Agricultural Development Center

Agricultural Extension Service
The University of Tennessee

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Evaluating the Potential of Value-Added Agricultural Ideas

A Series of Worksheets to Assess Feasibility

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Introduction

The mere mention of feasibility studies suggests a multitude of different concepts, definitions and ideas. Feasibility can be defined as the process of determining or assessing the capability and likelihood of something being accomplished, brought about, used or dealt with successfully. In the *Agricultural Development Center* (ADC), feasibility studies may involve any portion or segment of a lengthy process that includes preliminary studies into the technical possibilities of a project, financial analysis, technical evaluation and market potential and development. Some individuals adhere to a very narrow definition of feasibility that concentrates only on financial capability. That is, a project is feasible only if it is projected to cash flow or generate a profit. Others take a broader approach and include production, regulatory and marketing concerns in determining a project's feasibility.

Evaluating the feasibility of a new project involves assessment of many different items. However, a primary component of such a study should focus on the evaluation of *economic* feasibility. Important technical and physical relationships must be considered as well. Questions of social and political feasibility should also be addressed. For instance, a poultry waste processing center may be economically and physically feasible, but zoning regulations or public opposition may make it infeasible overall. All factors, economic and non-economic, of feasibility should be addressed and evaluated in a feasibility study.

Future costs and returns from investments cannot be forecast with certainty. Changing technologies and consumer demand may cause a feasible project today to be infeasible in the future. Similarly, a project that is feasible in one location may not be feasible in another.

The financial situation in rural Tennessee has forced many farm families to make major financial and business adjustments. A survey of 1,000 Tennessee farm families participating in an intensive farm and financial management educational program from 1984 - 1989 indicated that 4 percent of them left the farm and 10 percent took off-farm employment. Today, farm families are investigating home-based industries and other small business ventures. To deal with the many changes affecting agriculture in Tennessee, farmers and agribusinesses must evaluate alternative types of enterprises and production, processing, marketing and distribution alternatives. Such evaluations must include production, marketing and financial considerations. A feasibility study is the process by which a project can be properly evaluated.

Basic Understanding of Feasibility

A feasibility study basically involves the assembly, analyzing and evaluating of information in order to address the question: "Should I do it?" The saying *"How it looks depends on where you stand"* can be applied to the concept of understanding feasibility. If two people enter into a contract that provides for the first to pay the second to perform a service, there are many ways for each to determine the feasibility of the agreement. Whether the venture is indeed feasible depends on how each party chooses to evaluate it. The person who is to pay money for the service must decide whether the agreement is *financially* feasible, that is, whether he or she can afford the service. Besides this, he or she must consider whether it is *economically* feasible, that is, whether the service provides benefits equal to or greater than the price. The contractor who will render the service is concerned primarily with *physical* feasibility (whether the job can be done and whether available resources are adequate for it). Naturally, the contractor must also consider *economic* feasibility, in terms of whether the funds received are equal to or greater than the costs of providing the service.

Either party to such a proposed contract can consider the proposal from a variety of viewpoints, but some factors will inevitably dominate. If the price requested is so high that the prospective purchaser does not have sufficient funds, he or she will not be able to enter the contract and the proposal will fail because it is not *financially feasible*. If the service requested cannot be provided because the necessary techniques or equipment are not available, then the proposal will fail because it is not *physically feasible* [1].

A Broad Process for ADC Studies

Each feasibility study (and concluding report) will have a unique approach or structure. A process for projects evaluated by the ADC is outlined below.

Team Evaluation of Project Application

Preliminary Project Investigation

In-Depth Project Analysis

Formulation of Consensus and Conclusions

Presentation of Project Report

A feasibility analysis by the *Agricultural Development Center* should not be so one-sided that the applicant (farmer, entrepreneur or business person) has no input or responsibilities. Input from the applicant, is very valuable to a feasibility study. As the ultimate decision maker, the applicant should interact with the ADC and keep them informed. It is best for the applicant to have some understanding of what a new, value-added venture will require before the investigation gets too in-depth. Therefore, a series of worksheets have been prepared to provide a framework for the study and to involve the applicant in the overall project assessment and data collection.

