Credit Skills for Lending to the Food Production Sector

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Introduction

Lending to the small and emerging agricultural sector requires both fundamental business lending skills as well as a clear understanding of the unique aspects of the sector. As referenced in the *Understanding the Food Production Sector* chapter, a small and emerging farm does not have an easily defined or standardized business model from production to sale. CDFIs can expect to see a variety of loan applicants, farming operations, capital needs, and customized repayment terms. Each farming situation will have unique characteristics relating to the growth cycle of what is produced, the cash flow cycle from production to sale, the external factors including weather, disease, public perception, changing competition, and outlets to market. A strawberry farm in California may have one set of production standards, but a strawberry farm in the mid-west or northeast is likely to have very different requirements and production measures.

As an industry with very few absolute benchmarks, there is no rule-book available with standard answers to business lending questions surrounding small and emerging agriculture enterprises. The financials underlying a specific farm application are indicative of where the farm is today, but may not be representative of where the farm can be tomorrow or what its potential is. Underwriting loans to this sector requires a coherent process of analyzing the applicant's current situation, as well as understanding the applicant's potential based on the characteristics of their business. In addition, growth in this sector is currently impeded by a shortage of loan capital; specifically, loan capital which can be provided with appropriate loan structure and technical assistance support.

This chapter is intended to provide an underwriting framework which will allow CDFIs to understand and actively support this sector in an effort to fill this gap. As individual farms demonstrate successful borrowing experience through supportive lenders including CDFI's, and can evidence that the farming model is viable, they will ideally move from higher cost and risk loan structures into more conventional lending arrangements.

Credit Factors in the Food Production Sector

As with any lending program, there are common fundamental credit factors which can be referred to as the five C's of credit (Character, Capacity, Capital, Collateral, and Conditions) which CDFIs use for evaluating risk for all loans. The distinction in the food production sector is that the five C's have some unique attributes specific to the farming sector and, therefore, cannot be weighted equally but instead must be assessed in importance based on the characteristics of the applicants. Since CDFIs do not conventionally lend to "bankable" entities, this situation is not unusual. Nevertheless, there are certain risk elements in this sector which must be evaluated based on the sector's typical characteristics and not against the conventional small business model.

The underwriting model for financing the food production sector is distinguished by assigning priority or primary weighting to certain critical success factors, and less weighting to secondary considerations. The primary considerations, which are strong indicators of potential success in the sector, are the first cut – if the applicant cannot pass the first cut, the secondary factors are not likely to warrant consideration.

Primary Factors – Deal Breakers:

1. **Appropriate cash flow modeling**

The first step in assessing an application is to have a well thought out and detailed cash flow model, which breaks the enterprise into its components and reflects production costs and revenue streams over the relevant time span.

Cash flow modeling is one of the more challenging aspects of the food production industry, but is also one of the most important components to understanding risk in the loan application and the business viability.

Often, small farms have multiple sources of cash flow, some of which are consistent and reliable, and some of which are not. Farmers generally live a very modest lifestyle, which appears to be well below the poverty line, and they usually have little or no cash fall-back position. Health insurance is often limited, if available at all, creating a larger risk from potential illness or injury for the primary farm operator. Credit scores are often low and may not be representative of repayment patterns. Collateral is typically minimal, in many cases consisting primarily of the crop or product being sold. Therefore, primary viability is based on the cash flow resulting from successful deployment of the loan – increased crop diversity, increased yield, longer growing season, expanded acreage, higher profit margins on existing production, and access to new markets. The applicant's viability is not likely to be based on historic performance or any independent cash flow support. It is more likely to be based on a track record of agricultural experience which is taken to a new level, both in complexity, scale and capital investment. Cash flow, therefore, is the crux of success in this sector.

Understanding a farm's aggregate cash flow requires a complex model, as it needs to break each major or defined product into its own production cycle, as well as into its own cash flow cycle. Some crops can be produced quickly (in weeks) with modest cash requirements up front. Some require modest cash requirements up front but continual cash outlays for irrigation and fertilizers before being brought to market months later. Some, like orchards, require years of growth before the maturity and full output is reached. Livestock has unique attributes and seasonality, as well as required access to acceptable slaughtering facilities. Food processing, such as cheeses, has defined input requirements, equipment needs, and aging requirements before coming to market.

