivable	\$540
7	Tools	\$650
8	Fencing	\$1,500
9	Irrigation Equipment	\$2,250
10	<i>Accumulated Depreciation - Total</i>	<i>-\$1,483</i>
11	Total Assets	\$17,967
12		
13	Liabilities	
14	Accounts Payable	\$540
15	<i>Operating Loan Balance</i>	<i>\$0</i>
16	<i>Truck Loan Balance</i>	<i>\$0</i>
17	<i>Land Loan Balance</i>	<i>\$0</i>
18	Total Liabilities	\$540
19		
20	Equity	
21	Partner 1 Contributions	\$4,000
22	Partner 1 Draws	\$0
23	Partner 2 Contributions	\$4,000
24	Partner 2 Draws	0
25	Net Profit or Loss (Retained Earnings)	\$9,427
26	Total Equity	\$17,427
27		
28	Assets = Total Liabilities + Total Equity	\$17,967
29		
30		

If you have done the legwork, calculating your farm's net worth is a breeze. The formula is:

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

Cash Flow Statement

If the income and expense statement tells you where your money is coming from and going, and your balance statement tells you how much your farm is worth, your cash flow statement tells you whether you will have enough money to pay the bills and continue operating. In other words, this statement is all about the cold, hard cash. Or, in finance jargon, "liquidity."

Consider that not all of your assets are liquid. You cannot buy feed or pay your electricity bill by handing over part of your tractor. You need cash to pay bills, and the cash flow statement will estimate whether you have the necessary cash to make it through the year. Cash flow planning is important for any business but none more so than farming. All farms front-load expenses at the beginning of the season in hopes of selling enough product to make money at the end of the year. Successful farmers do make a profit, but almost all of them "lose" money during the year before the crops are ready to harvest. A cash flow statement will help you figure out how you will pay the bills in the meantime.

In its simplest form, your cash flow statement should project the farm's income and expenses over the next year. When do you need to buy inputs? How much will they cost? (Think about seed, fertilizer, feed, gasoline, etc.) What recurring bills come every month, and how much are they usually for? (Think about electricity, insurance, water, etc.) Which crops and animals (and how much) will be ready for market in each month of the year? How much do you expect to earn in sales each month?

Once you project all of your expenses and sales on a month-by-month basis, you can determine how much cash you will need on hand to start the year. For example, if you need to spend \$3,000 from January-

March to prepare the land and plant your spring crop, but you cannot sell these crops until April, the farm will need at least \$3,000 on hand before the season starts.

The final step is to assess whether you have the cash you need. Do you have \$3,000 in the bank, ready to go? If not, is there anything you can do to free up the cash you need? Will the local supply store extend you a line of credit to buy supplies? Can you qualify for an operating loan from the bank? Whatever your situation, your goal is to avoid running out of cash halfway through the season.

Example of Cash Flow Budget in Excel

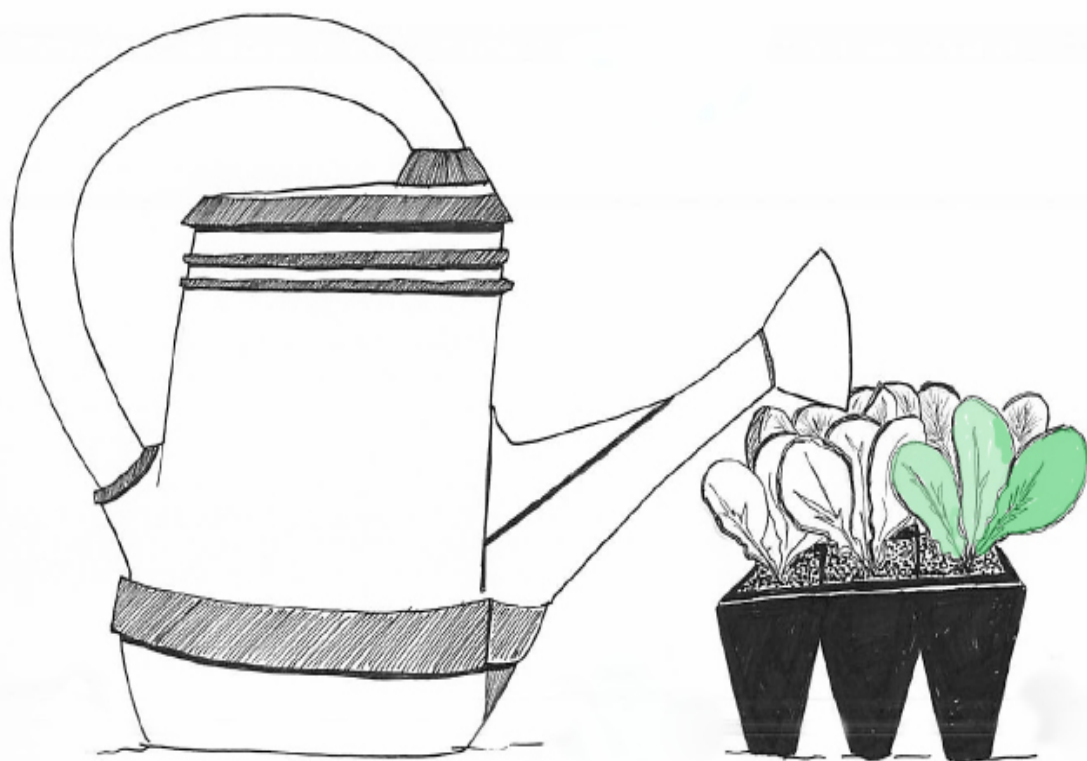
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Cloverleaf Cash Flow Budget 2012													
2		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
3	Cash In													
4	Starting Cash	\$8,000												
5	CSA				\$5,600	\$2,400			\$2,600	\$1,400				\$12,000
6	Farm Stand					\$450	\$950	\$1,800	\$2,600	\$650	\$300	\$150		\$6,900
7	Wholesale				\$400		\$280	\$950	\$920	\$850				\$3,400
8	Total Income	\$8,000	\$0	\$0	\$6,000	\$2,850	\$1,230	\$2,750	\$6,120	\$2,900	\$300	\$150	\$0	\$22,300
9														
10	Operating Expenses													
11	Sprays	\$100	\$150	\$50								\$90	\$180	\$570
12	Fertilizers			\$350	\$600				\$800					\$1,750
13	Fuel/oil			\$50	\$55	\$75	\$75	\$85	\$90	\$45	\$35	\$35	\$30	\$575
14	Insurance				\$200				\$625					\$825
15	Rent	\$2,500	\$150											\$2,650
16	Repairs					\$100	\$80	\$125	\$25			\$65		\$395
17	Seeds & plants	\$225	\$350	\$600	\$550		\$350			\$350				\$2,425
18	Supplies		\$750	\$150	\$300	\$250				\$300				\$1,750
19	Fees										\$450			\$450
20	Total Operating													\$11,390
21	Capital Expenses													
22	Tools		\$650											\$650
23	Fencing		\$600	\$900										\$1,500
24	Irrigation Equip	\$600	\$1,200	\$450										\$2,250
25	Total Capital													\$3,750
26	Total Expenses	\$3,425	\$3,850	\$2,550	\$1,705	\$425	\$505	\$210	\$1,540	\$695	\$485	\$190	\$210	\$15,140
27														
28	Monthly Net Profit/Loss	\$4,575	(\$3,850)	(\$2,550)	\$4,295	\$2,425	\$725	\$2,540	\$4,580	\$2,205	(\$185)	(\$40)	(\$210)	\$7,160
29	Total Cash Balance	\$4,575	\$725	(\$1,825)	\$2,470	\$4,895	\$5,620	\$8,160	\$12,740	\$14,945	\$14,760	\$14,720	\$14,510	

NOTES

Section Three:

Pen to Paper

Signing the Dotted Line



THE MONIES: FINANCE AND CAPITAL

Starting a farm—like any other business startup—usually requires more cash than the business owner has on hand. Farmers often need to borrow money from a bank, the USDA Farm Service Agency, or an alternative source to acquire expensive assets such as land, buildings and equipment. This chapter should help you think about the broad idea of financing your farm: what you should buy, when you should buy it, and how you can find the money.

Your first priority is to list the capital—that is, the tools, equipment, buildings, land and other farm inputs—you need to get started. Next, you will learn how “starting small” can save a lot of cash up front while you tune your crop system and find your market. Finally, this chapter will familiarize you with the most common financing options, and explore less conventional ways to find startup capital.

At the end of this section, you will use worksheets to:

- Calculate start-up cash needs for this year;
- Estimate your needs for equipment, land, buildings in the year you plan to scale up;
- List each major purchase item, its value, and your financing strategy for each;
- Identify financing resources, and make a plan to approach them.

What Do You Need to Start Farming?

To estimate the capital (and associated financing) needs on the farm, you will rely on worksheets from previous sections: your marketing plan, annual budget, and skills & resources assessment. In them, you identified the amount of land you will need, the type of markets you will sell to, and the equipment, tools and other supplies required to grow on the scale you have chosen as a target.