These worksheets have been developed and are presented to assist in the evaluation of the overall feasibility of projects evaluated by the ADC. They are not intended to be used as "stand alone" feasibility analysis tools. They should be used in workshop settings or in close working relations with the ADC. While the worksheets can be helpful "stand alone" tools, they do not provide the depth of explanation and direction needed to be fully beneficial.

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[1] EDP Feasibility Analysis, Massey, L. D. and John Heptonstall, [HF 5548.2 .M3 .B37], D. H. Mark Publishing Company, 1968.

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Assessing Feasibility
Worksheet Check-List

PRELIMINARY INVESTIGATION

- ❑ Complete Preliminary Worksheet #1: Questions to Consider
- ❑ Complete Preliminary Worksheet #2: Identification of Goals & Objectives
- ❑ Complete Preliminary Worksheet #3: General Personal Considerations
- ❑ Complete Preliminary Worksheet #4: General Project Considerations
- ❑ Complete Preliminary Worksheet #5: Owner's Monthly Living Expenses
- ❑ Complete Preliminary Worksheet #6: Business Start-Up Costs
- ❑ Complete Preliminary Worksheet #7: Revenue and Expense Estimates
- ❑ Complete Preliminary Worksheet #8: Pro Forma Monthly Cash Flow Statement
- ❑ Complete Preliminary Worksheet #9: Pro Forma Monthly Income Statement
- ❑ Complete Preliminary Worksheet #10: Balance Sheet
- ❑ Use ADC Info. No 3 "Break-Even Analysis" to Estimate Annual Fixed Costs, Per Unit Variable Cost and Break-Even Sales & Units
- ❑ Complete Preliminary Worksheet #11 to Estimate Sales (units, value)
- ❑ Complete Preliminary Worksheet #12 to Evaluate Overall Project Potential

Assessing Feasibility **Preliminary Worksheet #1**

"QUESTIONS TO CONSIDER"

Addressing, Evaluating and Planning a New Product, Enterprise or Business

Rate the questions on a scale of 1 to 10. The rating should indicate the general feeling you have concerning the respective question. This worksheet is not intended to provide a definite YES or NO answer but merely an indication of how familiar and prepared you are for the project. The rating should help indicate potential weak and strong areas of the project.

- - - - - General Rating - - - - -
1 . . . . 5 10
Weak Unknown Strong

Raw Product Supply

What minimum size facility is required? __________

What is the required quantity of inputs? __________

Are the required inputs available? What about quality, timing and price? __________

How far away are the inputs? __________

Do alternative inputs exist? __________

How dependable are the input suppliers? __________

What alternatives exist for input suppliers? __________

Do long-term agreements exist? __________

Production Process

What social concerns exist? __________

What are the start-up costs? __________

How much money must be borrowed? __________

What is the interest rate? __________

How many employees are needed? __________

What special skills are needed? __________

What is the local employment situation? __________

What type of training programs will be necessary? __________

What labor management experience is available? __________

What are the expected wage rates? __________

What are the expected management costs? ___________

What are the expected fixed costs? ___________

What are the expected interest expenses? ___________

What depreciation is expected? ___________

What insurance costs are expected? ___________

What about taxes? ___________

What is the projected net income? (from the income statement) ___________

What is the expected annual cash surplus? (from the cash flow) ___________

What message do the break-even charts send? ___________

Market Determination

What are the consumption trends for the product? ___________

What are the quality & quantity restrictions/trends related to consumption? ___________

What population segments are the primary and secondary consumers? ___________

Is there an established marketing center? What are its characteristics? ___________

Is there a target market? What are its characteristics? ___________

What market alternatives exist? ___________

How are these markets now being served? ___________

How will the competition react? ___________

What type of distribution system is needed? ___________

What are the delivery requirements/considerations/schedules? ___________

What type of transportation is necessary? ___________

How will the product be introduced into the market? ___________

What is the stimulus to get the buyer's attention? ___________

How long will it take to get the product to desired sales volumes? ___________

What types of buyers will be targeted? ___________

What volumes will each buyer obtain? ___________

Where are the buyers located? ___________

What product qualities/specifications are required? ___________

What signals have potential buyers been sending? ___________

How reliable are the buyers? How stable are they? ___________

What types of payment schedules are likely? ___________

Are any special selling services required? How stable are they? What do they cost? ___________