To fully understand the farmer's loan application, each major product needs to be broken down into its own cash flow model, and those individual cash flows then need to be overlaid to create the farm's aggregated model. Looking at the overall performance will not identify the specific risks to each component, but the farming model typically only works if each component performs or yields according to plan. The lender must be able to engage the applicant both verbally, to "hear" the story, as well as to provide support resources and TA, as necessary, to help the applicant create a realistic cash flow model.

Another challenge is that farmers are unaccustomed to using cash flow models; the farmers are focused on growing or nurturing the product or livestock and do not view each crop or animal as a budgetary line item the way a store owner or factory owner views inventory and accounts receivable. Helping the farmer understand the value in managing his/her business with a strong cash flow model to monitor actual performance also provides him/her with a core skill and will

create a stronger lifetime entrepreneur. There is often a very high need for TA to put together a representative budget as well as to assist the farmer in using the budget as a working tool, updated with appropriate data. This is a critical component since any future financing requests will require both a history of timely repayment and evidence that the borrower can develop and manage a realistic budget. The farmer also needs to prepare tax returns appropriately, including use of the correct business schedules, to access certain types of funding.

Every farm will have its unique mix of products, production practices, infrastructure and markets. Therefore, it is important for a CDFI to understand not only a farm's core products but its aggregated product mix, cash flow, seasonality, and capital requirements as well. Farm business models can range from very simple to complex. An effective lender understands each major product cycle and how it affects cash flow individually. The Agricultural Guidance chart in *appendix I* offers a sample list of questions and considerations a lender should ask about farms related to the type of food being grown or livestock being raised. This chart will be a useful tool to help lenders develop an appropriate cash flow model tailored to the specific set of activities of each farm.

2. Farm Business Management Skills

In analyzing any loan proposal, the lender looks at the applicant's skill and experience within the business field. A teacher who wants to open a gift shop will be asked about experience in retail. A banker who wants to open a restaurant will be asked about food preparation and kitchen management skills. But in farming, the range of necessary skills is both much broader and much more specialized.

Assessing a farmer's application requires assessing whether the farmer has each of the skills necessary to overall success. A successful farm has a strong marketing arm to determine the best markets to sell into and the most efficient delivery method. It also has the specific product expertise to grow or raise product, and to adapt to the typical weather, disease and illness factors which affect living organisms. Effective farm management requires functional skills like equipment maintenance as well as logistics planning to get the product to market. No single skill will provide the basis for success, and the absence of a critical skill can be a recipe for failure. Beyond the set of skills common among successful farmers, a good farming applicant is also a risk-taker who is looking for unmet needs in the market and will then expand or adapt his/her farm endeavor to fill that gap. This entrepreneurial spirit is a key element to a successful small farm, which must continually adapt to a changing marketplace.

Strong business management skills are often difficult to assess relative to a farming endeavor, and a young farmer is unlikely to have a resume which identifies practical experience in each skill area. The business management skills necessary for farming relate to monitoring expenses and appropriate financial reporting:

- Identifying equipment and facility needs;
- Understanding demand and appropriate markets for product;
- Understanding the regulatory environment which affects certain production or processing;
- Seasonal and low cost staffing; and
- Access to agricultural resources for crop or livestock issues such as disease and insects.

This practical knowledge has historically been acquired and transferred between generations and from established farmers to newer ones, which has worked well in more stable and localized markets. However, growth in the small farm sector is often targeted to more unique products and aims to access unmet demands for goods, making it difficult to apply the more traditional skills and knowledge used so commonly in the past. Instead, this sector needs to be directly and actively supported by qualified TA resources and through networks of peers producing like products in order to address specific needs and be responsive to the ever-changing landscape.

Rather than looking for a farmer's proven skill or established experience, this reality requires a lender to assess an applicant's commitment to the lifestyle, his/her ability to access knowledge based resources as needed, to have enough of the fundamental skills to manage a farm operation, and to rapidly identify and respond to issues related to crops/products, regulatory policy, the environment, or changing market opportunities.

The potential lender will also need to tap into a range of qualified resources to assess each aspect of the model on its individual merits in order to assess the viability of the complete farming model. It is unlikely that a single lending organization will have the expertise to fully assess a farming application and to provide both TA and loan capital. However, one of the particular strengths that CDFIs bring to this sector is the availability of TA resources for both internal use and to foster success among applicants. As has been identified in multiple cases, there is a critical need for expanded networking among farmers and knowledge-based providers, and the ability of CDFIs to be a link between industry players is central to enhancing the growth and success rates among enterprises in the sector.