The question remains: How will you acquire the items you need but cannot afford to buy outright? Say you are starting from scratch—no land, equipment or supplies. Based on your market research, you believe you could sell about two acres of mixed vegetables through a combination of farmers markets and a CSA. That means you need access to two acres of land, machinery to get the land tilled, seeds and supplies, tools for fieldwork, harvest totes and produce boxes, an irrigation system, etc. You will also need to pay for gas to get between farm and market, and cash to pay the stall fee at the market.

You might be thinking, Bummer! This is a lot stuff! How much will it all cost!?

The answer, actually, depends on how you approach it.

Farmers often need to borrow money to acquire expensive assets such as land, buildings and equipment.

The chart on the next page compares two different budgets associated with two different approaches to capitalizing your farm. Note that both budgets list the same resource needs, but the second approach costs only a fraction of the first. What is the difference?

First, note that Farmer Brock intends to buy ten acres of land, even though he only plans to farm two acres of it in the first year. This requires a downpayment and an ongoing payment of interest, property tax and principle, which is the actual sale price that you will pay off over the year. This is a lot of money! In contrast, Farmer Mary Beth will start by renting two acres of land, a much cheaper proposition.

Both farmers recognize that a hoop house will extend their growing season a few weeks in either direction. Farmer Brock plans to purchase a prefabricated hoop house, while Farmer Mary Beth will build a hoop house from scratch, relying on the help of her friend who has some construction experience. Similarly, Farmer Brock’s budget includes the purchase of a walk-behind tractor, while Farmer Mary Beth has opted to rent a tiller when necessary.

Both farmers will face the same input costs for supplies, seeds, soil amendments, and other operating expenses, which is a reasonable assumption.

It should be clear from this comparison that renting and hiring, rather than purchasing, saves a lot of money in the coming year. Farmer Mary Beth may even be able to scrape together all her startup costs using her savings. It is likely that Farmer Brock will need to procure a loan from outside sources in order to act on his plan.

There is nothing wrong with Farmer Brock's budget, but it does represent a different set of choices. Farmer Brock will take on more risk, but the payoff may be higher if he is successful. Spread out over several years, purchasing land and equipment can be cheaper than renting it, and owning land ensures that your investment in the land will be yours to enjoy (and profit from) in the future.

Your approach will also depend on your experience. Farmer Brock's budget may be more appropriate for a farmer with a couple years' experience, someone looking to put down solid roots with room for future expansion. Farmer Mary Beth is probably just starting out and looking for a lower-risk chance to try farming as a career.

Starting Small

Starting small offers many advantages to farmers, especially those considering their first year in farming. Consider that starting small:

- Frees up cash that would otherwise be spent “servicing” (which just means “paying off”) a loan;
- Lowers risk, especially the risk of “defaulting on” (which just mean “not paying”) your loan(s);
- Allows you to begin recordkeeping before taking on a loan, which helps secure better terms and rates when you do ask for a loan;
- Allows flexibility to change plans based on changing opportunities and experience.

Many beginning farmers envision their ideal farm. That's a good thing, and hopefully you have taken the time to immortalize that dream using previous worksheets. But understand this: very few successful farmers begin with their ideal farm; rather, those who get there begin with what they have, and patiently build their dream.

Farmer Brock		<i>Two approaches to startup</i>		Farmer Mary Beth	
Item	Cost		Item	Cost	
Downpayment (20%) on purchase of 10 acres of farmland at \$5000/acre	10,000		Land rental, 2 acres	800	
First year interest, tax, and principal payment	2,000				
Hoop house purchase	6,000		Hoop house constuction	400	
Tractor/tiller purchase	6,000		Rent/hired tilling	400	
Supplies (tools, seed trays, grow lights, harvest bins, wax boxes, row cover, trellises)	1,400		Supplies (tools, seed trays, grow lights, harvest bins, wax boxes, row cover, trellises)	400	
Seeds/plants	800		Seeds/plants	800	
Compost, soil amendments	600		Compost, soil amendments	600	
Market fee	300		Market fee	300	
Gas/oil	300		Gas/oil	300	
Water/utilities	100		Water/utilities	100	
Total costs	\$27,500		Total costs	\$5,100	

With that in mind, consider how you can begin working toward your dream farm by starting small (and cheap). The following is a sample list of things you might do to begin building your dream farm if you lack the cash to buy it outright:

- Use livestock to build soil fertility
- Rent, hire, swap, barter, or share
- Salvage/re-purpose
- Rely on your own labor
- Work on a scale you and your partner(s) can manage without having to hire labor

For example, say you had originally planned to grow vegetables, but soon realize you need to build soil fertility first. Instead of buying expensive soil amendments, you could opt to start the farm with livestock, a productive input that would add organic matter to the soil while generating income from meat sales. This strategy works better if you have the luxury of owning your own land. If you plan to rent land on a short-term lease, perhaps it is better to make sure it has good fertility to begin with.

Your ability to keep costs low depends on your creativity and willingness to work. For example, Farmer Brock's and Mary Beth's sample budgets showed the cost advantage of renting instead of buying. But what about swapping, bartering, or equipment sharing? Will you (do you?) have a neighbor with a piece of equipment you only need one time per year? Can you pay them cash, or would they welcome a weekly supply of fresh eggs as payment, or perhaps your labor for a couple of days loading hay into the barn?

Repurposing or salvaging equipment saves money. For instance, old drip tape can reinforce the plastic edges of hoop houses, old cables make great tomato trellises, and discarded newspaper acts as a biodegradable weed barrier. Can you save money if you save your seeds from year to year rather than buying new ones? Do you have the time and knowledge for seed saving, or are you interested in learning those skills? Do you have the construction skills (or a partner who does) to build your own

hoop house? Start thinking in these terms and you will save a lot of money.

Costs of Ownership

In addition to the initial cash outlay for the downpayment, there are other costs associated with ownership. The following list is not meant to stop you from purchasing the land or equipment you need. The point is that significant capital investments carry "hidden" costs and you want to be aware of these as you plan your next steps. As you learn to farm, you will develop a clearer sense for the inputs required by your business. In general, the scale of your investment should match your certainty that you can make that capital productive and profitable. Some key "hidden" costs to consider are:

- "Depreciation," or the capital's loss of value over time;
- Repairs and maintenance, especially if your mechanical skills are not yet sufficient to do the job;
- Interest payments on the loan;
- Insurance premiums to protect your assets;
- Property taxes on owned land;
- Labor (otherwise included in price of a custom hire job);
- Less flexibility to change how your farm operates, or to leave farming altogether.

Financial Recordkeeping

As you gain experience in production and sales, develop a methodical recordkeeping habit. These records will help you make better agronomic decisions in the coming years, and they will absolutely help you secure financing when the time comes to approach a loan officer. Here are a few finance-related records you should keep from Day 1:

- Your sales and expenses, broken down by crop/animal product;
- Labor input and yield for each crop/animal type;

- Annual financial statements, including everything you spent on operating expenses;
- Annual Schedule F tax forms, the IRS form for farmer profits/losses.

Making Investment Decisions

After a few years of steady and growing demand for your product, you may find yourself maxing out your resource base. If you anticipate and desire future growth, this is the right time to take steps toward scaling up your operation. In considering growth-oriented capital investments, start by answering the following questions:

- What scale of farm do you want, ultimately?
- Where is your current farm operation constrained?
- Will the investment allow you to add new income? How much?
- Will the investment improve your quality of life?

Begin by referring back to your goals. Remember, your lifestyle goals help you figure out how big your operation needs to be.

Next, define the problem you are trying to solve. Where is your operation constrained? Maybe you don't have an effective way to cool, clean and store your harvest. In this case, you could invest in a proper wash and storage facility. Or maybe you have a short-term lease (1-2 years), but you need to invest in soil and infrastructure to increase production. In this case, you might consider investing in your own farmland. The "investment solution" should deal directly with whatever is constraining your growth.

Before making an investment, think of other ways to achieve the same goal. Can you rent refrigerated storage space nearby, and at a reasonable price? Can you secure a longer lease on your land that would make your soil and infrastructure investments worthwhile?

Next, think in dollar terms about the return on any possible investment. How much additional income would the asset produce, and how much would it cost to buy and maintain?

Nerd Alert here, but don't be intimidated. The best way to decide the profitability of any investment is by calculating the "net present value of the expected cash flow" generated by the investment. If that sounds like a bunch of economist jargon, it is. But it is not so complicated, and there are many tools out there to help you do it.

In simple terms, you will estimate how much additional money the asset will generate over the amount of time you expect to have it, and you will subtract away the costs of buying and owning that asset over that same time period. That gives you a rough idea of the profit you will make by investing in the asset. But wait! There's more! Then you will apply a simple formula that considers the "opportunity cost" of making the purchase. Opportunity cost is a feature of every purchase you make; if you buy a tractor, you lose the opportunity to spend that money on something else, like a storage facility. Or you could simply put that money in the bank and earn interest on it. The formula will give you a "net present value," which is a single number that summarizes how much money you will make off of the investment (and, thus, whether it's the best use of your money).