What types of seasonal price patterns exist? ___________

What are historical prices for the product? ___________

What is the break-even price? ___________

What price will the market support? ___________

Personal Characteristics

Are you patient? ___________

Are you in good health? ___________

Are you willing to keep learning? ___________

Does you family totally support this venture? ___________

Do you take responsibility well? ___________

Do you have selling/marketing skills? ___________

Do you make decisions well? ___________

Are you resourceful? ___________

Are you a thinker? ___________

Do you understand the difference in efficient & effective? ___________

Can you “roll with the punches?” ___________

Are you courteous and understanding? ___________

Do you have good organization skills and abilities? ___________

Are you a self-starter? ___________

Do you desire to achieve results? ___________

Do you seek new opportunities? ___________

Do you have a high degree of energy? ___________

Do you have an ability to motivate people and get along with others? ___________

Do you have experience in many aspects of business? ___________

Do you have a proven ability to execute ideas? ___________

Do you have the ability to adjust your managerial style to suit a situation? ___________

Are you honest? ___________

Do you have foresight and planning abilities? ___________

Do you have a strong work-ethic? ___________

Are you an effective communicator? ___________

Do you have sound decision-making abilities? ___________

How Much Money Have You Saved To Invest In The Business? **$________________________**

How will you spend the dividends from this investment? **$________________________**

How do you feel about never seeing this money again? **$________________________**

AFTER ADDRESSING THESE QUESTIONS, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:

__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #2**

IDENTIFICATION OF GOALS

"If you don't know where you're going, how will you know when you get there?" This is the essence of goal setting and it has a direct relation to evaluating a new business venture. Starting and operating a successful business is often only a means to a much larger end. Therefore, knowing the ultimate ambition is critical to properly assessing the merit of a new business.

Knowing what you want is the very first step towards getting it. Identifying your goals focuses your attention and provides a basis by which decisions can be made. Setting and achieving goals keeps a business going the right direction. Without goals, the truest measure of a projects feasibility cannot be evaluated.

Goals should be developed, but not just once. Goals, personal and business, change over time. Therefore, goals should be developed early in the life of a business and then evaluated and adjusted to address the changing times and changing desires.

There is a set of criteria that business goals should meet in order to be effective for the business. Business goals should be "S.M.A.R.T." That is, each business goal should be Specific, Measurable, Attainable, Rewarding and Timed. Below is a worksheet to help in the identification and development of the goals that relate to your business. Make sure that each of your goals is "S.M.A.R.T."

1) What are your ultimate life-time goals?

2) What are your goals for the next three to five years?

3) What are your goals for the coming year?

4) What “MUST” happen in order for these goals to be accomplished?

5) Explain how your proposed venture relates to your overall goals.

AFTER ADDRESSING THE ISSUES CONCERNING GOALS, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:
__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #3**

General Personal Considerations

Business Ownership/Management	YES	NO
1) Do you enjoy competition?	____	____
2) Do you take advice from others well?	____	____
3) Do you relate well with others?	____	____
4) Do you plan ahead?	____	____
5) Do you have will-power?	____	____
6) Do you like to make final decisions?	____	____
7) Do you adapt well to change?	____	____
8) Do you get things completed on time?	____	____
9) Do you have experience in this type of business?	____	____
10) Do you have good leadership abilities?	____	____
11) Are you patient?	____	____

Physical, Emotional & Financial		
1) Are you prepared for this venture to be a 24 hour per day operation?	____	____
2) Do you have the physical needs to succeed in this business?	____	____
3) Are you and your family prepared for the emotional stresses of this business?	____	____
4) Do you realize that your personal savings could be lost?	____	____
5) Are you willing to lower your standard of living while the business grows?	____	____
6) Can you survive until the business generates a profit?	____	____

Personal Considerations

1) Do you know which skills and areas of expertise are critical to the success of the project? . . . . ____ ____
2) Do you have these traits? . . . . ____ ____
3) Does the project utilize your skills and traits? . . . . ____ ____
4) Does the project directly relate to your goals and objectives? . . . . ____ ____
5) Can the labor force be found to fulfill this project? . . . . ____ ____
6) Are you considering this idea for the "right" reasons? . . . . ____ ____

AFTER ADDRESSING THE GENERAL PERSONAL ISSUES,
ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT
THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:
__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #4**

General <u>Project</u> Considerations

<u>General Project Description</u>

1) Describe the business/idea.