Finally, determining an applicant's established skills, identifying skills which need to be augmented or developed, and assessing an applicant's dedication and commitment to the reality of a farming lifestyle will also help to determine TA needs, as well as whether the applicant has the "right stuff" to be a successful farmer.

3. Getting to Market and Understanding the Appropriate Market

One of the logistical challenges facing many farming enterprises is getting the product to market effectively. The farmer may grow or develop a marketable product, but if he/she can't reach an appropriate market at the appropriate time and with good quality product, the business model will not succeed.

There are many aspects to reaching market, but there are particular common impediments for small farms.

- There is varying accessibility in the range of potential markets. The increasingly robust network of Community Supported Agriculture (CSAs) and farmers' markets provides ready access for certain types and scales of farm activity. However, it requires a more focused and coordinated approach to successfully sell to food hubs, institutional buyers, wholesalers, larger retailers and the like. Continued growth in the number and range of local and regional food hubs may provide a much needed bridge to small farmers gaining access to larger markets in an efficient and cost effective manner.
- The scale of the farming enterprise may limit the range of appropriate markets. Smaller farms that can successfully sell from a farm stand or through farmers' markets may not be able to produce in a quantity which warrants the time and effort to sell into a retailer

like Whole Foods or to an institutional buyer. The farm size and scale may dictate the appropriate market, but the ease or difficulty in gaining access to certain markets may also direct the farm scale.

- The farmer's technical savvy and marketing skills, on top of the daily demands of running an effective farm enterprise, may limit his/her ability to research and gain entry to markets that might otherwise be appropriate. These factors also affect a farmer's ability to identify the optimal target market, determine proper pricing, obtain contracts when appropriate, and ensure that quality and quantity delivery goals are met. Again, working with a food hub may reduce these challenges considerably.
- The relative lack of aggregation and distribution infrastructure within a region places a much greater burden on the individual farmer. Farmers typically have to develop their own marketing approach and then also undertake their own logistics planning get to that market. In some cases, a cooperative approach is achieved, but this also requires the development (although collaborative) of a unique marketing approach and logistics strategy. It is clear that as the small scale farming sector evolves, aggregation and distribution supports will need to increase in order to facilitate effective access to markets and free the farmer from taking on production, processing, packaging and transportation of product. Although there is increasing interest in the development of functional aggregation and distribution models, scale again becomes an issue as there needs to be enough volume and diversity of product entering the system to entice a large pool of buyers. In turn, demand from buyers needs to be consistent enough to provide meaningful market stability and predictability for the small producers. As in all aspects of this sector, sufficient loan capital, appropriately priced and structured, will be necessary to finance aggregation and distribution business models.

In assessing an applicant's ability to get to market, the following factors need to be understood:

- How shelf stable is the product? Can it be stored for future sale or is it highly perishable?
- What volume is being produced for sale within a saleable timeframe? Is it enough volume to support independent direct sale or institutional sale, or is it more targeted to farmers markets?
- How far can the farmer travel to sell product? Does she/he have adequate delivery vehicles or can she/he sell on-site and expect a reasonable demand?
- How strong is the demand for the product? How far geographically does that demand reach? And how does price vary within the region? Are there specific buyer groups who will pay a premium or create consistent demand for the product? Are there institutional buyers who will purchase in bulk?
- Are there any food hubs, selling groups or aggregation/distribution organizations which can provide a larger marketing outlet for the individual?
- How do target customers typically pay? Under contracts, open account, credit card, COD, cash, etc. Is there a larger organization, such as a food hub, which can provide billing and payment processing?
- What markets are being sold to – retailers? Restaurants? Consumers? Institutions? Each will likely have its own requirements for quality, volume, timeliness, payment methods, and timeline for payment as well as risk of non-payment.

Understanding the applicant's target market, assessing the key elements of getting to that market with an appropriate profit margin, and looking for opportunities to facilitate the applicant's entry into that market will help determine the applicant's lend-ability.

4. Market Conditions

To a certain extent, the farm applicant can control his or her own operation. However, beyond the farm gate there are the regional and local market factors which are already in place, or are in active development, and may affect the borrower. For the applicant to understand the market demands (both positive and negative) of the economic region where they are operating, she/he must tap into local resources to answer a number of important questions.