Finally, think about how a large investment will affect your quality of life. Will paying back the loan add stress to your life? Will it save you enough time to take one day off per week to spend with your family? In other words, does the investment help you meet your lifestyle goals? The net present value formula described above does not put a price on spending time with your family, or on additional stress caused by a loan, or on the comfort of riding in an air conditioned tractor versus sweating behind a tiller. These are factors that you have to weigh based on your own goals and values.

Estimating What You Need

The table below shows the type of equipment needed for a vegetable operation, depending on the number of acres. For example, if you are farming three acres or fewer, you are probably getting by with a rototiller.

If you are farming more acres, you probably need a tractor. Spend some time with this table and get a sense for the type of equipment you will need to succeed on the scale you envision. Keep in mind that these are rough estimates. They will change depending on your own physical abilities, those of your partner (and whether you have one), your tolerance for manual labor, your time availability (do you have an off-farm job?), and the type of crop system you are considering.

Sources of Cash/Financing

Okay, the parental lecture is over. You've been warned about the dangers of going on a shopping spree—unless you are starting your farm with the help of a trust fund—and you should have some idea about weighing the costs and benefits of different investments. It is time to discuss how to find the cash you will need to get your farm started, and where to go when you are ready to expand.

Once you've decided on the critical investment, there are several places to look for financing. Many of these opportunities are explored below.

Your Own Savings

Your personal savings—your “contributed capital,” as it's known formally—is core to any financing strategy because many investments cost more than you can borrow, and financiers want to see that you have some skin in the game. Some beginning farmers enter farming as a second career and have considerable savings. Others start saving as soon as they begin farming; they lease farmland and equipment and deposit any profits into a savings account intended for future expansion.

“Individual development accounts” (IDA) — often offered by local non-profit organizations or economic development agencies — will match your savings, helping you reach your goal twice as quickly as you

Estimated Equipment Needs for Various Sizes of Vegetable Operations

Scale	Seed starting	Power source and tillage	Direct seeding	Equipment	Cultivation	Harvesting	Post-harvest handling	Delivery
1-3 acres	small hoop house, grow lights, planting trays	rototiller or walking tractor, custom work	Earthway seeder, Cy-clone seeder	Back-pack, sprayer, irrigation, tools	Wheel hoe, hand hoes, digging forks, spades	Field knives, hand boxes, buckets, carts	Bulk tank, canopy, packing containers	Pickup with topper or van
4-6 acres	1,000 sq. ft. greenhouse, cold frames, field tunnels, planting trays	35-40 hp tractor with creeper gear, power steering, high clearance	Planet Jr. plate seeder	1-row transplanter, irrigation, more tools	Cultivating tractor (IH Super A or IH 140)	Potato digger, bed lifter, wagon, more boxes, buckets	Roller track conveyor, hand carts, walk-in cooler	Cargo van
7-10 acres	Additional cold frames, planting trays	40-60 hp tractor, chisel plow, spader	Stanhay precision belt seeder with belts	2-row transplanter, sprayer	Tool bar implements: beet knives, basket, weeder	More field crates	Barrel washer, spinner, pallet jack	1 ton truck with refrigeration
20+ acres	2,000 sq. ft. greenhouse	80 hp tractor with loader bucket and forks, compost spreader	Nibex or Monosem seeder	Irrigation, bed shaper, mulch layer	Sweeps (Bes-serides), Buddingh finger weeders, flame weeder, potato hiller, 2d cultivating tractor	Asa lift, harvest wagon	Wash line, larger cooler, packing shed and loading dock	Refrigerated truck

Adapted from a table distributed at Michael Fields Institute Advanced Organic Vegetable Production Workshop 2/2001, Jefferson City, MO

would otherwise. Do not forget that off-farm jobs can help you cover health insurance in the short term, and help you qualify for a loan with a financial institution. There have been several efforts by non-profits to develop an IDA program for agriculture in North Carolina, but as of this publication the authors aren't aware of any off the ground. Yet.

USDA Farm Service Agency

The FSA provides financial assistance to farmers. The FSA considers itself the “lender of first opportunity” (though they would more traditionally be called a “lender of last resort”) because they have programs designed for beginning and socially disadvantaged farmers who would not qualify for loans from traditional banks. Because FSA is a federal program, it offers financial management and planning consultation for farmers even if you have not been approved for a loan. FSA loan officers will provide assistance throughout the life of the loan. They make loans using federal funds, some of which are designated to beginning farmers.

FSA can also guarantee loans at commercial banks, meaning that they will repay the bank if you default. If you secure such a guarantee, it increases your chance of getting a loan from a traditional bank. Like banks, FSA has lots of loan options: farm ownership loans to purchase land, equipment purchase loans, livestock purchase loans, and down payment loans to buy a farm.

A new micro-loan program targets beginning farmers. While most FSA loans applications require three years of farm records, the micro-loan program has looser loan requirements and may provide loans up to \$35k (changes in the farm bill may eliminate the three-year requirement on FSA loan applications). Keep in mind that FSA usually locates its offices next to other useful resources, such as Cooperative Extension, USDA-NRCS and county Soil & Water Conservation District locations. Do not hesitate to stop by and discuss your current plans and needs with these people who know the most about current opportunities to support your vision with state, federal and private funding.

Other (Non-Federal) Farm Loan Programs

The Farm Credit System is a national network of cooperative, client-owned banks that provide

financial services to farmers and rural residents. This includes education and mentoring in financial management for young and beginning farmers. Farm Credit has small, medium and long-term loans as well as refinancing options, meaning they will help you get better terms and interest rates on the loans you already have. Farm Credit, in particular, reaches out to beginning farmers through a new online resource called “Field Guide to the New American Foodshed.” This resource offers keen advice for those interested in alternative agriculture business development

Some commercial banks have an agricultural lending department, including lines of credit to finance seed purchases and other inputs meant to be paid of within a year. They also offer longer-term loans for major infrastructure. Many of these institutions participate in the FSA loan guarantee program, described above.

In general, smaller, local and community-based lenders have more of a vested interest in promoting local businesses like a viable small farm. Some other smaller, more regional lending institutions are springing up to support small beginning farmers. For example, check out the Whole Foods Markets Local Producer Loan Program and similar opportunities.

At various times, depending on the funding environment, non-profits will develop micro-lending programs for agricultural entrepreneurs. These loans are typically smaller, shorter-term and carry a higher interest rate than traditional lending sources, but they also include valuable mentorship and educational opportunities.

Customer and Community Loans

Many beginning farmers see their endeavor as a family or community affair. This can apply as much to financing your farm as to the experience and benefits you expect in the medium or long term. New farmers who approach friends and family members with a solid business plan are often rewarded with loans or even gifts.

In the winter before their first year of operation, TableTop Farm in Iowa worked with a lawyer to develop a letter to send to friends and community members requesting small loans of at least \$1,000. These community lenders had the option of providing loans of two to five years at interest rates of 2% to

4%, with the longer loans receiving higher interest rates. TableTop used these funds to purchase supplies and make improvements on the farm that their FSA equipment loan would not cover.

Across the Creek Farm in Arkansas offers another example. When a local grocery store invited them to scale up their production of pastured poultry, the farmers went back to the grocery with their business plan, the costs of expansion, and a request for a shared investment in the form of a \$10,000 loan. The grocery store agreed to this, allowing Across the Creek to expand production enough to supply the large volume requested by this market.

Crowd Funding and Slow Money

The burgeoning world of crowd funding offers beginning farmers a new and exciting opportunity to find capital. This type of Internet-based funding allows individuals to donate money towards businesses with a specific goal, including local and sustainable agriculture. Often, donors receive an incentive depending on the amount of money they give. You might consider offering farm t-shirts, homemade preserves or even CSA shares for larger donors. Start by searching for “Farm” at crowd source financing websites like Kickstarter, Indigogo, StartSomeGood and ThreeRevolutions.

Slow Money helps socially conscious investors to put their money to work through loans at low interest rates to local (often organic) farms and small food enterprises. Slow Money has a network of local and regional chapters, and events are organized at a local and national scale. These events organize investors to support local food systems, and if you are interested in this type of funding, you should put yourself out there at these events.

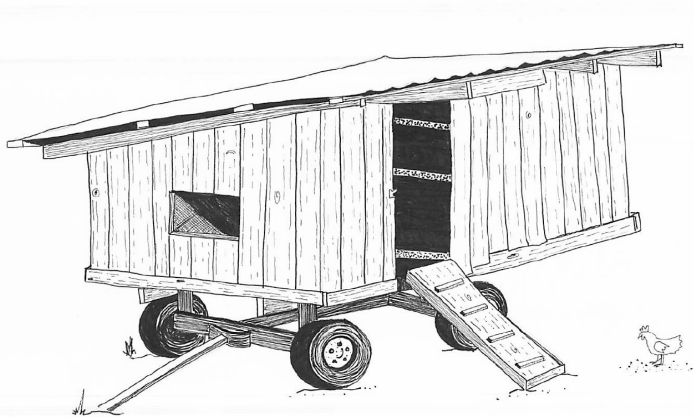
USDA Natural Resource Conservation Service

The USDA’s Natural Resource Conservation Service controls a pot of money, authorized by the farm bill and appropriated by congress, intended

to incentivize and otherwise support on-farm conservation practices. EQIP (the Environmental Quality Incentives Program) provides cost-share money to purchase farm improvements that support conservation goals. These grants are not directly aimed at beginning farmers, but they may help beginning farmers nonetheless by offsetting capital costs that you would pay for anyway. For example, EQIP can help you become certified organic, build a high tunnel, install a fence for livestock, or implement conservation enhancements such as riparian buffers. Many beginning farmers have relied on NRCS funds to build the infrastructure of their farm and bolster annual net income. To qualify for EQIP, farmers must provide some money of their own, but the cost-share rates for beginning farmers often

approach 90% of the total cost. This is free money that does not have to be paid back.