2) List the products/services that will be sold?

3) Describe the user/consumer and why they want the product/service?

4) What inputs will be needed?

5) How is this product/service being provided now?

Critical Success Factors	YES	NO
1) Are there factors that would restrict or eliminate any of the required inputs?	____	____
2) Are the start-up requirements excessive?	____	____
3) Is adequate financing difficult to obtain?	____	____
4) Are there significant contingent liabilities?	____	____
5) Are there factors that constrain adequate marketing?	____	____
Desired Income		
1) Do you know how much income you desire from this project?	____	____
2) Do you know what "minimum" income you require?	____	____
3) Do you know how much of your own savings will be required?	____	____
4) Do you know how much could be earned by investing your savings elsewhere? . . .	____	____
5) Do you know how much you could earn working somewhere else?	____	____
6) Other than money, will you obtain value from this project?	____	____
7) Other than money, do you know what this project will cost you?	____	____
Other Considerations		
Do you know how much money will be needed to get the business started?	____	____
Do you know where to obtain the needed start-up funds?	____	____
Will the product/service meet a need that is currently not met?	____	____
Will the product/service serve a market that is not currently satisfied?	____	____
How can the product/service compete with existing competition?	____	____
Do you know how much credit you can get from the business that will supply inputs?	____	____
Do you have a "management/advisory team" that can assist the business?	____	____
Are most businesses in the area doing well?	____	____
Do you know the kind of people (profile) that will purchase the product?	____	____
Do you know how many sales (dollars & units) to expect?	____	____
Do you have or have you identified a suitable facility?	____	____
Is there room for growth at the facility?	____	____
Is the facility suitable for sales?	____	____
Do you have a lawyer to advice the business?	____	____
Do you have an accountant to advice the business?	____	____
Have you listed the needed equipment & supplies?	____	____
Have you obtained cost estimates for them?	____	____
Do you have sources for used equipment & supplies?	____	____

Have you identified your product line? . . . . ____ ____

Have you estimated the volume and timing of sales for the product line? . . . . ____ ____

Have you developed a list of suppliers? . . . . ____ ____

Have you compared prices, credit terms, transportation charges and reliability of different suppliers? . . . . ____ ____

Have you compared your product/service to the competition? . . . . ____ ____

Have you identified a record-keeping system for financial records? . . . . ____ ____

Do you have experience tracking inventory? . . . . ____ ____

Are you familiar with how to maintain and report payroll and tax records? . . . . ____ ____

Are you prepared to offer credit sales? . . . . ____ ____

Are you prepared to never be paid for items sold on credit?

Do you know what licence and permits are required for this business? . . . . ____ ____

Do you know what business laws apply? . . . . ____ ____

Do you know what type of business/product insurance is available? . . . . ____ ____

Do you know what type of business/product insurance you need? . . . . ____ ____

Do you know what business/product insurance will cost? . . . . ____ ____

Do you know how your product should be promoted? . . . . ____ ____

Have you identified promotion/advertising resources? . . . . ____ ____

Do you know how much you will be spending on advertising? . . . . ____ ____

Do you know how to price your products? . . . . ____ ____

Do you know how many sales will be possible at these prices? . . . . ____ ____

Have you considered discounts? . . . . ____ ____

Do you know where to find new employees? . . . . ____ ____

Do you know what characteristics you will desire in employees? . . . . ____ ____

Do you know how much you will spend on labor? . . . . ____ ____

Will you offer benefits? . . . . ____ ____

Do you have a training program? . . . . ____ ____

Do you have a plan for evaluating performance? . . . . ____ ____

Does your family support this venture? . . . . ____ ____

How will you stay abreast of the changes and opportunities that effect your business? . . . . ____ ____

AFTER ADDRESSING THE GENERAL PROJECT ISSUES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE: __________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #5**

Owner's Monthly Living Expenses [2]

Complete this list of expenses based on an average month. Add or subtract items to fit your own lifestyle and financial obligations.