This includes questions regarding access to market by the target products:

- Is there increasing demand for local produce through CSA's?
- Do institutional buyers indicate interest in sourcing agricultural products from local producers? (Reasons may include food security, support for local economy, or others.)
- Are new producers emerging which will affect the marketplace and the applicant?

Broader infrastructure questions can affect production and delivery costs:

- Are there USDA-inspected slaughter facilities for livestock, or does the borrower have to drive 40+ miles each way to deliver the animals and then to pick up the meat?
- Are accessible cold storage facilities being built to extend growing seasons and add capacity?
- Is there a regional food hub which can support sale and delivery of product?

This can also extend into marketing resources which heighten awareness of local products and draw consumers and buyers to producers. There is increasing awareness of agri-tourism programs, which meet broader economic needs of an area but can directly facilitate local producers, and of "buy local" programs which create stronger marketing and market identification that the borrower can readily take advantage of. There may be broader development of institutional buyer programs that supports aggregation of product and supports new entrants into the group; networks of successful farmers and knowledge-based programs including extension services and consultants who can provide immediate advice and counseling if needed; and established systems of getting produce into urban centers with coordinated delivery systems, schedules and established market outlets.

Every market that an individual farmer has to find and access on his/her own creates an additional risk factor. The more a farmer can utilize existing or emerging programs or infrastructures, the more likely his/her success. The lender needs to clearly understand this need for cooperative production and marketing support and assist the applicant in accessing it wherever it is possible. As noted above, a typical farmer will be consumed with the logistics of production, and will benefit significantly from the networking support which can be offered by CDFIs.

5. Character

Character is always a challenging topic in the economic development arena. Conventionally, character includes a strong credit score, demonstrated financial success in the subject business or in a comparable niche, strong experience, supported by peer references, and financial capacity in the form of meaningful collateral or other financial resources. In the small agricultural sector, most of the applicants will not have these common measures. They may be young and committed, but often lack the track record or adequate financial capacity. They may have an existing farming enterprise which is on the level of a side business, but is not sufficiently established to carry the proposed debt. They may be branching out to a new niche wherein they do not have a track record. Or, they may not have co-signers or other financial or collateral support to bring to the financing request.

In many cases, an applicant may have a low credit score or no credit score; alternative payment records such as private store credit, phone bills or rent payments may be helpful to understand how the individual treats his/her obligations. Understanding if there are external factors which impacted the credit score is also important, including illness, job loss, divorce, etc. Additionally, personal liquidity is often insufficient to support the requested amount, but having the individual provide some level of personal assets to support a financing request, such as a car or equipment, will typically ensure that she/he is fully committed to success and full repayment.

Ultimately, assessing how the applicant deals with the application process, how well she/he has done homework on the anticipated products, markets, cash flows, and other realities of typical farming events, and how she/he has done in prior ventures, either with smaller farming models or working on other farms, may be a valid indicator of character. The small farmer needs to be resourceful and dedicated in order to succeed. Within reason, knowledge can be acquired through the process.

One of the benchmarks we have come across which encapsulates character is whether the CDFI, as a prospective lender, would actively support and advocate for the applicant to a third party (as well as to internal approval factors). If the applicant gives the sense that they "get it" and can accomplish their goals, even if it is not visible on a spreadsheet or apparent in their financial history, it may still be worthwhile to gather more information to help "make the case". If the applicant appears like she/he is going through the motions, hasn't done the research, doesn't have any networking connections in the field, and isn't fully committed, then it may be appropriate to provide constructive and tangible recommendations for improvement and hold off on the lending opportunity until progress is made.

As with any other economic development lending, the lender needs to understand the relevant lending arena and its inherent risks, and then assess the individual's capacity within that specific arena. In agricultural lending, there are fewer benchmarks and no definitive assessment tools. Likewise, there is a less established framework for assessing skills, for peer evaluation, and for relating historic performance to future debt repayment. Therefore, an open mind and concerted efforts to understand the specific agricultural opportunity and its implications will be crucial to putting together a successful financing arrangement. This is also why having a very strong TA component, either in-house or through active third party supports, is so important to identifying issues early and providing immediate corrective support.