Other NRCS incentive programs pay farmers to implement conservation practices on their land. In many cases, these are practices that you might undertake anyway. As with any program run through the USDA, you must have an FSA farm number to apply. CSP (Conservation Stewardship Program) is administered in a cooperative effort between the national and state NRCS offices and county Soil and Water Conservation District offices to maintain good conservation practices. Together, they set conservation priorities within the state and receive applications from farmers for funding. In your application, you will describe particular conservation measures you would be willing to adopt and your application will be weighed against other applications in your area. If you get approved, the government will pay you a certain rate per acre depending on the practice(s) you adopt. In general, if you are only farming a few acres, the paperwork is probably more hassle than the payment is worth. If you plan to farm many acres, this may be a valuable program that supplements your income.



Federal & State Grants

Farms are businesses, and must function as such. There are few “pure” grants available for farm business start-ups. However, as mentioned above, there are some grants and cost-shares for efforts with a demonstrable public benefit. This might include on-farm research, or conservation improvements. You are not likely to find grants simply because you are starting a farm. This is not meant to discourage you from pursuing any opportunity that you find, but do keep in mind that the small amount of grant money available will involve a competitive process and you should always weigh the cost (of your time) against the possible benefit of winning this money. A few federally-funded grants for farmers include Value Added Producer Grants (VAPG), Sustainable Agriculture Research and Education (SARE) producer grants, and Renewable Energy Assistance Program (REAP) grants

Exercise

Now it’s time to put your short and long term financing plans on paper. First look at your annual budget projection for next year. How much cash do you need? What are your estimated expenses? Where will the cash come from? When can you get the money?

Reflect on the scale of operation you expect for the next few years. Focus on the year you expect to jump from your current size to another level, in terms of equipment/land/etc per the chart. In this future year, what will you need to buy to scale up? List each major item, its value, and where you might go for financing.

Next, begin to plan how you will get the financing you will need. Who will you borrow from? What is a common interest rate? What alternatives (crowd sourcing, NRCS cost-share, family and friends) are you interested in?

- Step 1: Write down start-up cash needs this year
- Step 2: Estimate your needs for equipment, land, buildings in the year you plan to scale up. List each major item, its value, and your financing strategy for each
- Step 3: Identify lender and target date to meet with them to learn more

NOTES

CHOOSE A BUSINESS STRUCTURE (LIKE YOU MEAN IT!)

Perhaps the last thing most beginning farmers are thinking about as they plan their agricultural enterprise is what legal form their business needs to take. But the consequences of this choice can be crucial, especially in the unfortunate event of any litigation against your farm. More importantly, a business entity provides you with a solid opportunity to craft a good contract between the owners to address how the company will operate. What follows is a short introduction to the major business structures, including the pros and cons of each.

If, after reading this section, you are considering any legal structure other than a sole proprietorship or general partnership, it is strongly recommended that you seek out professional legal assistance. There are websites and legal clinics at schools like Duke Law School, but remember that free forms and law students are no substitute for a practicing lawyer who will look after you as your business grows.

Sole Proprietorship

If you make no effort to legally establish your business, the default business structure you have “chosen” is the sole proprietorship. In this structure, there is no legal distinction between you and your farm business. This means that your personal property and assets are at risk if the farm incurs liabilities that it cannot pay. For this reason, sole proprietorships should carry a general liability policy that will help pay liabilities incurred by the farm.

Most farms are sole proprietorships, and this might be perfectly appropriate while your farm is small and in the beginning phase. If you are a sole proprietor you do not have to file legal forms declaring your status; however, you should file a Schedule F with your personal Federal Income Tax return to report farming income and expenses. Schedule F is required by some agricultural grant and loan programs as part of demonstrating a farming track record.

Partnership

A partnership is an arrangement where more than one business and/or individual agree to advance their business interests together. Most commonly, partnerships form among individuals who share in the work and in the profits and losses. Partnerships can be assumed and informal (as with spouses), and are governed by state statute in the absence of a written partnership agreement. But if such partnerships dissolve due to death, divorce, or other life situations, untangling the business from personal considerations can devastate a beginning farm operation. At the very least if you are farming with another person, you should have a written agreement between you.

Choosing a business structure provides you with a solid opportunity to craft a good contract between the owners to address how the company will operate.

Limited Partnerships are another type of partnership whereby only one partner need assume unlimited liability. The limited partners’ liability only extends

to what they have invested in the company. You must file organizational papers with the Secretary of State to create a limited partnership (as opposed to the general partnership above) and you must have a written partnership agreement between the partners.

Partnership profits are only taxed once. The IRS views partnerships as “pass through” entities, because the profits and losses “pass through” the business to the partners. The partners pay taxes on their share of the profits (or deduct their share of the losses) on their individual income tax returns. Each partner’s share of profits and losses is usually outlined in the partnership agreement. Depending on the partnership structure and the jurisdiction in which it operates, owners in a partnership may be exposed to greater personal liability than they would as shareholders of a corporation.

Limited Liability Company (LLC)

The Limited Liability Company offers limited personal liability with the single taxation feature of partnerships and sole proprietorships. An LLC’s

profits and tax benefits are split any way the “members” (LLC speak for owners) specify in their written operating agreement, and members pay personal income taxes on their share of the profits. LLC owners have less administrative requirements and recordkeeping than a corporation. For instance, they are not required to have a board of directors or officers. Instead, LLCs make operational decisions by designating “managers” if less than all “members” are to have a hand in day-to-day decisions. Limited Liability Companies have more financial flexibility than a sole proprietorship, such as the ability to raise needed capital through shareholder investments (and co-ownership) in the business.

Though they aren’t required to have a board or officers, the members of an LLC must produce and have on record governance and protective provisions regarding their operation. Filing the organizational paperwork with the Secretary of State is the easy part. Crafting the Operating Agreement (see sidebar) takes a bit more legal skill. In addition, you must file annual reports with the NC Secretary of state and pay an annual fee (currently \$200) to avoid dissolution.

Like a partnership, an LLC is considered a pass

through entity, and by default the IRS treats the LLC as a partnership. However, you can elect to be taxed as an S-Corp (see below) by timely filing the appropriate form. Such a filing may have tax benefits if you plan to pay yourself a salary.

LLCs are a good option for many farmers because they can protect your personal assets from liabilities incurred by the farm business. Even if you start with a sole proprietorship or general partnership, you may consider transitioning into an LLC as your farm business and personal assets grow.

Corporations

The corporation is historically the most-used liability limiting business structure. There are two types that have different tax implications:

The “C-Corporation”

The C-Corp is a corporate business structure that protects you and other owners from personal liability and provides some other non-tax benefits, such as the ability to raise capital from private investors. The primary advantages are limited personal liability and more options for shareholder investments. C-Corp income is taxed twice: First as corporate income,

“I Might Like You Better if We (Farmed) Together”

Many farmers go into farming side by side with a romantic partner. Often, this partner is a spouse. A lot times, the partners are not yet married. Combining the decision to farm with a romantic relationship can be exciting. However, you must try to recognize that the romantic relationship likely forms the basis of your decision to go into business together. If it were to go away (and with it the trust), would you still want to farm together?

In these situations, drafting a business agreement is not a bad idea. It is likely that the partners will have uneven resources and contribute different amounts of labor and capital to the enterprise. Also, unmarried partners might take on debt together, or one partner might take on debt in which the other partner has no responsibility. One partner’s good credit score may be the basis for being able to borrow capital. One

partner might have a job and contribute more to the living expenses. If the relationship ends and one partner leaves the farm, who gets to decide how it all settles out? The situation is more acute if the parties buy land together, but contribute unequal amounts.

For married couples, the separation and divorce process tends to override agreements, and there are well-established principles in matrimonial law (and a mediation process) that guide and govern the splitting of assets. Because the law treats unmarried romantic business partners as, well, business partners, it assumes all decisions and revenue and asset splits are 50-50. Co-tenancy in land ignores whether one person put up more of the down payment or cash towards purchase.

Part of your decision to farm together should include a sober reflection on what is to happen should your romantic relationship end. That will be tough enough, why make it more difficult?

then as shareholder (dividend) income (this is what is known as “double taxation”).