ITEM	COST
Rent or Mortgage	$
Car payment & other loan payments	$
Life & health insurance premiums	$
Utility & telephone bills	$
Home repairs and maintenance	$
Food (groceries, away from home (eating out)	$
Car repairs, gas, and parking	$
Travel	$
Medical and dental care	$
Educational expenses	$
Clothing	$
Newspapers and magazines	$
Child care	$
Savings	$
Spending money and allowances	$
Entertainment	$
Other Expenses	$
Total Personal Expenses	$

AFTER ADDRESSING THE MONTHLY LIVING EXPENSES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE: ________________
(1 = NOT VERY GOOD, 10 = GREAT!)

[2] Adapted from "Exploring Entrepreneurship," Barefield, et. al. The University of Tennessee, Agricultural Extension Service, 1998.

Assessing Feasibility **Preliminary Worksheet #6**

Business Start-Up Costs[3]

This worksheet should include the expenses you will incur when opening your business. This list is a sample; add or subtract items to fit your situation.

ITEM	COST
Initial Value of Inventory	$
Rent deposit or mortgage down-payment	$
Furniture and fixtures	
Desks and chairs	$
Filing cabinets	$
Light fixtures	$
Counters, shelves	$
Total Furniture and Fixtures	$
Tools and production equipment	$
Supplies	
Stationary	$
Business forms	$
Cash register	$
Pens, pencils	$
Total Supplies	$

[3] Adapted from "Exploring Entrepreneurship," Barefield, et. al. The University of Tennessee, Agricultural Extension Service, 1998.

Utility Deposits	$
Telephone Deposits	$
Advertising and Promotion	
Business Cards	$
Ads, posters, etc.	$
Business logo design	$
Exterior signs	$
Total Advertising & Promotion	$
Site and Building Preparation	
Remodeling	$
Decorating	$
Repairs	$
Total Site and Building Preparation	$
Organization Costs	
Accounting Fees	$
Legal Fees	$
Total Organization Fees	$
Licenses and Permits	$

AFTER ADDRESSING THE ISSUES CONCERNING BUSINESS START-UP COSTS, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:

__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #7**

Revenue and Expense Estimates[4]

Answer these questions with realistic, conservative estimates. Use the best information available and remember that you should change your estimates as you get actual price quotes, negotiate contracts and gain experience.

1. Estimate the number of units you will sell in the first year. ______
2. What is the average sales price per unit? $ ______
3. Estimate your sales in dollars for the first year. $ ______
4. Estimate your cost of merchandise or materials as a ratio or proportion of sales (for example, cost of materials ($50) / total sales ($100) = 0.5) $ ______
5. Estimate the cost of the inventory needed to start the business. $ ______
6. Enter the level of monthly personal expenses to be covered by the business. $ ______
7. Estimate the monthly rent or mortgage payment for your business $ ______
8. Estimate the rent deposit or mortgage down payment required. $ ______
9. Estimate the total cost of the furniture and fixtures you will need to buy. $ ______
10. What is the average useful life (in months) of these furnishings and fixtures? ______
11. Estimate the cost of the tools and equipment you will need to purchase. $ ______
12. What is the average useful life (in months) of these tools and equipment? ______
13. Estimate the total level of monthly wages you will pay to your employees. $ ______

[4] Adapted from "Exploring Entrepreneurship," Barefield, et. al. The University of Tennessee, Agricultural Extension Service, 1998.

14. Estimate the level of payroll taxes you must pay as a percentage of total wages $ ________

15. What is the total cost of supplies and materials that you will need to start your business? $ ________

16. Estimate the average monthly cost of supplies and materials that you will need to operate $ ________

17. Estimate the percentage of sales that will be made on credit (for example, credit sales ($25) / total sales ($100) equals 0.25 or 25%). Enter zero if you will not make credit sales. $ ________