The above are primary factors for consideration in assessing a loan request to a small or emerging/changing agriculture enterprise. A significant shortcoming in any of the above should lead to appropriate TA to address the issue. Effective communication of this shortcoming to the applicant using the outlined considerations will help the applicant understand why they are not yet ready to receive credit, and provides appropriate reference points for improvement.

Making a loan to an applicant who is not prepared to effectively utilize and repay the funds, and who is not fully committed to achieving success, is not to anyone's benefit. Conversely, failing to fully explore ways to make a properly structured loan to a viable and committed applicant does not further the goals of CDFI's, of economic development, or of strengthening the agricultural sector.

Secondary Factors:

We consider the following two factors, which are also basic components of the five C's of credit, to be secondary in importance. There are two reasons for categorizing these as secondary. First, we do not find that these specific factors are direct indicators of potential success. Rather, they are fallback positions and in a young and emerging sector, they are the least likely to be present in a financing application. Secondly, we find that effective lending requires providing an active support network to the applicant to bring available resources to the table as needed. Very few small farms can find all the appropriate resources on their own, either in the early stages of getting established or through fundamental growth phases. A successful farmer has determined what his/her strongest skills are, with a focus in the specific agricultural or husbandry niche, but may not have developed a broader resource pool to develop the additional skills needed to succeed. However, that network creates the framework which results in a successful loan and is more important than the secondary factors outlined below.

The secondary factors are Cash/Equity, and Collateral. These are often "deal breakers" in making lending decisions. A borrower who cannot put in 20% cash or equivalent equity is often construed as not fully vested in the project, and therefore more likely to walk away if times get tough. An applicant who cannot put up sufficient collateral to achieve an acceptable loan to value ratio is often turned away because if the loan fails, the result is a full or partial loss to the lender. We have found that these two components need to be viewed relative to the sector and its realities, and tempered accordingly.

1. **Cash/Equity**

   A typical pattern for a small farm is to boot-strap. The owners often start with a small range of product in crops or livestock, on a small parcel of land, and sell that product to a single, defined market which may be farmers' markets, CSAs or direct buyers (in the case of livestock). They often rely on credit cards to make purchases, and then retire the card balances once sales occur in what is typically a highly seasonal fashion. If there is an issue with the crop or animals, they have limited fallback, and their personal financial capacity is often dependent on the cash balance remaining after products are sold and bills are paid. The funds farmers do amass in one season are usually fully reinvested in the farm, meaning that as the farm grows, the farmers continue to live on a very limited personal budget and do not build liquidity. And, due to the integrated business model of the small family farm, producers and the farm are one financial entity and are highly subject to the risk of crop or product failure.

The goal is to recognize this practical reality, and to determine how a loan can assist the farmer to actively strengthen farm cash flow. As previously discussed, there may be many positive outcomes:

- Increased product diversification to create a broader cash flow cycle or to generate cash flow over a longer season;
- Production of shelf stable products to allow off-season sales;
- Growing or raising higher margin products;
- Reaching a larger scale which increases net cash flow; or
- Reaching into new markets which better suit the farm's capacity and niche.

In assessing the cash/equity contribution in an application, the inadequate liquidity based on traditional benchmarks (10% – 20% or more) will rule out many viable transactions. By maintaining an emphasis on understanding the primary factors referenced above, the lender will develop a strong and well-qualified opinion on the viability of the concept or products being funded, the associated direct cash flow, and therefore overall benefit to the farming model.

Assessing the primary factors will help a lender assess the need for cash equity versus owner commitment and contribution to the project. It can also find a practical and creative solution which advances the loan application in the absence of defined liquidity.

2. Collateral

Collateral is traditionally a benchmark used to ensure that in the event of loan failure, the lender can liquidate tangible assets and be repaid in full. CDFIs may have a higher tolerance for under-collateralized loans than conventional lenders, but are often still uncomfortable with collateral of indeterminate value. In farming enterprises, collateral offered will likely be insufficient in "market" value, and may consist of asset which cannot be readily liquidated. For example, a maple sugaring operation may need miles of tubing to tap maple trees, and a physical and segregated sugar shack for boiling down sap. Neither of those "assets" can be easily retrieved, broken down into salable components, or sold in a strong secondary market. A barn or shed put up for livestock and feed storage cannot be moved, and only adds value to the farm on a going concern basis as a working farm. However, the value of the assets in place, if there is a demonstrated and validated business plan, is significant as the enterprise cannot expand without those capital investments. In many cases, the capital investment required for a growing or changing farm will not have a clear market value (beyond purchase cost), nor can it be liquidated. In addition, the sale of assets from a distressed farm will likely be further diluted in value as prospective buyers look for bargains.