The “S-Corporation”

Like a partnership, S-Corp income is passed through its stockholders in proportion to their investment and taxed at personal income tax rates. S corporations (‘S’ stands for the Internal Revenue Code sub-chapter under which they are allowed, and you will hear them referred to often as “Sub-chapter S Corporation”) can have only one type of stock and only a limited number of stockholders. It’s easier to raise capital as a corporation than as a sole proprietorship or partnership. The S-Corp form provides stockholders/shareholders with the corporate protection of limited personal liability but does not come with additional taxation of corporate profits.

The Agreement

Your choice of entity will depend on a number of factors, most having to do with complexity of paperwork and tax advantages. However, whether you farm with others as a partnership, a limited liability company, or a corporation, you should have a contract executed between you that governs not only the management of the entity, but that determines any limitations on the division of equity (who owns what percentage), income (how is income divided), and management (who has the right to make decisions).

With partnerships, this is known as a *partnership agreement*. Limited Liability Companies have an *Operating Agreement*. And Corporations are governed by *Bylaws*. There are six essential elements that any of these business agreements should cover. They are:

1. **Money In.** Co-owners need to be clear on what each is contributing to the entity (cash, equipment, livestock, etc.) in exchange for his or her percentage of ownership. Also, the business needs clarity regarding how the owners should handle future needs for capital, and how such contributions affect ownership percentages.

2. **Money Out.** How do the owners get paid? Once the business generates a profit - what’s left over after all expenses have been paid, how will the profits get divided, or under what decision process are the profits re-invested. Consider also whether owners

will be paid by salary (in a corporation) or by draw (LLC) or whether profits are simply divided at end of year.

3 **Management.** In short, how are decisions made? There are a certain number of major decisions that require input of all owners (major capital purchases, responses to litigation, change in business purpose, dissolution, etc.) and minor decisions (routine inputs and day-to-day operations) that perhaps shouldn’t require a vote. Also, a decision on how revenues should be applied and handled in the course of operations. For example, the agreement could state that purchases over \$2000 require a majority vote of the members. There may be other decisions - such as the decision to dissolve the company - that will require unanimous approval (agreements with unanimous vote requirements should have strong dispute resolution and buy-sell provisions).

4. **Dispute Resolution.** Simply, if there is a disagreement between the owners of the business, what is the process for breaking the impasse? A well-crafted agreement will be easy for all owners to understand, and when the agreement allocates management decisions to certain owners (again, “managers” in an LLC), disagreement should be less of an issue (i.e. all owners have agreed before hand on management decisions). For other decisions that require a vote, owners can live with the vote or choose to exit (see #5). Voting should always be structured to avoid a 50-50 for-against situation. However, not every situation can be foreseen, and where the agreed decision-structure does not resolve the impasse, there should also be language that all agree to for settling a dispute. This can be as simple as a coin-toss. More likely, there should be a requirement that the parties seek a third-party mediator (as well as a process for choosing the mediator) before seeking redress in court. Again, the true importance of agreements between partners is that all know what they are getting into beforehand. Only then can they live better with decisions that don’t go their way. Lastly, the agreement should be clear under what circumstances the agreement itself can be amended in response to new situations.

5. **Entry/Exit.** As a business grows, opportunities may arise to bring in other owners (for expertise, capital contributions, etc.). Likewise, over the course

of a business, owners may become disengaged or disaffected (i.e. they can't live with an important decision), and wish to exit the business. The agreement should be clear on the process for how people enter the business, and how they exit. For accepting new owners, the agreement should be clear on the other owners' role in this decision. Also, there should be a process for valuing their contribution relative to the current value of the business to determine their ownership share.

If an owner wants to leave the business (or dies), the agreement should be clear on this process as well, particularly how the owner's share is valued (normally by hiring an appraiser) and how it should be liquidated (i.e. paid out to the exiting owner). Agreements should enable the business to buy the interest from owners who die, get divorced, become disabled, or whose personal assets become subject to outside creditors (this could include their percentage share in the business). Again, how the interest is valued and liquidated is a core element of any such "buy-sell" clause.

6. Winding Up. All businesses come to an end. In farming, land is forever, but businesses that live on it will come and go. First, the business agreement should spell out the decision-making process for bringing the business to a close. The business agreement should be clear on the rights and responsibilities of all owners regarding this decision. There should be a process for how assets are sold off, or who should take responsibility for that action. Also, as assets are sold, how will the sale proceeds be distributed? Or alternatively, if the business is closing with debt, how will the debt payback responsibilities be apportioned?

In summary, a well-crafted agreement should achieve understanding and buy-in from all owners. No partner should feel stupid by asking to have a clause clarified, or proposing scenarios on how the company will respond to hypothetical situations. Don't be intimidated by an agreement that is many pages long. Shorter agreements tend to default to the state law that is governing the entity, and while this may suffice to determine the outcome of various situations, you are left with little understanding of your agreement, which leads to poor risk management decisions as the business weathers its

ups and downs. The idea is to avoid court or third party involvement. Many startups file papers to set up their entities, but don't follow through with getting an agreement drafted.

Finally, business agreements should be flexible, and will be amended and change over time. The agreement is just your best foot forward as you start a new enterprise and try to anticipate things foreseen. But their real value is how they help you and your partners affordably manage things unforeseen.

QUICK COMPARISON OF BUSINESS ENTITIES

	Sole Proprietorship	General Partnership	Limited Partnership	Corporation	Limited Liability Company
Ownership	Single individual	2 or more general partners	1 or more general partners and 1 or more limited partners	1 or more shareholders	1 or more members
Direction and Control	Single individual	All partners	1 or more general partners and 1 or more limited partners	1 or more directors	1 or more members
Management	Single individual	Managing partner or all partners	1 or more general partners	1 or more officers	1 or more members
Liability	Owner has unlimited liability	Partners have unlimited personal liability	Limited for limited partners, unlimited personal liability for general partner	Limited	Limited or unlimited
Transferability	Not applicable	May be assigned, but assignee not a partner	May be assigned, but assignee not a partner	Corporate stock freely transferable, "S" corporation restrictions must be met	May be assigned, but assignee may or may not be a member
Continuity of Life	Terminates on owner's death	Dissolves upon death or withdrawal, unless continued by partners	Generally dissolves upon death or withdrawal, unless otherwise specified in agreement	Perpetual	Operating Agreement determines continuity
Federal Taxation	Individual Taxed	Pass-through entity (each partner taxed individually)	Pass-through entity (each partner taxed individually)	"C" corporation and shareholders taxed; "S" pass-through entity, shareholders taxed	Pass-through entity (members taxed individually)
Legal and Administrative Costs	No initial or annual filings or fees or legal costs	No initial or annual filings or fees but may need legal service to draft partnership agreement	Initial and annual filings and fees for drafting limited partnership agreement	Initial and annual filings and fees, legal fees for drafting documents, annual meetings	Initial and annual filings and fees, legal fees for structuring entity

LAND IS WHERE YOU LOOK: A PRIMER ON LAND ACCESS

Take a deep breath: your land is out there. Many beginning farmers hear the words “land access” and, cringing, curl up in a fetal position. They fear that farmland is unavailable, expensive, and just plain out of reach for anyone who lacks family land or a stack of cash.

First, take a deep breath. Understand that all farmers find land to farm if they have the patience and resolve to make it happen. It takes deliberate work, some risk, and a measure of guts. The underlying theme of this section is that to get your land, you have got to go out and find it.

Your search, discovery and acquisition of the land you are going to farm will be an odyssey unique to you, with your own limits of patience and creativity. You will need a willingness to get the help of others, and you will need to persevere the heartbreak of a promising parcel slipping away. There will be glitches along the way, but you will just keep at it.

The good news: technology has expanded the geographic area and speed that a not-yet-established farmer can search and find information on specific parcels of land. Though not a panacea, the Internet gives the new generation of farmers one heck of a start.

Land Title Flows

Keep in mind that land is always changing hands, and has been for hundreds of years in this country. Land has always been a highly prized commodity, and it has always been expensive relative to the purchasing power of the times.

There are many ways to access land; you’ve just got to find the one that will work for you. It is no cliché in looking for land that you’ve got to be at the right place at the right time.

So where will you look for land? Well, many new farmers focus on land access earlier than they

should. In the early phases of your career, so much more energy should go into locating your training: either working for someone else, on your own at an incubator farm, through the community college system, etc. You’ll likely choose to train in a geographic area near where you know you want to live.

That does not mean you blind yourself to opportunity. You will find that as you search for land, your own goals and openness to interaction will shape the mentors you attract and perhaps those who might sell or otherwise make land available to you.

Working for an established respected farmer in the area helps your credibility, and is an easy reference when a landowner is deciding whether to rent (or even sell) you land. Most farm incubator programs seek to connect participants with landowners in the surrounding area. Many beginning farmers find land through these connections. In other cases, farmers train in one place and then patiently and methodically search other markets they consider promising.

Again, all land changes hands. Families can only hold it for so long, especially when they do not do the planning required to keep it as it passes between generations. But all farms are built from the remnants of previous farms, and for all families farming comes to an end, and land is released to someone else. Just know that you will come across land opportunities where the owner is voluntarily relinquishing the land but is not in a hurry, especially when they think they will get a higher price by waiting, or you may find a landowner in need of cash. Acute financial need shortens the time a landowner is willing to wait for the highest price, and a lower offer by you might get their approval. Similarly, land foreclosed by a bank and sitting in their inventory may sell for a lower price because the bank can put cash to work faster than it can land.