18. Estimate your monthly utility bill. $ ________

19. What are the required utility deposits? $ ________

20. Estimate your monthly telephone bill. $ ________

21. What is your required telephone deposit? $ ________

22. Estimate your monthly insurance costs. $ ________

23. Estimate the advertising and promotion costs incurred in the startup of your business. $ ________

24. Estimate your monthly advertising costs after the initial opening of your business. $ ________

25. Estimate the expenses incurred in getting your business location ready for opening. $ ________

26. Estimate the monthly costs required for maintenance and upkeep after opening. $ ________

27. Estimate attorney and accounting fees to start the business. $ ________

28. Estimate the average monthly attorney and accounting fees after the business opens. $ ________

29. Estimate the costs of business licenses and permits. $ ________

30. Estimate your monthly debt service. $ ________

31. How much of Q30 is payment on the principal part of the loan? $ ________

32. How much of Q30 is interest expense? $ ________

33. Estimate the monthly cost of other expenses. $ ________

34. How much cash will you invest in the business? $ ________

35. What is the minimum amount of cash that you want on hand at the beginning of each month for unexpected expenses? $ ________

AFTER ESTIMATING REVENUE AND EXPENSES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:

________________ (1 = NOT VERY GOOD, 10 = GREAT!)

PRO FORMA MONTHLY CASH FLOW STATEMENT[5]

SOURCES OF CASH	INITIAL STARTUP	MONTHLY REQUIREMENTS
Cash on Hand	$	Last month's ending balance
Cash Sales (Adjust for seasonality as needed)	0	
Accounts Receivable Collections	0	
Other Income	0	
Initial Borrowing	$	
Additional Borrowings	0	
Total Cash Available	Add above items	Add above items

[5] Adapted from "Exploring Entrepreneurship," Barefield, et. al. The University of Tennessee, Agricultural Extension Service, 1998.

USES OF CASH

Inventory	$	$
Furniture and Fixtures	$	$
Tools and Equipment	$	$
Owner's Draw	$	$
Employee Wages	0	$
Payroll Taxes	0	$
Rent or Mortgage Payment	$	$
Utilities	$	$
Telephone	$	$
Supplies	$	$
Insurance	$	$
Advertising	$	$
Maintenance	$	$
Legal and Accounting	$	$
Licenses	$	$
Other Expenses	$	$
Taxes	0	$
Other Loan Payments	0	$
Total Uses of Cash	Total Above Items	Total Above Items

CASH POSITION

(SOURCES OF CASH - USES OF CASH)

AFTER ADDRESSING THE MONTHLY CASH FLOW ISSUES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:

__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

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Assessing Feasibility **Preliminary Worksheet #9**

PRO FORMA MONTHLY INCOME STATEMENT[6]

Income	
Sales = [Adjust for seasonality as needed]	________
Cost of Goods Sold =	________
Gross Margin = (Sales - Cost of Goods Sold)	________
Operating Expenses	
Employee Wages & Payroll Taxes	________
Rent	________
Utilities & Telephone	________
Supplies	________
Insurance	________
Advertising	________
Maintenance	________
Legal/Accounting Fees & Licences	________
Other Expenses	________
Interest Payments	________
Depreciation	________
Total Operating Expenses (Add all operating expenses)	________
Net Income (Loss) Before Income Taxes (Gross Margin - Tot. Op. Exp.)	________

AFTER ADDRESSING THE MONTHLY INCOME STATEMENT ISSUES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE: ________________
(1 = NOT VERY GOOD, 10 = GREAT!)

6 Adapted from "Exploring Entrepreneurship," Barefield, et. al. The University of Tn., Ag. Ext. Service, 1998.

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Assessing Feasibility **Preliminary Worksheet #10**

BALANCE SHEET

A balance sheet is a financial statement that shows what is owned and what is owed by the business at a particular point in time. It consists primarily of two sections; assets and liabilities. The liabilities section of a balance sheet also contains an assessment of net worth. A balance sheet is constructed on the basis that the two sections must balance. The two sections form the equation:

ASSETS = LIABILITIES + NET WORTH

In other words, what is put into the business plus what is borrowed must equal the total value of assets. The distinction between liabilities and net worth is made in order to show the proportion of assets that are backed by debt and the proportion represented by contributions.

The balance sheet shows the condition of the business at one point in time. A balance sheet is rarely the same for any two points in time because the items on the balance sheet are constantly changing. For instances, inventories and assets are continually changing as are debts. The growth and success of a business can be evaluated by comparing two balance sheets at different points in time. Because the values listed in a balance sheet are representative of a particular point in time, one of the most critical aspects of a balance sheet is the date.