Therefore, collateral, which should be obtained if available, should not necessarily be a core component of the lending decision at conventional loan to value ratios. Either more generous ratios need to be applied, or specific loan loss reserves should be allocated to the lending program to support the higher inherent collateral risk if an agricultural lending program is going to be successful. As discussed above, we have found that the key factors in success are:

- In-depth analysis of the business model and the associated cash flow cycles;
- Ensuring functional skills to produce/grow/process the products; and
- Ensuring that there is an identified market which can be accessed for sale of the product in a reasonable and cost effective manner.

The goal is not to make loans with no collateral support or financial fallback position, however, the reality is that the fallback position in this sector is focused analysis and strong TA to ensure that projected cash flows materialize as anticipated. Therefore, collateral is a secondary consideration.

Conclusion:

All farming applicants need to be thoroughly and carefully evaluated. Each one needs to be understood relative to its place in the agricultural and business model spectrum, and then in terms of its operational model, both current and projected. TA resources should be thoroughly assessed and introduced very early in the process, both to improve an applicant's viability and to increase the applicant's skills and resources in general. A strong TA program and its network of agricultural service providers, as outlined in the *Understanding the Food Production Sector* chapter, will go a long way towards helping lenders evaluate risk of the potential borrower and ultimately help the borrower to obtain credit. Lending decisions need to be based on lending benchmarks and measures. However, those benchmarks need to be weighted according to the realities of this sector in terms of:

- Historic performance which is typically limited;
- Defined skills and experience, which are often shorter in duration and more difficult to evaluate than in other industries; and
- Fallback position through equity, collateral, or independent cash flow, which is often insufficient to provide full repayment if the core operation does not succeed.

This is a sector that has significant economic potential for improving the quality, affordability, and accessibility of foods in rural and urban areas. Supporting this sector will directly improve the flow of high quality, local foods at affordable prices into urban centers, which continue to suffer the challenges of limited access to healthy produce and food products. However, this sector has a unique need for strong TA resources in a variety of support areas, as well as a dedicated and skilled lending system. Over time, the goal is for these farmers to develop the performance track record and for CDFIs to pave the way through practical lending experience in order to allow conventional lenders to comfortably enter into this arena. This will provide easier access to lower cost capital while maintaining an appropriate risk profile. Today, however, the need is for CDFIs to bring their demonstrated skills to the table to create this knowledge and experience based platform for others to join.

Appendix I: Agricultural Sector Industry Guidance

The '**No Standard Farm Model'** is an important concept. Every farm will have its unique mix of products, production practices, infrastructure and markets. Therefore, it is important for a CDFI to understand not only a farm's core products but its aggregated product mix, cash flow, seasonality, and capital requirements. Farm business models can range from very simple to complex. An effective lender understands each major product cycle and how it affects cash flow individually. The following chart offers a sample list of questions and considerations a lender should ask about farms that fall into any of the broad categories listed.

Crop/Product	**Questions & Considerations**
Vegetable Crops – Greenhouse	Heating Costs Greenhouse capacity / ability to expand Starter plants or seed Production method (hydroponic/soil) Organic/Non-Organic Cost/access to growth materials, fertilizers etc. Common disease/insect issues for crops Combined production (aquaculture system) Harvest cycle (time to harvest) Production schedule (crop rotations, consecutive plantings) Processing (sold fresh in bundles, fresh in packaging, dried) Sales Outlet (farmers markets, retail outlets, on-line, wholesale) Shelf life Sale price per unit Alternate, higher yield products
Vegetable Crops – Open Air	Growth season/Climate Size of tillable land / access to additional land Cost of land (if rented or leased) Crop rotation, soil characteristics Organic/Non-Organic If organic, chance of contamination/cross fertilization from surrounding fields