All farmers find land to farm if they have the patience and resolve to make it happen

The Givens of Land

So land has a number of “givens” with which you should be familiar. This background is critical to your understanding of the access process, and critical to your perspective and patience.

1) Transfers Must Be in Writing

The first given with land: most all transfers must be in writing. A long time ago in England, jurists in wigs developed something called the Statute of Frauds. All states in the United States have some form of this in their state law codes. It means that transactions involving the transfer of land and many rights to it must be in writing to withstand a claim by someone else, and in many cases a specific form of writing. For example, options to purchase land must be in writing, and often “recorded,” which means filed with the proper authority. Another example: the right to harvest timber from the land must be in writing, as must any deed to the land.

2) Land is a County Affair

Land records are organized by county. The records for land interests are held at the Register of Deeds found at or nearby the county courthouse. Most documents recorded since the 1980s (it varies by county) can now be searched online, but all of them are held in a “deed vault”. The deed vault is essential when you need to show the chain of ownership through the years. If Farmer Magoo offers to sell you a piece of land, you will first want to make sure that Magoo is the rightful owner to that property.

3) You’ve Got to Record Documents

In many cases, these writings must be recorded to protect your rights in the property. For example, a lease in excess of three years must be recorded (usually by a memorandum referring to the lease, not the lease itself). You can have a deed and “own” the land, but if you do not record that deed, someone else could show up with a deed and claim the same land. Whoever records first, wins. The point is that your claim to title and right in the land must be known to the world, to put would-be owners or interest holders (banks, heirs, purchasers, etc.) on notice that someone already has a claim.

4) All Land is Regulated

All land is subject to some form of government regulation. Qualifying farms often receive some

important zoning exemptions that will exempt you from certain county regulations. What you do on your farming path before you go for land will help you qualify as a bona fide farm when you do get land. This can be a huge benefit. For example, all land is taxed by the county, so owning land is not free. Generally, land is taxed at some dollar amount per \$1000 of assessed value. Land in agriculture or forestry can be enrolled in present use value programs, assuming you have sufficient acreage in production. Enrolled land is usually taxed at a much lower rate and can save you significant money each year.

Some Legalese

As you search out and approach landowners, it is helpful to know a bit about how land is owned. First you need to understand that the person with whom you are speaking about the land may not have ultimate authority to lease or sell it to you.

In the English common law, where our laws come from, an interest in land is described as a *tenancy*. A tenancy can describe ownership, either alone or with someone else, or simply a use, as in a lease. For example, a “sole tenant in fee simple” owns the land absolutely, and can sell it, give it away, or die with it so that it goes to his or her heirs. (If you haven’t been to law school, you’ll probably never come across this phrase in real life.)

A *life estate* describes when the person who is currently on the land, say a widow, has already transferred title to the land to someone else, and that person takes ownership immediately upon the previous owners death. This is pretty common.

Tenancy in common ownership is where two people own an undivided interest – not a specific portion – of a piece of real property. Each person’s interest can be sold, gifted or inherited, but one owner cannot transfer the entire parcel. All interest holders must agree to a sale. Most inherited land is owned this way.

Joint tenancy is where two people own the land, but when one dies, all the land goes to the survivor. You won’t see this that often, but it is out there.

Tenancy by the entirety is the same thing as joint tenancy, excepts it only applies to married couples, and it's pretty common. Sometimes married people own land not also owned by their spouse (i.e. they inherited it), but the law assumes when a married couple buys land, they own it jointly.

If you take title to the land as husband and wife, it will likely be as tenants by the entirety. If you take title to the land as "significant others," you are tenants in common. Regardless of what each of you put up in purchase money, the law assumes you own the land 50-50. In this situation, you have the option to write an agreement splitting up your interests unequally. This can be a wise decision, especially when one party is putting up more money or taking on more risk than the other.

Oftentimes, land is held in a trust, or the land is the property of a business entity such as a corporation or limited liability company. It is important to understand how to spot trust and LLC ownership because you need to know that the person with whom you are dealing has the right to transfer interest in the land. They may have the power, but must otherwise adhere to the terms of the trust or LLC, which may restrict their power.

To identify land in a trust when searching online records, the owner's name will be that of the trustee of the trust, usually with a "TRST" or something like that next to their name. Sometimes the name of a trust will appear with that word identifying it as such. If the land is in a business entity, you will see a less personal name with an "Inc." or "LLC" (maybe even "partnership") next to it.

As noted earlier, interests in land require a written instrument, with limited exception. In most cases title belongs to whoever has their interest recorded in the chain of title for that property, housed in the county's Register of Deeds office. In North Carolina, most deed registries can be accessed online.

The basic instrument of title is the **deed**. The deed is the record of transfer from one owner to another. The person transferring the land is known as the "Grantor." The person receiving the interest in land is known as the "Grantee." The deed can show the transfer of an entire interest in land, or it can show

the transfer of a partial interest, such as the right to harvest timber or the granting of an access easement.

A **warranty deed** is a deed where the grantor is telling the grantee that he or she has the right and title to the property and will defend against any outside claims.

A **quitclaim deed** is the grantor telling the grantee that he or she is taking the property as is, without any statement regarding clear title.

If the land has been purchased with a loan, normally that loan will be secured by the land. This is known in common terms as a **mortgage**. This means if the purchaser of the land fails to make payments on the loan they used to purchase the land, the lender--normally a bank but sometimes the seller--has the right to foreclose on the property and take or retake title.

The instrument that requires repayment of the loan is known as a **promissory note**, and the instrument that is recorded in the deed registry that references the debt and right of collection to the specific piece of property is known as a **deed of trust**. The deed of trust, at least in North Carolina, has taken the place of the mortgage deed to secure loan liens on land.

Finding Land

There is land that is listed as available, and there is land that is potentially available. For the former, you can find this land by hiring a broker to help with your search, or search where landowners might list land for sale. Real estate brokers have access to what's known as the Multiple Listing Service (MLS), which they can access to find land put up by brokers representing sellers. If you hire a broker to search out properties for you, you will pay them a commission on the sale. Depending on what else is going on in your life (i.e. a job), having someone who knows their trade do this work for you is well worth it.

If you want to substitute effort for money (ie. avoid paying a broker's commission) and can afford the time, you can look for the opportunities that are not yet listed. To search for opportunities that are not yet advertised you fill the shoes of the broker and find out information yourself without a listing service. Once you have a lead—property you spotted driving

down the road, a tip from another farmer, etc.—use available tools to learn more about the property (see table below).

Land comes up for sale in many ways. Today most farmland is sold off by heirs of people who used to farm the land, quit farming and lived on it until the last of them died. Assuming all heirs agree, land is simply put up for sale by the executor (if he or she has that power) or by the trustee of a trust if the land has passed into that entity. You might succeed in convincing the family to sell you just a portion of the whole farm (though you will pay to have it surveyed off). Other times, parents had a good mind to break up their farm before they died, and each heir has an individual piece to sell or hold (this has the effect of breaking farmable parcels into more affordable tracts).

Prime open farmland is going to be competitive. There are established farmers in the area who may lease it currently, and have probably been asking the family for years when they're going to sell it. Same with land coming up for auction: there will likely be a number of farmers who have the cash or borrowing power to pick up a new piece to add to their farm.

Increasingly, there are landowners who bought their farm maybe 10 years ago after themselves retiring from other careers, have improved its soil and infrastructure, but are now older, or couldn't make a go of it, or just want to move somewhere else. These are good opportunities because the owner probably "gets" what you are doing and would like to see their dream remain under good stewardship. This maybe could help the price. Maybe.

You will come across less-than-ideal parcels that you feel you need to jump on (say there is a scheduled auction). Try to get the best idea you can about the land's potential before rushing in. If it is an entirely wooded parcel, just know that it will cost a fortune to clear it.

One potential strategy: go where owners of farmland gather. There are a number of places landowners, especially older landowners, gather. For example, you may drop in on Farmland Preservation Board meetings. These are called different things in different counties, but many counties have a

Voluntary Agricultural District ordinance. The people who usually oversee its activities are county staff, landowners, and other people keen on seeing land stay in farming in their county. Usually, these people come from different townships in the county, or are otherwise connected with farmers and landowners. Be friendly, explain your situation, and they might pass on some information to you about a piece of land that you can follow up on. With some luck, you may find an older landowner who understands what you are trying to do, doesn't have heirs going into farming, reminisces for the farm culture in their area, and is willing to carve off a part of their landholdings to help you get a foothold. It will still cost money to buy. But it can happen.

Also, keep your eye out for "farm transition" or "farm estate planning" meetings held regionally or in the county. Often county cooperative extension or soil and water conservation staff organize these gatherings. These draw lots of landowners, and you should be there (and not so shy) to strike up conversations about your farming goals. If there's another one the same time next year, make sure you go. You will recognize people and they will recognize you and your serious intent.