In preparing a balance sheet, assets are traditionally presented first. The assets are often listed in order of liquidity under the sub-headings current assets, intermediate assets and long-term assets. Current assets are those assets available as cash or easily converted to cash during the coming 12 months. Intermediate assets are those with a useful life of one to ten years. Long-term assets are those with an expected life in excess of ten years. The sum of the current, intermediate and long-term assets is presented as total assets.

Liabilities are also listed in order of their currency. Current liabilities are those debts that are due to be paid within the next 12 months such as accounts payable, notes payable and interest payable on all debts. Intermediate liabilities are the outstanding balances of debts against intermediate assets while long-term liabilities are the outstanding balances of debts against long-term assets. The sum of current, intermediate and long-term liabilities is presented as total liabilities.

The owners financial contribution to the business is represented by the difference in the value of total assets and total liabilities. The owners interest is labeled net worth (or owners equity) and totaled with the total liabilities. The sum of total liabilities and net worth must always be the same as the value of total assets.

Business Name: ___________________________ Date: ___________

BALANCE SHEET

ASSETS

Current Assets

Cash	______________		
Checking Accounts	______________		
Savings Accounts	______________		
Accounts Receivable	______________		
Inventory	______________		
Items Held for Resale	______________		
Other Current Assets	______________		
Total Current Assets		______________	

Intermediate Assets

Machinery	______________		
Equipment	______________		
Automobiles	______________		
Breeding Livestock	______________		
Other Intermediate Assets	______________		
Total Intermediate Assets		______________	

Long-Term Assets

Land	______________		
Buildings	______________		
Other long-Term Assets	______________		
Total Long-Term Assets		______________	

Total Assets . . . . ______________

LIABILITIES & NET WORTH

Current Liabilities

Accounts Payable	______________		
Notes Payable	______________		
Current Potion of all Debts	______________		
Other Current Liabilities	______________		
Total Current Liabilities		______________	

Intermediate Liabilities

Debts on Intermediate Assets	______________		
Other Intermediate Liabilities	______________		
Total Intermediate Liabilities		______________	

Long-Term Liabilities

Debts on Long-Term Assets	______________		
Other Long-Term Liabilities	______________		
Total Long-Term Liabilities		______________	

Total Liabilities . . . . ______________

Net Worth . . . . ______________

Total Liabilities and Net Worth . . . . ______________

AFTER ADDRESSING THE BALANCE SHEET ISSUES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE: ______________

(1 = NOT VERY GOOD, 10 = GREAT!)

ADC Info #3 Break-Even Analysis **September 1998**

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One of the most common tools used in evaluating the economic feasibility of a new enterprise or product is the break-even analysis. The break-even point is the point at which revenue is exactly equal to costs. At this point, no profit is made and no losses are incurred. The break-even point can be expressed in terms of unit sales or dollar sales. That is, the break-even units indicate the level of sales that are required to cover costs. Sales above that number result in profit and sales below that number result in a loss. The break-even sales indicates the dollars of gross sales required to break-even.

It is important to realize that a company will not necessarily produce a product just because it is expected to break-even. Many times, a certain level of profitability or return on investment is desired. If this objective cannot be reached, which may mean selling a substantial number of units above break-even, the product may not be produced. However, the break-even is an excellent tool to help quantify the level of production needed for a new business or a new product.

Break-even analysis is based on two types of costs: fixed costs and variable costs. Fixed costs are overhead-type expenses that are constant and do not change as the level of output changes. Variable expenses are not constant and do change with the level of output. Because of this, variable expenses are often stated on a per unit basis.

Once the break-even point is met, assuming no change in selling price, fixed and variable cost, a profit in the amount of the difference in the selling price and the variable costs will be recognized. One important aspect of break-even analysis is that it is normally not this simple. In many instances, the selling price, fixed costs or variable costs will not remain constant resulting in a change in the break-even.. And these changes will change the break-even. So, a break-even cannot be calculated only once. It should be calculated on a regular basis to reflect changes in costs and prices and in order to maintain profitability or make adjustments in the product line. [7]

There are three basic pieces of information needed to evaluate a break-even point:

Average Per Unit Sales Price: ____________________

Average Per Unit Variable Cost: ____________________

Average Annual Fixed Costs: ____________________

[7] Management, Richard Hodgetts & Donald Kuratko, Second Edition, 1986.