	Harvest cycle – time to grow plant to maturity Production schedule (crop rotations, consecutive plantings) Cost/Access to fertilizers, pesticides, fungicides, etc. Common disease/insect issues for crops Common weather risks for location Need for farm equipment (tractors, etc.) and storage facilities (barns/sheds) Processing – sold fresh, processed into secondary product, access to appropriate processing facilities with necessary certifications (i.e. USDA) Shelf life Sale price per unit (of product) Sales generated per acre Sales outlets (farmers markets, CSAs, retail, on-site, on-line, wholesale) Alternate, higher yield products Complementary crops/products to extend season, improve cash flow cycle, increase overall appeal to potential customers
Poultry	Life cycle to slaughter maturity Feed / food supplement costs Veterinary costs Waste disposal (removal, compost, sale of manure) Animal loss rate (death, disease, predators) Barn/Shed requirements along with heat/light requirements Physical equipment requirements – feed hoppers, watering, etc. Animal capacity – how many currently, what is maximum capacity Organic/Non-organic/Free Range (production implications of each) Consistent availability at reasonable cost of organic grain Products for sale – eggs, meat, combination, sale of chicks Packaging requirements (i.e., egg cartons, shrink wrapping of product) Sales cycle – seasonal product (i.e. turkey) or year round sales (i.e. chicken) Specialty poultry product (goose, duck, ostrich, specific breeds)

	Access to appropriately certified slaughter facilities (distance, capacity, cost/animal, freezing of product) Sales outlets – on demand, pre-order, on-site, retail, wholesale Ancillary processing (pate, processed food items) Shelf life – fresh or frozen. Storage location if frozen/processed. Sale price/pound
Small Ruminants (rabbits, goats, lamb, sheep, pigs)	Life cycle to slaughter maturity Feed / food supplement costs Veterinary costs Waste disposal (environmental issues depending on animal/waste) Animal loss rate (death, disease, predators) Barn/Shed/Pen requirements along with heat/light requirements Physical equipment requirements – feed hoppers, watering, etc. Animal capacity – how many currently, what is maximum capacity Organic/Non-organic Products for sale – milk, cheeses, sale of babies, combination Ancillary sale items – goat hair/sheep fleece, skins Packaging requirements (i.e. milk/cheese containers, meat packaging) Sales cycle – seasonal product (i.e. lamb) or year round sales (i.e. goats) Specialty product (specific breeds) Access to appropriately certified slaughter facilities (distance, capacity, cost/animal, freezing of product) Sales outlets – on demand, pre-order, on-site, retail, wholesale, niche buyer (i.e. halal) Shelf life – fresh or frozen. Storage location if frozen/processed. Sale price/pound
Livestock (Beef, veal, elk, buffalo/bison)	Life cycle to slaughter maturity Feed / food supplement costs Veterinary costs—preventative/ongoing, emergency, AI

	Waste disposal (environmental issues depending on animal/waste) Animal loss rate (death, disease, predators) Barn/Shed/Pen/Fencing requirements along with heat/light requirements Physical equipment requirements – feed hoppers, watering, etc. Animal capacity – how many currently, what is maximum capacity Organic/Non-organic Consistent availability and reasonable cost of organic feedgrains (if organic) Products for sale – milk, cheeses, sale of babies, combination Ancillary sale items – organ sales, skins Packaging requirements (i.e., milk/cheese containers, meat packaging) Sales cycle – seasonal product or year round sales Specialty product (specific breeds) Access to appropriately certified slaughter facilities (distance, capacity, cost/animal, freezing of product) and processing facilities (i.e. tannery) Sales outlets – on demand, pre-order, on-site, retail, wholesale, niche buyer Shelf life – fresh or frozen. Storage location if frozen/processed. Sale price/pound
Strawberries/ Berries	Annual/Perennial crop Annual/Perennial crop Growth season/climate Production capacity—current, maximum per land base Land base—current, accessible in future Cost of land (if rented or leased) Harvest cycle—time to grow plant to production Organic/ non organic Supplies—fertilizers, pesticides, fungicides, amendments, fencing/crop protection/cover Common disease/insect issues

	Common weather/environmental risks—general and site specific Equipment Storage facilities Value-add—processing off site/on site, fresh/frozen/canned Distribution/transportation costs Shelf life Sale price per pound/unit Sales per acre Sales outlets (retail, direct, farmers' markets, wholesale, on site, on line)
Maple Syrup	Size of sugar stand (acres/# trees) Access to additional sugar stands – proximity, collection infrastructure needs If establishing a new stand, age to tree maturity for sap production Cost of land if rented or leased; lease terms Sap collection method – tubing, buckets, etc. Gallons of sap collected Processing – sell sap wholesale or process into syrup Grade of syrup produced (A/B/C/D) Infrastructure requirements – sugar house, boiling equipment, storage units (sap and syrup), canning/bottling equipment Utility costs Processing certification – USDA, State and local codes Packaging supplies including labeling, bar coding if larger scale retail Ancillary products – maple sugar, maple products, baked goods Sales outlets – on-line, on-site, retail, wholesale Sales contracts if selling sap wholesale Seasonality – sap collection in spring but shelf stable product Weather dependency – temperatures affect sap run and timing
Flower farms	Greenhouse or Outdoors