Valuing and Pricing Land

It is certain that land is one of the most valuable commodities in our society. The value of land can be seen as a combination of many factors, including the emotional value an owner places on it, and what "the market" places on it. Many variables are considered in placing a value on land. These variables can be categorized down to four interdependent concepts: utility, scarcity, desire, and effective purchasing power. All are a function of location.

The basic valuation of what land is worth to a purchaser is its fair market value (FMV). You will see this as the asking price expressed either as a price-per-acre for raw farmland, or the price for a whole tract, which can include a residence, barns and other infrastructure.

Fair Market Value will also be expressed in the county's tax assessment for the property; in other words, what the county thinks the land is worth determines how much taxes the owner pays on it.

The value of land might also be expressed in “use value” terms. In North Carolina, this measurement of value is expressed in the present use value property tax regime, which allows farmers to own and operate more land taxed at a lower rate than its highest and best use, so long as the size of the parcel qualifies.

Factors to Consider in Choosing Land

First: location. And Second and Third: location. You should be searching in an area that is reasonably close to some off-farm employment (especially if you are buying and will need a loan). Many beginning farmers romanticize the idea of being 100% self-sufficient on a farm, and it is a worthy goal. But

many farms – most, actually – have survived and thrived throughout the 20th and into the 21st century with at least one income lifeline to a job in town. It helps with loan qualification and repayment, cash flow, and benefits like health insurance.

Also consider distance to the market or markets where you will sell your product. When you live in a rural area, you do a lot of driving. Farmers need to be within a feasible distance -- both time and mileage-wise -- to their markets.

Do not forget infrastructure. You will need to be somewhere in the vicinity of someone who can fix a

Tools You Can Use In Your Property Search

What	Where	Information you Need	Information you Get
County GIS (Geographic Information Service)	Online (depending on county, may only accept certain browsers)	- Owner name - property address - PIN (property identification number)	A graphic outline of the tract in the context of its surroundings. Has various overlays including zoning, can show water, topography, etc.
Google Earth	Google it, download it	- street address - continent	A good areal photo of the land, what's cleared and what's not.
Property Tax Records	Online (see above)	- Owner name - Property Address - PIN	- Tax value of parcel - Information on residences, barns, etc. - Deed Book and Page - Whether taxes are current - Value per acre
Real Estate Agent (Buyer's agent)	Everywhere	- A description of what you are looking for - How you are going to pay for the land - May have to sign exclusive contract	- Listings of properties listed (access to Multiple Listing Service) - Someone experienced in land transactions and overcoming challenges
For Sale By Owner	- Signs on property - Listings on Craigslist, NCDA&CS Ag Review, Listings in certain periodicals	How you are going to pay for the land	What the owner thinks the land is worth
Obituaries	- Local paper - Local coffee shop	Eyes and ears	Names of people who recently died and where they lived

tractor or your trailer or whatever else will break on your farm. Also, feed and other inputs should not be too far away.

Farming requires water. As best you can, determine where it will come from. Existing ponds are a bonus, but try to get a view of the pond – maybe on Google Earth – taken in the drier months of June-October. Creeks in many parts of North Carolina are intermittent in Summer. There may be a place to dig a pond, but ask your local Soil & Water office first about regulations and what they know about the particular farm and the water that drains in wet weather through or over it from the surrounding parcels. Also try to see how well the land drains, and if rain stays too long in the field. Draining can be expensive to install.

Many farmers get their water from a well. As best you can, talk to neighboring landowners about their well performance, how deep they had to dig, flow, etc. It will tell you something about your potential groundwater resources.

Then, of course, the soil. You will need to identify the distribution of soil types on your property, a mix of clay, loam and sand. Soil maps are now online, and by the time you are looking for land, you will have a good sense of what you want to produce and what basic soil type will be required. Normally the lease or sale process does not allow the luxury of sending away a soil sample. It does not hurt to ask the owner for any recent soil tests, or if the land was farmed by a neighbor, perhaps they may have done some recent test that they will share. Just know that you will spend some money to get the soil where it needs to be for production.

Your lender may or may not require buildings to be inspected, but it is a good idea to get someone to take a look at them to see what will be needed (if anything) to make them useful and safe. Other items might include gates, livestock panels, a pile of cedar posts behind the barn, portable sheds or old hoop houses, cattle feeders, miscellaneous old (yet potentially salvageable) equipment lying off to the side. Make sure that if you see something you want to be part of the sale, specifically list it in the purchase contract. The item then becomes part of the price.

Know your access to the property. If it is road frontage, this is less of a problem, but you may have to secure access across someone else's land if you find a land opportunity that is not on a road. Many times the access will be an "easement" or "right of way" and be recorded. Sometimes, if the land has been split off in an unusual settlement between family members or business partners, you need to make sure that there is access to that parcel from the road. Do not count on another landowner voluntarily granting you an access easement.

Also, know the history of the property. You can get its farming history from the Farm Service Agency office, or by asking the seller or neighbors. This will tell you a good deal about what might be waiting for you (or not) in the soil, namely pesticides and herbicides used on previous crops.

Finding Money to Buy Land

So where does money come from to buy land? A number of places, and usually a combination. Think of money as either "patient" or "impatient."

"Patient" capital usually means "family and friends." You may be fortunate enough to have family and friends with enough money to loan or give to help you buy land. It is rare, perhaps, but some new farmers have developed a group of "angel" investors who help with the land purchase and agree to very generous buy-out terms of their investment, leaving the farmer as the sole owner after a time.

Between "patient" and "impatient" sources lies the landowner. It just depends on who this person is, their financial circumstances, perhaps even their desire to see their land put to farming use. The landowner (seller) can finance your purchase, whereby you make "mortgage" payments directly to the seller. You and the landowner execute a contract specifying the terms, and the landowner can file a deed of trust to secure the repayment contract, or promissory note, to the land. If you get into financial trouble and cannot pay, the landowner can decide how much leeway to offer. Accept that in most sale situations, the owner needs to let go of the land and get the full price for it up front. But you never know until you find out.

This leads us to “impatient” capital: The bank. Most land purchase takes place through a commercial lender like a bank. In deciding whether to offer you a loan, the bank weighs the value of the collateral and your ability to make regular payments, and they measure the risk according to their formulas in offering you terms and an interest rate.

If you are unable to make payments on a bank mortgage, remember that banks do not necessarily want to take your land away. It is expensive for them to do so and they may end up sitting on it, which costs them money. However, banks are better situated to foreclose and repossess the property. The bank may work with you if you get into financial trouble, but only if you work with them.

Farm Credit Services is a banking system chartered under the federal Farm Credit Act, and serves as the primary lender in many farmland purchases. You can also borrow money directly from the government. The Farm Service Agency has a Beginning Farmer Loan Program. Generally its terms are friendlier to beginning farmers, require less money down, and offer lower interest rates. Going for an FSA loan is one example where it pays to try to operate with some independence during your training years, so that you accumulate three years of Schedule F “Profit and Loss from Farming” filings, which is a requirement to participate in the Beginning Farmer Loan Program.

Doing the Deed

If you feel pretty good about getting the funds needed, make an offer to the landowner. You will probably go back and forth on a price. When you agree on a price, you’ll need to put money down and sign a “purchase contract.” This ensures the landowner cannot decide to sell the property to someone else. It also starts the clock running on the *due diligence period*, the amount of time you have to check out that the property has clean title and is otherwise suitable for your purposes.

Between the signing of the contract and the closing of the land, a number of things will happen. The bank will get an appraisal. If the land has not been surveyed in a while, it will get a new survey.

Your loan will have to be insured by title insurance. An attorney will perform a title search and certify the current owner owns the property, that there are not any loose interests of other owners, and will advise you of any other rights granted in the property such as timber, utility easements, etc.

Once everything is lined up, you will first sign the documents (the promissory note and deed of trust) with the lender, then the seller will sign over the deed when the money from the loan is available. Congratulations, you own land!

At Peace with a Lease

Chances are, you are going to rent land before you buy land. Most rented farmland in North Carolina is farmed on a handshake “across the fence.” Although it can be confusing, a written lease eliminates a good bit of disagreement between farmer and landowner. Leases with a term of more than three years must be recorded in the Register of Deeds (normally with a simple memorandum) to protect the farmer’s longer-term interest in the land. State statute allows a farmer to complete yearly production and harvesting should the property be sold during the year. You will be challenged to find some landowners willing to write out an agreement. This is fine but do not count on being on that land for too long unless they commit to a long-term written lease or serious sale discussions.

Always remember that when renting land, you are just paying for access to it, you aren’t earning any ownership. Take heart that many newer landowners—often baby-boomers that have inherited land or have bought it but aren’t going to farm it—are looking for tenants to keep the land farmed and clear of trees, and often seem more open to written agreements.

A written lease is a legally enforceable piece of paper that, if one of you breaks it, provides the other with enforcement options. For example, the landowner can move to evict you and you have to argue to a court why you should stay. For you the farmer it is somewhat harder: if a landowner breaks the lease (i.e. won’t let you on the land), or if the land is sold, you have to make a decision whether it is worth the money to enforce the lease or walk away. Either way, a written lease is the foundation of the agreement you the farmer reach with the landowner, and it goes

far in mitigating the risk that there is going to be a disagreement between you.