The basic equation for determining the break-even units is:

Average Annual Fixed Cost

÷

(Average Per Unit Sales Price - Average Per Unit Variable Cost)

The basic equation for determining the break-even sales:

Annual Fixed Cost

÷

1 - (Average Per Unit Variable Cost ÷ Average Per Unit Sales Price)

Break-even analysis can be very helpful in the evaluation of a new venture. In most instances, success takes time. Many new enterprises and products actually operate at a loss (at a point below break-even) in the early stages of development. Knowing the price or volume necessary to break-even is critical to evaluating the time-frame in which losses are permissible. The break-even is also an excellent benchmark by which a company's short-term goals can be measured/tracked. Break-even analysis mandates that costs be analyzed. It also keeps a focus on the connection between production and marketing.

Example: A local livestock producer utilizes compost waste to develop an organic fertilizer product. The fertilizer is prepared for retail sale in 50 pound bags. The retail sales price is $5.00 per bag. The average variable cost per bag is $2.80 and average annual fixed costs are $60,000. These three pieces of information are:

Average Per Unit Sales Price = $5.00 per bag

Average Per Unit Variable Cost = $2.80 per bag

Average Annual Fixed Costs = $60,000.00

The above assumption can be utilized to calculate the number of bags that must be sold in order to break-even as well as the total dollar of sales needed to break-even. Using the formulas explained earlier, the following calculations can be made:

Break-Even Units: $60,000.00 ÷ ($5.00 - $2.80) = *27,273 bags*

Break-Even Sales: $60,000.00 ÷ 1 - ($2.80 ÷ $5.00) = *$136,365*

Therefore, no profits are made from the sale of this product until more than 27,273 bags are sold or more than $136,365 in gross sales is generated.

Agricultural Development Center

Agricultural Extension Service
The University of Tennessee

ESTIMATING SALES

CUSTOMERS

Who Are They	% of Sales	What They Want	How to Target

COMPETITION

Who Are They	Yrs. In Business	% / $ of Market	% / $ of Market With You	Competitive Advantage	Your Competitive Advantage

PRODUCT LINE

Products	Retail Price (per unit)	Cost (per unit)	Gross Margin (Price - Cost)	Relation of Price to Competition

Business Name: ___________________________ Date: ___________

ESTIMATING SALES

Product Line (Revenue Generators)	Expected Annual Sales (qty)	Average Value of Sales (price per unit)	Total Estimated Sales Income ($)

AFTER ESTIMATING SALES, ON A SCALE OF 1 - 10, HOW DO YOU FEEL ABOUT THE OVERALL POTENTIAL OF YOUR PROPOSED VENTURE:
__________________ (1 = NOT VERY GOOD, 10 = GREAT!)

Assessing Feasibility **Preliminary Worksheet #12**

EVALUATION OF OVERALL PROJECT POTENTIAL

WORKSHEETS	OVERALL RATING (1 = NOT VERY GOOD, 10 = GREAT!)
Preliminary Worksheet #1: Questions to Consider	_______________
Preliminary Worksheet #2: Identification of Goals & Objectives	_______________
Preliminary Worksheet #3: General Personal Considerations	_______________
Preliminary Worksheet #4: General Project Considerations	_______________
Preliminary Worksheet #5: Owner’s Monthly Living Expenses	_______________
Preliminary Worksheet #6: Business Start-Up Costs	_______________
Preliminary Worksheet #7: Revenue and Expense Estimates	_______________
Preliminary Worksheet #8: Pro Forma Monthly Cash Flow Statement . . .	_______________
Preliminary Worksheet #9: Pro Forma Monthly Income Statement	_______________
Preliminary Worksheet #10: Balance Sheet	_______________
ADC Info #3, “Break-Even Analysis”	_______________
Preliminary Worksheet #11 to Estimate Sales (units, value)	_______________
Preliminary Worksheet #12 to Evaluate Overall Project Potential . . .	_______________