	Utility costs (heat, light, water)) Growth season/Climate Capacity of greenhouse Size of tillable land / access to additional land Cost of land (if rented or leased) Plant rotation, soil characteristics Harvest cycle – time to grow plant to cutting maturity, plant seasonality Cost/Access to fertilizers, pesticides, fungicides, etc. Common disease/insect issues for crops Common weather risks for location Need for farm equipment (tractors, etc.) and storage facilities (coolers) Shelf life Sales generated per acre by type of flower Cost of packaging and shipping for wholesale Sales outlets (farmers markets, on-site, wholesale) Alternate, higher yield products Complementary crops/products to extend season, improve cash flow cycle, increase overall appeal to potential customers Quality of product for different markets (i.e. weddings vs. farmers' markets)
Mushrooms	Spores/Mushroom products Cost of growth materials Capacity of growth area Cost of growth area (rent, lease, lease terms) Utility costs (heat, ventilation, light) Organic/Non-Organic Harvest cycle – time to grow plant to maturity Cost/Access to fertilizers, pesticides, fungicides, etc. Common disease issues

	Fungus loss rate Packaging materials/equipment Sale price/pound (will vary with type of fungus) Sale outlet – on-line, on-site, wholesale, retail
Orchards/Fruit	Acreage of crop producing (mature) trees/plants Mix of crops produced and seasonality of each Growth season/Climate Access to additional land If establishing a new orchard/plant stand, age to maturity for crop production Cost of land (if rented or leased) Organic/Non-Organic Harvest cycle – Seasonality of crop production Cost/Access to fertilizers, pesticides, fungicides, etc. Common disease/insect issues for crops Common weather risks for location Need for farm equipment (tractors, sprayers, etc.) and storage facilities (coolers, storage facilities) Processing – sold fresh, processed into secondary product, access to appropriate processing facilities with necessary certifications (i.e. USDA) Shelf life of crop and of processed items Sale price per unit (of product) Sales generated per acre Sales outlets (farmers markets, CSAs, retail, on-site, on-line, wholesale) Complementary crops/products to extend season, improve cash flow cycle, increase overall appeal to potential customers
Dairy	Herd management skills—experience, track record Nutrient Management plan (y/n) Organic/non organic Pasture requirements—including fencing, nutrient management

Note: costs are calculated in several ways: Per Cwt, where CWT= hundred-weight. That is, costs per every 100 pounds of milk. There are typical industry standards per cwt, to compare farm to farm. Cost per cow Cost per worker (~230 hours/month)	Access to good pasture/forage, hay, to reduce reliance on purchased feed Purchased feed cost/cwt or per cow Access to reliable (consistent supply and cost) source of grain/feed % purchased feed cost is of milk receipts (meeting industry standards) Cows/worker Pounds milk sold per worker Cwt milk produced/cow Cull rate of herd Breedings per conception Age at first calving Calving interval Animal loss rate (death/disease/predators) Housing requirements Equipment requirements—milking, feeding, watering, haying—at appropriate scale and age for herd size Animal capacity—minimum (for cash flow) /maximum (space constraints) Sale price/cwt, value-added products, other Products—milk, value-added, culls, calves and/or replacement heifers Packaging expenses/requirements Sales cycle—year round or seasonal, per product Access to processing—dairy processing, slaughter, value-add, Sales outlets—direct, processors, milk hauler. Alternative sales outlets—where farmer has flexibility to set price (i.e. not be a price-taker) Shelf life—per product Supplies—seed, fertilizer, bedding Veterinary costs—preventative/ongoing, emergency, AI Certification/testing—safety, consistently acceptable cell counts

	Contracts—with haulers, processors, feed supply Milk assignments—in place, available Fuel costs/cwt Utilities costs/cwt Energy costs—heat, light, electrical Waste disposal Insurance