Lease Terms

The minimum needed to have an enforceable lease are:

- 1) Correct identity of *the parties* (remember you need to know the person you are dealing with has the authority to lease you the land);
- 2) The identity of *the property* you will have access to;
- 3) The *term* of the lease (how long you have access for);
- 4) How much you are going to pay in *rent* for using the land.

There are many other terms that can be included in the lease depending on the situation. The landowner may be specific about access to the property, care of current infrastructure, etc. If you plan to install any infrastructure, make sure the lease is clear that you can remove it at the end of its term (the law generally allows you to, it's just better to have this in writing). Leases can be "cash rent" (where you just pay a specified amount either per acre or calculated for the whole farm), or they can be "share leases," where the landowner takes some of the risk by helping provide certain inputs, and the payment they receive may be a combination of cash rent and a percentage of your sales receipts.

As far as describing the land, specify the acreage, note the county PIN, maybe even cite a deed book and page reference for the property. If you are getting access to a certain portion of a larger tract or farm, you might attach a Google Earth image as a marked exhibit with the farmed area shaded in. Be sure your access is marked, too.

Again, it just takes time and patience and hard work to find land. You will have to knock on doors, write letters, walk up to people at meetings and introduce yourself and describe what you are looking for and why. But all farmers find their land.

SHORT-TERM LEASE CHECKLIST

Use this worksheet to ensure key areas are addressed in your discussion of a lease agreement. Each item will require discussion between both parties and legal counsel.

1 _____ Who are the parties? Make sure you have evidence of ownership and authority to act if the landowner is an entity (i.e. LLC, estate, trust) other than an individual. Make sure the lease binds “heirs and assigns.”

2 _____ What will be the least term? State law may require recording of the lease or memorandum in the register of deeds for the county where the land is located.

3 _____ Will the lease be renewable? Will both parties have the option to renew or not renew? How much notice is required for renewal, and what is the procedure?

4 _____ Do you have an adequate description of the property (real and personal) to be leased (land, boundaries, farm structures, residence, equipment, etc.) If a good written description is elusive, include an FSA aerial photo with boundaries marked as an exhibit.

5 _____ How much and what type of rent will be paid? When must the rent be paid?

6 _____ If the agreement includes a residence, will there be a separate residential lease?

7 _____ What will be the allowable and prohibited uses of the property under the lease? If chemicals are allowed, who bears liability for their misuse?

8 _____ How will the landowner and the tenant allocate responsibility for repairs and maintenance of the property? (See worksheet *Repairs and Maintenance*)

9 _____ How will the landowner and tenant allocate responsibility for capital improvements? If the tenant invests in capital improvements, how will they be compensated?

10 _____ Who will be responsible for obtaining and maintaining insurance - liability, casualty or crop insurance?

11 _____ What actions by either party will constitute default under the lease? Will the non-defaulting party have the right to terminate the lease or withhold rent until the default is cured? Will the lease include a procedure for dispute resolution?

Worksheet 3.2

REPAIRS AND MAINTENANCE CHECKLIST

This worksheet can be used to support a clause in a lease agreement requiring that landowner and farmer will visit the issues of repair and maintenance on an annual basis. Each party should keep a copy.

Year: _____				% of Cost Contributed by Landowner and Tenant				Total Dollars Contributed Toward Repair		Value of Labor	
	Repair or Replacement to be Undertaken	Date to be Completed	Estimated Cost of Materials and Labor	Materials		Labor					
				L	T	L	T	L	T	L	T
Structures: Exterior siding/ Windows/ Roofing											
Fences											
Barn Equipment											
Water, Heating, Ventilating Systems											
Waste Management Systems											
Conservation Structures											
Total											
Landowner (signed)				Farmer (signed)							

This worksheet adapted from USDA form AD 562 (Mar 1960)

Worksheet 3.3

COMPARING TRACTS OF LAND

This worksheet provides a template for comparing different tracts of land. At the end of the day, there is no “perfect” piece of land out there that suits your needs in every imaginable way. Buying (or renting) land is about making tradeoffs--between location and price, soil quality and infrastructure, etc. Once you’ve begun the land search, use this worksheet to track and easily compare your options. Think carefully about which features of your land are “non-negotiable” and which, if any, you can improve over time. You can estimate the price of a parcel by consulting the County tax records, or use recent sales on neighboring parcels to estimate a per-acre cost. You can use the NRCS Soil Survey (Google it) to estimate soil quality and topography, and Google Earth to locate buildings and infrastructure. If you can, go visit the parcel. Below, circle the letter that corresponds to your best estimate of the quality of each amenity: **E** = Excellent, **G** = Good, **F** = Fair, **P** = Poor.

Parcel	1				2				3				4			
Owner Name																
# Acres																
Address																
Asking/List Price	\$				\$				\$				\$			
County/Township																
Price/Acre	\$				\$				\$				\$			
Cleared/Wooded																
Proximity to Markets	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Rental Terms	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Soil Quality	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Topography	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Water Access	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Existing Infrastructure	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
Buildings	E	G	F	P	E	G	F	P	E	G	F	P	E	G	F	P
PIN #																
Property Tax Value	\$				\$				\$				\$			
PUV* status																
# of owners																

* Present Use Value. This will be reflected as a lower valuation on the tax record. Landowners will rent land to keep it in PUV, and if you should purchase land in PUV you will need to file an application with the county tax office to keep it taxed at the lower rate. Minimum qualifying tracts for PUV are 10 acres open crop land, or 5 acres for horticulture, or 20 acres for forestry. Visit the county tax office to get more information on how the program is administered in that county.

Worksheet 3.4

ESTIMATING REVENUE FROM LAND

This worksheet will help you estimate the value of a piece of land. If you already have land that you are planning to farm, it will help you determine how much that land is worth to your farm enterprise. If you are beginning to search for land, the worksheet will help you estimate how much a parcel will be worth to your business, which will give you a sense for how much you should be willing to pay. If you are looking for land, make copies of this worksheet and fill one out for each each parcel you are considering. This is important, because each parcel will present you with different opportunities. For example, this worksheet will allow you compare the value of a 20 acre parcel with bad soil (requiring a lot of investment in amendments) to a 10 acre parcel with fewer amendment requirements. This worksheet has space for three crop systems. If you plan to focus on a few crops, each column should represent a different crop (e.g. sweet potatoes, collards, etc.). If you plan to run a highly diversified operation, each column should correspond to a different crop system (e.g. “diversified vegetables,” “hogs,” “cut flowers,” etc.).

Projected Revenue per acre	Crop System:				
Yield (expected)		A			
Price		B	\$	\$	\$
Total Income from sales	(Line A x B)	C	\$	\$	\$
Projected Operating Expenses					
Seed			\$	\$	\$
Fertilizer/Amendments			\$	\$	\$
Pest Control			\$	\$	\$
Equipment hire			\$	\$	\$
Gasoline			\$	\$	\$
Irrigation			\$	\$	\$
Equipment repair			\$	\$	\$
Hired Labor			\$	\$	\$
Total Operating Expenses/Acre		D			
Projected Net Income			\$	\$	\$
Net income per acre	(Line C - D)	E			
# Acres in each crop system	(Lines E x F)	F			
Net revenue per crop system	(Lines E x F)	G	\$	\$	\$
Total net after operating	Total Line G	H			\$
Overhead Expenses					
Owner draw from business					
Asset depreciation					
Property taxes					
Insurance					
Other					
Total Overhead Expenses		I			

Estimated Value of Parcel

This is your estimate for how much profit this parcel will generate in a year. You can use this number to estimate a value (or fair price) for the parcel, known as the “capitalized value.” You do this by dividing the annual net return, above, by the “capitalization rate.” The capitalization rate depends on many factors, including market interest rates, inflation, and changes in technology. Instead of worrying about all that, you’re going to use the capitalization rate as a tool to estimate how valuable the parcel is based on how long you are willing to be paying off the debt. The longer your timeline, the more the parcel will be worth to you. Play around with the numbers and see how the “value” of land changes depending on your own plans.

Net Return of Parcel (Net operating [H] minus Total Overhead [I])	(H - I figure goes below)				
If I want to pay off my land in...			Capitalization Rate		Capitalized Value
5 years	\$	/	0.2	=	\$
10 years	\$	/	0.1	=	\$
20 years	\$	/	0.05	=	\$
30 years	\$	/	0.34	=	\$
<p>The capitalized value estimates how much the parcel is worth based on its ability to bring revenue into your business. To get the total value, add the capitalized value to the value of any amenities that the land possesses: this should definitely include the estimated value of any buildings (barns, houses, etc) on the property, as well as the value of its location, existing pasture, and timber.</p>					
Value of Parcel Amenities					
Value of farm structures					\$
Value of house(s)					\$
Value of location					\$
Value of pasture					\$
Value of timber					\$
Value of other structures (well, fencing, etc.)					\$
Total value of amenities					\$
Total Parcel Value (capitalized value + total value of amenities)					\$

Adapted from *Acquiring and Managing Resources for the Farm Business*, Midwest Plan Service 2001

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